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## On the Art of Conversational Communication of College Counselors in Student Management

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Abstract: College students' life is closely related to the guidance of counselors. Especially for freshmen, many things they do not know need the careful guidance of counselors. College counselors need to pay attention to all aspects of students by communicating with them. Language has become one of the more important main tools, with a wide range of use and high frequency. Language, as a "must", is very important in both work arrangement and daily communication. Mastering the art of conversation and communication can be a powerful weapon for counselors to serve students well. By cleverly using the art of conversation in the conversation with students, it can not only improve the tense teacher-student relationship and promote the development of students' physical and mental health, but also show the charm of a college counselor. At the same time, it is more conducive to the counselors in the future ideological and political work in high efficiency and high energy to carry out the corresponding activities, do a good job in student management.

Keywords: Colleges and universities; The counselor; Student management; The art of conversation and communication

As the link between the school and the students, the counselor plays an indispensable role in the development of all kinds of work in the school, and is also the backbone of the moral education and quality education for college students. With the rapid development of China, it is more and more important to build a cultural power, and the higher education for college students has become the most important part of the construction of a cultural power.Students not only require excellent academic performance, but also take into account all aspects, so as to achieve comprehensive development, focusing on improving the comprehensive quality of students. College counselors are more closely related to students and have the dual tasks of teaching and management. In the comprehensive guidance of study and life for students, it is a more important point to grasp how to communicate in an easy-going way that is comfortable and caring.Conversation is also an art, so every college counselor should first learn the art of conversation and communication before they can better educate and guide students. This paper gives a comprehensive discussion of the art of conversation[1].

1. THE ROLE OF CONVERSATIONAL ART IN THE EDUCATION OF COUNSELORS IN HIGHER VOCATIONAL COLLEGES

To a great extent, the efficiency of counselors depends on how well they grasp the art of conversation and communication. Although the art of conversation is a virtual object that does not exist in real life, it determines whether counselors can do their own work well. The instructor's job is to help college students in their daily life and study, and to guide or help solve problems in time. Therefore, only when counselors communicate with students regularly can they have a deeper understanding of students and better guide students' life and study. The conversation between counselors and students is not the order from superiors to subordinates, the strict constraint from generals to sergeants, nor the simple issue of tasks and opinions. Instead, counselors guide and educate students in their study and life as their "friends" and increase the intimate relationship with students.It is very important to master the art of conversation and communication, which is also a "key" that can really open students' hearts. Through many times of artistic talks, the good impression of the counselors in the hearts of students will be enhanced, and the students will also actively adopt the advice of the counselors, better accept criticism of the counselors and make corrections.Besides, a high-quality conversation, the enlightenment and incentive effect to the students is more obvious, the students can also learn a lot of things in the conversation. Artistic conversation, increases the student to the counselor, counselor of the guidance will be more likely to be adopted, the conversation to have effect on the student to have the inspiration and motivation, the conversation also need to have the artistry, counselors themselves dabbled in more and more knowledge, for psychology, literature, and tutoring students know more professional knowledge, They are more able to model and lead their students.

1.1 Language is the bond between teachers and students School, as a learning place, can improve the ideological quality of college students. In addition to meeting in class, counselors also have more contact time with students after class, so they play an irreplaceable role in guiding students to improve their own quality.In the communication with students, every word of the counselor can have a different impact on students. It may be because of a word that students are deeply hit, or it may be because of a word that students feel like a spring breeze and benefit for life. Therefore, the proper art of communication can be called the lubricant of the teacherstudent relationship. As college students come from all corners of the country, each of them has his or her own characteristics. Counselors personality appropriately use different language communication skills to make targeted artistic conversations according to the personality characteristics of different students.For example, communication with students with inferiority tendency should reflect the affability of counselors and

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encourage students more; To communicate with students who are irritable, we should use soft to overcome rigid, polish edges and corners, etc. Only by understanding the temper characteristics of different students in the usual conversation can we better form a harmonious teacher-student relationship.

1.2 Communication art is the embodiment of the instructor's comprehensive quality

Language is a way of emotional expression that we use in communication. The language expression ability of college counselors is directly related to their moral cultivation, spiritual outlook and knowledge level. According to relevant information, counselors in most colleges and universities communicate with their students more than ten times a week on average. However, conversation in college is not a simple education or a single task, but a consensus on solving a problem can be reached through communication between counselors and students. Therefore, counselors are required to be patient, calm and well-spoken when dealing with students' mistakes or problems. Remember not to be impatient or strongly criticize them, or they will cause students' dislike and uncooperation at the least, or they will leave trauma to students' hearts. The instructor's own quality and wisdom can be reflected from the process of conversation and the way of speech.

1.3 Good use of communication art is a necessary means of counselor's work

In order to have a deeper understanding of the heart and behavior of college students, the conversation between college counselors and students is particularly important.Before talking with the students, the counselors should make full preparations and carry out targeted conversations according to different people and problems. In order to understand what problems the students have in this conversation, what aspects should be involved in the chat, and what effects should be achieved after the exchange, the counselors should make full preparations in the back.In addition, the more important is in the conversation skills, instructors should also work hard, to use a combination of various communication skills. For students who are in the growth stage, more encouragement is undoubtedly a way to build up students' confidence. For the emotional weak students, counselors should be more pacify, so that students learn to self-regulate, maintain inner balance, cheer up.Of course, criticism is also an essential link, but criticism is not abuse, but through the way of theory to let students learn lessons, to tell students, dare to recognize their own mistakes, the courage to accept the criticism of others, in order to do better, better achievements of their own.Improper pointing out may hurt students' selfesteem, but not pointing out students' mistakes will not achieve the purpose of education, which requires counselors to accurately handle this dilemma.If appropriate skills are used in the process of conversation, to mix reproof with comfort, and criticism with humor and earnestness, it can achieve twice the result with half the effort. Practice has proved that counselors have superb art of conversation and communication for the future

work has a great help.

2. HOW SHOULD COUNSELORS TALK IN STUDENT MANAGEMENT OF HIGHER VOCATIONAL COLLEGES

2.1 The characteristics of the instructor's communication art

Counselors involves a wide range of daily work, such as student services, student dormitory management, attendance in class and a variety of issues, such as size, all these have complexity, educational, service and political qualities, facing the personalities of the students, conversation communication art of instructors must have higher requirements, Conversations with students should be emotional, attractive, appealing and appealing, and should be "accurate", "interesting" and "sincere".

To be accurate means that the counselor needs to analyze the personality characteristics of the students. Students with different personalities should not communicate in the same way, but have a one-to-one conversation. Before the conversation, do your homework and choose the right communication skills for a particular student by analyzing the student's family environment, study and life.In this way, you can pinpoint the problem, find the right solution, and have a quality conversation. To be sincere means that the conversation between counselors and students should be full of emotion, full of sincere feelings. To be a truly successful counselor, students should be treated strictly rather than harshly, and should be taken care of rather than spoiled. If it is only a pale theoretical instigation, not only can not get the desired effect, but also form a bad situation. Therefore, sincerity is the key to open the hearts of students[2], and it is also a character that should be possessed by a counselor. To be interesting means that the counselor should incorporate some humor and interest in the conversation with the students, rather than being rigid and stern. Most students would mind being called in for a conversation, and would be intimidated by the atmosphere of the office or the harshness of the teacher. They would always find it instructive to be called in for a conversation, leading to a kind of psychological activity of fear in most students. The effect of the conversation will be less than satisfactory. Therefore, if the counselor is more humorous in the conversation, it will inexplicably produce a strong attraction and appeal, lighten serious problems, and make students feel that the counselor is really telling and students like friends for their development.Interesting in the conversation is an important embodiment of mastering the art of conversation and communication, as well as the crystallization of the counselor's own knowledge and wisdom. Humor can also strengthen the interaction with students, can more from the side to understand the students' hearts[3].

- 2.2 Instructors should pay attention to several aspects in the conversation
- (1) Cultivate the instructor's language communication qualities

A successful conversation is closely related to the instructor's own ability.Quality is the inner

accomplishment of each of us. It is an intangible and abstract existence. It is a kind of ability that our whole society has been continuously advocating to cultivate and improve, and it is also the internal basis of interpersonal communication. Therefore, the quality requirement of the counselors is the requirement for the high quality of the students' conversation work. Counselors involve all kinds of trifles in students' life and study. Counselors are required to be patient, responsible, and dedicated, as well as to treat each student fairly and justly and respect each student's ideas. Only when students truly feel understood and respected can they open their hearts and solve the puzzles and problems they encounter smoothly. To sum up, counselors should first improve their own quality, and then educate and guide students [4].

#### (2)Find the right time and place to talk

Talk with students between also want to distinguish the occasion, seize the time. If the time and place can not be grasped correctly, it will lead to the students to complain about the counselors and cause antipathy. For example, if a student makes a mistake and directly criticizes the student in front of many students in the class, it not only fails to achieve the effect of education and learning, but also hurts the student's self-esteem and makes him resent the counselor. In general, conversation should be held in a place where both parties feel comfortable and approachable. Especially according to the different content of the conversation to choose different occasions, such as serious conversation suitable for formal occasions, in order to attract the attention of the other side;Lighter conversations can be held in students' dormitories, classrooms or on the same road as students, so that students feel relaxed and at ease to avoid embarrassing situations. Counselors should also grasp the conversation time accurately. When they understand that students have made mistakes, they should communicate and understand them in time. Informed that the student heart depression, timely communication with the solution and so on. When students encounter these troubles and misfortunes, it is a good opportunity for counselors to communicate with students.In this time and in this

situation to give students more care in a timely manner, will bring better results.

#### (3)Use good conversational skills

In the art of conversation and communication, counselors should take into account all aspects, not only how to carry out students' work but also the students' physical and mental health.In the conversation to the student's ideological status of multi-directional understanding, the correct grasp of the student's inner thoughts.In the conversation, students should not only be re-educated, but also be guided to establish a correct view of right and wrong, outlook on life and values. In the conversation, learn to listen, and students can become friends is the real use of the art of conversation communication to the extreme. Various ways are used to guide students, such as explaining their own life experience to students and talking about their own personal feelings, which are often used by counselors when talking with students. Also want to encourage the student more, enhance the student's enthusiasm and self-confidence, care about the student.A simple greeting can make a student feel the counselor's care.

Conversation is also an art, and there are rules to follow and methods to learn. Counselors should adopt more communication methods when communicating with students, so as to find the most suitable method and achieve the best results.

- [1] Zhu Baoyan. Talking art in student management of Higher Vocational College Counselors [J]. Modern economic information, 2018 (06): 453.
- [2] Liu Qian. Analysis of the art of conversation in the student management of counselors in Higher Vocational Colleges [J]. Oriental world, 2019 (02): 107.
- [3] Liu Qian. Analysis of conversation art in student management of Higher Vocational College Counselors [J]. Examination and evaluation, 2019 (02): 107.
- [4] Sun Fengping, Chen Xiaoquan. Talk art of counselors in Higher Vocational Colleges in student management [J]. Literature and education materials, 2009 (16): 223-224.

### Research on Planning and Architecture of Regional Smart Education Big Data Platform

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Abstract: Based on the regional smart education big data platform, we will comprehensively carry information-based teaching, and use various information systems and Internet of things technologies to collect students' learning, life and growth data. All urban schools will realize digital management, build an education information management platform that gathers all kinds of education management information at all levels, dynamically monitors the operation status of education, optimizes the layout and resource allocation, and makes scientific decisions, so as to realize the dynamic monitoring of the operation status of education, early warning and prediction of anomalies, and improve the level of education business management, decision support, monitoring and evaluation, and public services. Comprehensively change the teaching, learning and management methods in the field of basic education, and realize accurate teaching, accurate learning and accurate management through education big data collection and analysis.

Keywords: Smart Education; Balance of educational resources; Information teaching; Digital management

#### 1. INTRODUCTION

Data of any person, any time, any place, any behavior and result active on the education big data platform can be collected, analyzed and mined in real time, and presented to users in the form of visual products. We should teach students in accordance with their aptitude, promote the professional development of teachers, improve the quality of subject teaching, and enhance the scientific level of educational decision-making.

#### 2. EDUCATION BIG DATA BASIC PLATFORM

Build an open service platform, provide service API center, support control mechanism, aggregate Internet capabilities, fully open their accumulated business capabilities, and build an open ecological environment around education. It will fully open the ability to gather basic education business data, provide API for security credit, and realize rapid development and one-stop development service experience.

The platform includes the following parts:

Platform portal: portal page customization, registration, login, forgotten password, problem feedback, etc;

System Administrator Console: including tenant management, application audit management, service management, organization, authority, role management, developer audit, basic service management, application center:

District Management Console: application statistics, basic information management, organization, account,

role, permission management, portal, application center, configuration item, application management.

School level management console: statistical information, basic information management, data management, configuration item, dictionary, portal, application management.

Third party developers: access ranking statistics, basic information maintenance, my application, application center, document center, component service SDK, etc.

Unified user authentication: Based on the open oath 2.0 protocol, it is convenient for users to access and authenticate quickly.

Service governance platform: including service management, API gateway, node management, monitoring alarm, log management.

Master data management platform: including data standard management, data interface, data integration and sharing, data storage, etc., to completely solve the problems of "low data quality, chaotic data flow, insufficient sharing, lack of historical data" in current data sharing.

Data platform: realize cross system data sharing, solve information island, improve data quality, assist decision analysis, and provide unified data service.

3.REGIONAL BIG DATA VISUALIZATION SYSTEM Regional big data visualization system can provide data micro services, including data extraction, cleaning, loading, analysis, storage, etc. It provides a public data platform for the information construction of education, and helps education solve the problems of data presentation, such as data standardization, data exchange and data sharing.

The core data of education basic database management data layer provides unified organization and personnel information basic data and data management services for all third-party applications. The maintenance and management services support the management of all basic data, establish a complete basic data validity maintenance mechanism, and push it to third-party applications through data exchange services, Ensure the integrity and unity of data.

The overall construction framework of education data platform will adopt a multi-level construction framework, which is divided into four layers: data standard definition layer, data storage layer, data analysis and processing layer, and data presentation layer. Each layer is interrelated and mutually supporting, and has a high degree of independent expansion ability. The data platform is based on massive data processing, with data value application as the goal, to create an agile, intelligent and reliable data platform, so that users at all levels can

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quickly, accurately and stably discover new value points from various kinds of complex and disordered massive data

#### 4.CAMPUS BIG DATA VISUALIZATION SYSTEM

The campus big data visualization system has brought many outstanding values to customers through the platform products of component, service, visualization, standardization and integration.

#### (1) advanced and unified microservice architecture

system adopts the advanced microservice architecture and standard specification, realizes the SaaS service at the business level, the standardized architecture at the technical level and the standardized framework at the management level, fundamentally solves the application architecture of business, data, technology and management, and helps customers upgrade the application architecture to the advanced microservice system.

#### (2)service business model

In order to improve the consistency between it and business, and to achieve business services with lower cost, higher quality, faster and more flexible, the increasingly complex and changing business system is decomposed into several relatively independent and disjoint micro services through hierarchical and modular design, so as to better reuse business services and maximize business

#### (3)standardized technical framework

Customers' attention and investment in technical architecture are obviously increasing. The larger the customers are, the more obvious it is, because it carries many meanings: technical implementation of business architecture, development mode of application, relevant technical standards, integration ability of business and technology, management framework, etc. On the other hand, it is the MVC development mode, open source framework implementation, existing integration mode and technology developed on top of today's most mainstream application server; With the development of microservice technology, container, new integration mode and technical standard, service and process are brought. All these are making the already complex technical architecture more complex and difficult to keep up with. However, the satisfaction and responsiveness of the technical architecture to the business requirements are constantly declining, which makes it difficult for it to maintain good consistency with the business.

#### (4)standardized management framework

Education informatization is not achieved overnight, so we need to have strong IT management and control ability and flexible and dynamic business strategy. The standardized management framework will more effectively realize the visibility and control of it and business. Furthermore, it governance and business optimization are continuously realized through the mechanism of strategy. At the same time, it also provides a more flexible and simple way for the implementation of SLA. Everything can be controlled and optimized based on services. With more and more business applications, efficient allocation and use of computing resources will

become more and more urgent. Therefore, such an advanced and standardized microservice architecture management framework will make the simulation and virtualization of business services within reach, and our business operation efficiency will be further improved.

#### (5)efficient and flexible development system

The development of education informatization is not simply the informatization of education management, but the establishment of a solution based on the whole process business data inside and outside the school, covering multi role three-dimensional scene. In order to ensure the rapid access of the above scenarios and the real-time flow of data, it is necessary to have the corresponding business application development system to provide it support for such a solution, so as to truly achieve high-quality, low-cost and fast business delivery. (6)the best development mode

Microservice architecture mode provides a modular solution for functions that are difficult to realize by single coding mode. This architecture enables each service to be developed by a special development team. Developers are free to choose development technology and provide API services. The microservice architecture pattern is an independent deployment of each microservice. Developers no longer need to coordinate the impact of other service deployment on this service. This change can speed up deployment.

#### (7) enrich component library

In order to ensure the rapid response capability of business system, in addition to providing iterative speed for business cutting with microservice, we split some basic capability components unrelated to business for all business systems to share. At the same time, we maintain, manage and upgrade these shared basic business function components, Finally, we can improve the efficiency of our business system development. Let the business system developers only focus on customer needs, and truly achieve the rapid response of the business.

#### MANAGEMENT 5.EDUCATION BIG **DATA** ANALYSIS SYSTEM

Education management big data analysis system mainly provides data mining and analysis function for data model analysis. Through data mining model and algorithm, it mines the internal relationship between data and reveals the internal value of data. Data mining subsystem provides data association analysis, data clustering, data classification, supervised data mining model, unsupervised mining and other algorithm models.

#### (1) student portrait model

Student portraits include students' personal basic information, students' psychology, physical health, learning data, consumption data, life data, analysis of students with life difficulties, analysis of students addicted to the Internet, analysis of truancy behavior, monitoring of obese students, and analysis of students' psychological pressure.

#### (2) educational decision support model

The application of big data technology can accurately grasp the dynamic development of regional education and the key factors affecting its balanced development, and promote the balanced development of regional education from the balance of educational resources, educational opportunities, and educational quality.

(3)student evaluation model

Big data enables every teacher and student to know their true "self" and promote personalized development. Big data helps students' personalized chemistry and teachers' personalized teaching, and realizes the organic combination of large-scale and personalized education.

(4) data precision recommendation model

Data recommendation subsystem based on data center user behavior data and learning resource data, based on the behavior characteristics and personalized characteristics of students and teachers to recommend personalized resources and learning methods.

The system provides data recommendation service through data mining and analysis recommendation engine based on data platform.

It can recommend personalized teaching for teachers and provide personalized teaching resource recommendation based on subject knowledge and students' knowledge. Recommend personalized learning path and personalized exercises and exercises for students. Based on the data of students' behavior and performance, it provides parents with personalized counseling and personalized learning interpretation report. Provide comprehensive and three-dimensional data for the management, and provide data decision support services for the management.

#### REFERENCES

[1] Cheng Wei, The development of smart education from the perspective of informatization, Chinese Journal of Education, 2021.

[2] Wang Chenyu, Explore the promotion of teaching continuous improvement through information platform, Invention and innovation, 2021.

[3]Zhan Jing, Leading educational modernization with educational informationization, Scientific consultation, 2021

[4] Yuan Yijie, Research on the optimization design of Internet plus intelligent education information platform, Hebei University of science and technology, 2020.

# The Construction of Practical Education Mode of Ideological and Political Education in Colleges and Universities from The Perspective of Ideological and Political Education

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Abstract: Ideological and political education is an important way for colleges and universities to actively implement the fundamental task of moral education. At present, in order to promote the ideological and political education of college students, colleges and universities need to deeply tap the ideological and political education resources contained in other courses, speed up the realization of all-round education, constantly strengthen the ideological and political education, and promote the ideological and political construction of the course as a whole, so as to make all kinds of courses and ideological and political courses face each other, and build a great personality Bureau of Ideological and political education. Therefore, while constantly improving and strengthening the ideological and political theory education, we should combine theoretical learning with practice, combine ideological and political small class with social big class, educate and enlighten students in front-line practice, and constantly consolidate the depth of Ideological and political education.

Key words: Great ideology and politics; Ideological and political education in Colleges and universities; Practice education; Pattern; Structure

#### 1.INTRODUCTION

In recent years, many colleges and universities adhere to the ideological and political education as an important channel to implement the fundamental task of moral education, strive to create the whole process of "great ideological and political" education pattern, all staff participate in Ideological and political education, and constantly improve the effectiveness of Ideological and political education in colleges and universities [1]. On this basis, colleges and universities should continue to strengthen the construction and optimization of the practical education mode of Ideological and political education from the top-level design and front-line exploration, accelerate the formation of a vivid situation in which the theoretical learning and practical education of Ideological and political education integrate and complement each other, and effectively improve the quality of Ideological and political education in Colleges and universities in the new era.

2. THE NECESSITY OF CONSTRUCTING THE PRACTICAL EDUCATION MODE OF IDEOLOGICAL AND POLITICAL EDUCATION IN COLLEGES AND UNIVERSITIES FROM THE

PERSPECTIVE OF GREAT IDEOLOGICAL AND POLITICAL EDUCATION

Youth is a critical period for the formation and development of a person's world outlook, outlook on life and values. In terms of ideology, careful guidance and cultivation are most needed. Ideological and political education in Colleges and universities plays an irreplaceable role in this process [2]. At present, the ideological and political theory education in Colleges and universities in China has been quite mature and has played a positive role in the moral education and personality cultivation of contemporary college students. However, the problem of "one leg" in Ideological and political education in Colleges and universities still exists for a long time, that is, practical education has always been a short board in the ideological and political education in Colleges and universities, This has affected the further deepening and implementation of Ideological and political education in Colleges and universities in the new period. A good ideological and political education curriculum should have a great power to reach the people's heart [3]. Society is a big classroom, which provides a continuous stream of fresh teaching materials for ideological and political education in Colleges and universities. Only by organically combining the ideological and political small classroom with the social big classroom, can we strive to build and form a "big ideological and political course" education mode with rich connotation and various forms, and form a benign pattern of mutual connection and mutual supplement between Ideological and political theory education and practical education, Only in this way can we better help college students "buckle the first button in life", effectively implement the fundamental task of moral education, and constantly improve the pertinence and effectiveness of Ideological and political education in Colleges and universities in the new period.

3. ANALYSIS OF THE CONSTRUCTION PATH OF PRACTICAL EDUCATION MODE OF IDEOLOGICAL AND POLITICAL EDUCATION IN COLLEGES AND UNIVERSITIES FROM THE PERSPECTIVE OF GREAT IDEOLOGICAL AND POLITICAL EDUCATION

The construction of the practical education mode of Ideological and political education in Colleges and universities from the perspective of Ideological and political education should adhere to the principle of morality cultivation, extend the ideological and political

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education from classroom teaching to extracurricular teaching, build the "second classroom" of Ideological and political education in Colleges and universities, and construct the practical education system of Ideological and political education in multiple dimensions and levels, To realize the connection between practical education and theoretical education, and promote the ideological and political education work to achieve actual results.

3.1 Broaden the carrier of education and build the platform of "second classroom" practice education of Ideological and political education

We should actively broaden the carrier of Ideological and political education in Colleges and universities, strive to build the "second classroom" of Ideological and political education, and extend ideological and political education from inside to outside. This requires colleges and universities to actively organize and carry out a series of brand activities of Ideological and political education, organically combine ideological and political education with the second classroom, and constantly enhance the appeal and effectiveness of Ideological and political education. For example, in combination with the party history learning and education being carried out by the whole party, the party history learning and education reading club was established, and relevant wechat group reading and sharing activities were organized with the help of wechat platform; Organize students to actively shoot relevant ideological and political micro films or videos; Through this mode, we can provide a platform for students to consolidate their ideological and political knowledge and share their ideological and political insights, constantly broaden and enrich the carriers of Ideological and political education, integrate the second classroom into the practical education teaching system of Ideological and political courses, and effectively improve the quality of Ideological and political practical education. 3.2 With the help of red resources, build on-site teaching and education platform of Ideological and political education

Red cultural resources are important spiritual resources. Colleges and universities should actively make good use of local rich red resources, take red resources as the carrier to lead the construction of College Students' spiritual civilization, cultivate and practice socialist core values, and cultivate patriotism. In the process of Ideological and political education, we should actively organize college students to participate in the local revolutionary sites, revolutionary memorials and museums to learn the heroic deeds and revolutionary spirit of the revolutionary martyrs, and stimulate their enthusiasm to learn from them, We should guide them to establish their faith in socialism with Chinese characteristics; We can also tap the patriotic stories in the local red resources, organize red songs, watch red movies, etc. to stimulate the lofty spirit of college students to love the motherland and the people, and inspire young college students to serve the motherland. 3.3 Help rural revitalization and build a platform for social practice education of Ideological and Political Education The implementation of the Rural Revitalization Strategy is a major historical task of building a moderately

prosperous society in an all-round way and a modern socialist country in an all-round way. It is also the general grasp of the work of "agriculture, rural areas and farmers" in the new period. This also provides a favorable opportunity for colleges and universities to actively promote the practice education mode. Colleges and universities should actively take the Current Rural Revitalization Strategy as the starting point, actively combine the related activities such as "three visits to the countryside" of college students with the practical education of Ideological and political education, and go deep into the local countryside to carry out various intellectual and cultural activities to help agriculture. For example, at the college level, college students of relevant majors can be actively organized to go deep into the local countryside, At the same time, the school can also actively establish a cooperation mechanism with the local government, especially the township government, deepen the in-depth cooperation between the school and the government, improve the practice content, broaden the practice path, and jointly boost the revitalization of the countryside, so that college students can offer love, cultivate character, and increase talents in the vast rural practice.

#### 4. CONCLUSION

In a word, under the current background of Ideological and political education, colleges and universities should actively promote the reform and innovation of Ideological and political education for college students, at the same time, actively expand the education carrier, build the "second classroom" of Ideological and political education, carry out on-site teaching of Ideological and political education with the help of red resources, help rural revitalization, and build a long-term mechanism of Ideological and political practice education, Efforts should be made to build an overall pattern of Ideological and political practice education with the characteristics of the times in the whole process, all-round and all staff education, so as to effectively boost the physical efficiency of Ideological and political education in Colleges and universities.

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- [1] Zhang Jun, Jiang Jinkang, Xu Wei. Research on practical education mode of Ideological and political education in Higher Vocational Colleges from the perspective of Ideological and Political Education [J]. Modern marketing (Information Edition), 2019 (03): 144-145
- [2] Guo Sulian. Research on the path of integrating red culture into Ideological and political education in Colleges and universities from the perspective of "great ideological

and political education" [J]. Leadership Science Forum, 2019 (05): 88-92.

- [3] Jiang Shan. Double platform and four linkage: Construction of practical teaching mode of Ideological and political theory course in Colleges and universities from the perspective of "great ideology and politics" [J]. Journal of Beijing City University, 2020 (02): 100-103.
- [4] Wang Shuai Shuai, Zhou Yanan. Research on the practical education system and its value of Ideological and political education from the perspective of great ideological and Political Education [J]. Journal of Hubei open vocational college, 2020, 33 (20): 77-78.

## On the Teaching Reform of Ideological and Political Theory Course in Colleges and Universities

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Abstract: In the new era and new situation, the teaching of Ideological and political theory course in colleges and universities is facing new challenges. This paper mainly introduces the theoretical basis of the teaching reform of Ideological and political theory course in Colleges and universities, and puts forward some concrete measures, such as strengthening the construction of teachers, optimizing the existing teaching mechanism, breaking the traditional teaching framework, in order to further improve the effectiveness of Ideological and Political Theory Course Teaching in Colleges and universities, To construct the information and modernization blueprint of Ideological and political education.

Key words: Ideology and politics; Teaching framework and teaching mechanism of theory course

#### 1.INTRODUCTION

The teaching of Ideological and political theory course in Colleges and universities has obvious discipline characteristics of politics, ideology, theory, practice and times. Based on the current situation of Ideological and Political Theory Course Teaching in Colleges and universities, the realization of course teaching reform helps to coordinate the relationship between knowledge teaching and ability training, avoid formalism in practice course, and fully improve the course teaching system, Actively explore and master scientific and effective teaching methods.

2. THE THEORETICAL BASIS OF THE TEACHING REFORM OF IDEOLOGICAL AND POLITICAL THEORY COURSE IN COLLEGES AND UNIVERSITIES

Education is the foundation of our country. The teaching reform of Ideological and political theory course in Colleges and universities can effectively solve the problem of deviation in practice teaching and further improve the education and teaching system. The teaching reform of Ideological and political theory course in Colleges and Universities Based on Marxist practice view, Dewey's moral education theory and Tao Xingzhi's moral education theory can promote the "massive" of teaching resources The "high efficiency" of teaching interaction and the "diversification" of teaching carriers can effectively cope with the new challenges of "fragmented" "fission" knowledge acquisition, public dissemination and "diversified" value impact. In recent years, China's education and teaching environment has been comprehensively improved, and the ideological and political theory teaching in Colleges and universities has a new development goal. The system promotion of national policies, the endogenous driving force of discipline development, the realistic driving force of talent cultivation and the influence of foreign practical teaching will become the mechanism of the ideological and political theory teaching reform in Colleges and universities, Further improve teachers' cognition of Ideological and political theory teaching, and then comprehensively change the traditional teaching concept, improve the effectiveness of education, and create a good teaching atmosphere. Based on the basic structure of the current teaching mode of Ideological and political theory course in Colleges and universities, in order to further consolidate the guiding position of Marxism in the ideological field of colleges and universities, college educators should deeply understand the connotation of teaching methods of Ideological and political theory course, improve the classroom teaching environment, comprehensively use teaching methods, and meet the learning needs of students, Finally, the teaching thought of keeping pace with the times will be formed, and the fundamental educational task of establishing morality and cultivating talents will be implemented.

3. TEACHING REFORM MEASURES OF IDEOLOGICAL AND POLITICAL THEORY COURSE IN COLLEGES AND UNIVERSITIES

3.1 Strengthen the construction of Teachers

On the basis of constructivism theory, integrity theory and collaborative interaction theory, the effectiveness of Ideological and political theory teaching in Colleges and universities is closely related to teachers' teaching ability and teaching ideas. In order to further implement the concept of "three complete education", colleges and universities should actively strengthen the construction of teaching staff:

First of all, colleges and universities should actively guide teachers to change the traditional education concept, further improve the scientific understanding of Ideological and political theory teaching, so that teachers can take the scientific teaching concept as the guidance, fully infiltrate the concept of "life is education" and "society is school", take students as the main body, let students become the masters of learning, master learning methods, learn to learn, and promote the development of teachers The quality of students has been improved. Secondly, colleges and universities should strengthen the unity of teacher selection and training, improve the ideological and Political Theory Teachers' Marxist theory literacy and theoretical course teaching ability. Finally, in

the process of strengthening the construction of the teaching staff, we should take the teaching material system of Ideological and political theory course in Colleges and universities as the basis, guide teachers' ability to specialization, and further improve teachers' attention to the teaching of theory course.

#### 3.2 OPTIMIZE the existing teaching mechanism

The continuous development of Ideological and political education in Colleges and universities further highlights the era and scientific teaching concept. Teachers with excellent political and professional quality can cultivate a curriculum system with professional characteristics and adapt to social needs. In order to effectively deal with the new challenges of Ideological and political theory teaching in Colleges and universities in the new era, we should actively optimize the existing teaching mechanism: First of all, the school should optimize the curriculum system according to the characteristics of disciplines and social needs, improve the quality of Marxist theoretical basis curriculum, highlight the characteristics of disciplines, scientifically set up four sections, broaden students' employment channels, absorb the latest political theory innovation and academic achievements, and strengthen the construction of teaching materials. Secondly, we should improve classroom teaching and comprehensively use various teaching methods and means. For example, we can use discussion teaching to mobilize students' enthusiasm, use discovery teaching to stimulate students' autonomous learning, use practice teaching to cultivate students' practical operation ability, use micro class teaching to improve students' learning skills, and use network media to guide students to develop their learning thinking. Finally, colleges and universities should pay more attention to ideological and political theory education, increase the investment in theory teaching, reform the teaching plan, balance the proportion of theory teaching and practice teaching, open up the space for students' theoretical analysis, enrich the form of theory teaching, build a scientific and reasonable evaluation system of theory teaching, guide teachers to continuously update teaching ideas and enrich teaching content [1]. It is worth mentioning that in the process of optimizing the existing teaching system, teachers should fully highlight the core content of Ideological and political theory course teaching, reasonably distribute the teaching content system of Ideological and political theory course, realize the renewal of the teaching content of Ideological and political theory course, and strive to improve the content of auxiliary teaching materials of Ideological and political theory course, so that students can be problem oriented, Realize the full deepening of learning ability [2].

#### 3.3 Break the traditional teaching framework

In order to effectively improve the effectiveness of Ideological and political theory teaching in Colleges and universities, we should actively break the traditional teaching framework, and put forward some suggestions for it as follows:

First, teachers should establish problem-oriented teaching ideas, build teaching laboratory of Ideological and political theory courses, improve students' understanding

of theoretical knowledge, so as to realize the unity of theoretical and practical courses. Secondly, based on the complexity and particularity of teaching reform, teachers should construct a teaching environment of deep integration of information technology and ideological and political theory courses, improve the flexibility of information technology teaching, and make it integrated into the system planning of Ideological and political theory curriculum. Thirdly, we should actively optimize the strategy of "three views education" in the ideological and Political Curriculum Theory Teaching under the information technology environment, strengthen the main channel of subject coordination to educate people, give full play to the advantages of emotional education in the information technology environment, further change the teaching thinking and role orientation of Teachers, apply the teaching mode design of new information technology. and improve the flexibility of education. Finally, in the process of breaking the traditional teaching framework, we should coordinate the technicalism and humanism in the teaching process, and form the characteristic information teaching evaluation based on the actual effect. For example, in practical teaching, teachers can effectively apply VR technology, MOOCS teaching resources and mobile app to further improve the teaching attraction of Ideological and political theory courses. By strengthening the position of information technology in teaching activities, the influence of mainstream values in society can be expanded comprehensively, and the urgent needs of Ideological and political quality improvement of college students can be further met.

#### 4. CONCLUSION

In a word, the innovative development of Ideological and political theory teaching in Colleges and universities is helpful to realize the comprehensive renewal of the traditional teaching environment and embody the connotation that moral education is the foundation of education. Based on the theoretical basis of the teaching reform of Ideological and political theory course in Colleges and universities, colleges and universities should actively strengthen the construction of teachers, optimize the existing teaching mechanism, break the traditional teaching framework, and realize the new positioning of teaching innovation function.

- [1] Cheng Zhiyuan. Reform and innovation of teaching mode of Ideological and political theory course in Colleges and universities [J]. Knowledge base, 2021 (08): 96-97
- [2] Ma Xuyang. Reflections on the teaching reform of Ideological and political theory course in Colleges and universities in the new era [J]. Teaching and educating people (Higher Education Forum), 2021 (09): 74-77.

## The Application of Micro Course in The Mixed Teaching Mode of Business Japanese

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Abstract: Blended teaching mode is a new teaching mode in the information age. As a new teaching mode, the prominent feature of this teaching mode is the organic combination of traditional offline teaching and online teaching based on information technology, and the integration of the advantages of online teaching mode and offline teaching, which is a great innovation and improvement to the overall traditional teaching paradigm. In the teaching process of business Japanese education, adopting the mixed teaching mode is one of the important ways to promote the teaching reform of the course in recent years. In this process, the production and application of micro class is the key to effectively play the role of the mixed teaching mode. Therefore, it is necessary to deeply analyze the application of micro class in the mixed teaching mode of business Japanese, in order to effectively improve the quality of teachers The scientificity and accuracy of micro class production constantly promote the quality of business Japanese blended teaching.

Keywords: Business Japanese; Hybrid teaching mode; Micro class; Application

#### 1. INTRODUCTION

The hybrid teaching mode organically combines the traditional teaching mode with modern information technology, especially the use of micro class and other carriers in this teaching mode, so that students can use fragmented time to learn anytime and anywhere, so that students' learning is more targeted and autonomous, which further breaks through the traditional classroom restrictions on students' learning in time and space [1]. Therefore, the production and development of micro class is an important part in the process of hybrid teaching mode. Teachers should attach great importance to the production and development of micro class, and promote the application of Hybrid Teaching Mode in Business Japanese.

#### 2. ANALYSIS OF THE CONCEPT AND CONNOTATION OF MICRO CLASS

Micro lecture is micro course, which was first proposed by a professor of the University of North Iowa. With the rapid development of media technology and the in-depth development of the concept of sharing and open education, micro lecture began to rise in the global scope. The theoretical research and practical research of domestic and foreign scholars on micro lecture also gradually increased, and its concept connotation began to be unified If a relatively independent teaching course is organized based on the teaching content and teaching organization form, its core is classroom based teaching video, and it also contains teaching resources related to the course content,

such as teaching design, teaching reflection, classroom practice and teacher guidance. It is characterized by short, small and flexible. It is these factors that make micro class different from traditional teaching In recent years, with the introduction of a series of policy documents such as "opinions of the Ministry of education on comprehensively improving the quality of higher education", micro course has been further popularized and applied in higher education, which also promotes the reform and exploration of micro course in Colleges and universities.

## 3. THE APPLICATION OF MICRO CLASS IN THE MIXED TEACHING MODE OF BUSINESS JAPANESE

Business Japanese teaching is mainly based on the cultivation of business Japanese compound and professional talents, so the course often has strong practical and life characteristics [2]. In the process of using the mixed teaching mode of business Japanese, micro class plays a key role. In the specific application process, we should pay attention to the following aspects: 3.1 Attach importance to the design and application of micro lesson introduction

In the specific application process of micro class, its import link is very important, which directly affects whether it can attract students in a short time and bring students into the curriculum situation [3]. Therefore, in the mixed teaching mode of business Japanese, teachers must first pay attention to the design and use of teaching introduction. Taking the translation of menu in Business Japanese as an example, the introduction process must first bring the students into the teaching situation of the course of dish name translation as soon as possible. In order to achieve this goal and requirement, teachers can use the relevant Japanese situational short video or short play in the production and use of the micro class, and tell the story of their future work through the short video In the process of reception, the translation of dish names leads to the translation skills and methods in Business Japanese. In this process, the design needs to focus on the following aspects: first, we should strive to "enter the country", that is, we should be able to quickly arouse students' interest and enthusiasm in learning, so that students can enter the learning state as soon as possible Go in. The second is to strive for "simulation", that is, in the process of short video shooting, we should strive to use various experimental equipment to create a simulation learning environment, such as the model of related dishes, table, tableware, etc., so that the short video can become an important clue of the whole micro class.

3.2 Attach importance to the design and application of micro class training part

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In view of the strong practical and life characteristics of business Japanese, teachers should pay special attention to and give full play to the practical function of micro class in the process of making and using micro class, so as to effectively promote the development of practical teaching of business Japanese and improve students' practical application ability of Japanese. In this process, after careful design by teachers, the modules of competition, entertainment and translation training in Business Japanese teaching can be organically combined. In this link, students can form a learning group for practical training. The teacher arranges each group of students to translate the corresponding dish name, and students carry out practical training as translators, and show it to other students and teachers In this way, teachers can integrate the original text, translation and readers in Business Japanese translation teaching, which will help students quickly enter the training situation and improve the classroom teaching effect.

3.3 Pay attention to the design and application of the micro course expansion

In order to ensure that students can have more abundant extended teaching resources to learn business Japanese more efficiently, especially for business Japanese autonomous learning, micro class should also provide students with various kinds of common vocabulary, background knowledge, books and other related resources as much as possible in the design and application process. The translation of relevant dish names in Business Japanese is still taken as an example In terms of vocabulary, micro class can provide students with a list of common cooking vocabulary in the translation of dish names, background knowledge can provide food and beverage guide for various cuisine departments, etc. these expanded materials can not only provide effective support for students' independent learning, facilitate students to identify learning materials useful for their own learning in the learning process, and in the long term, they can learn business Japanese for students It also has a very important role in promoting.

#### 4. CONCLUSION

In short, micro class plays an important role in the use of business Japanese blended teaching mode, and it is also the core of the effective application of business Japanese blended teaching mode. In the process of designing and using micro class, teachers should constantly strengthen the theoretical research and practical grasp of micro class, adhere to the educational concept of people-oriented and lifelong development, closely combine with the teaching characteristics and objectives of business Japanese, try to use micro class as the carrier and platform, provide students with multi-dimensional learning support, supplemented by various forms of teaching resources and teaching materials, through micro class Its inherent short, small, refined, flexible and other characteristics, improve students' interest in Business Japanese learning, strive to come from life, highlight employment orientation, and improve the quality of business Japanese teaching.

- [1] Li Li, Yang Changlong, Jia Hongge, Yu Yan, Zhang Xiaozhou, Lin Wei. Research and application of mixed teaching mode of materials courses based on micro lecture support [J]. Journal of chemical engineering, 2020, 34 (02): 48-49.
- [2] Huang Li. Research on the application of micro class based blended teaching in secondary vocational schools [D]. Guizhou Normal University, 2019.
- [3] Leng Jing. Application of task driven method based on online and offline Hybrid Teaching in financial management course [J]. Journal of science and technology economics, 2019, 27 (29): 106-107.

## Electrician Skills Training Strategy in Higher Vocational Colleges Based on Cooperative Team-Teaching Mode

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Abstract: For the professional teaching of higher vocational education, electrical skills training can help the school to cultivate students' professional skills. Teachers should combine the characteristics of students, the teaching characteristics of the subject, the course content, and use the method of combining theory with practice to help students improve their interest and enthusiasm in learning, so as to improve the teaching effect. Based on this, this paper analyzes the training strategy of electrician skills in Higher Vocational Colleges under the cooperative team-teaching mode, for reference.

Key words: Cooperative team-teaching mode; Vocational school; Electrician skills training

#### 1.INTRODUCTION

Electrical skills training is a basic course for engineering majors in higher vocational colleges. At this stage, there are still many problems in the teaching of electrical skills training in higher vocational colleges, which will limit the progress of the cultivation of students' comprehensive quality in Higher Vocational Colleges to a certain extent. Therefore, for the teachers of electrical skills training in higher vocational colleges, We need to research and innovate the teaching methods under the cooperative team teaching mode.

#### 2. THE SHORTCOMINGS OF ELECTRICAL SKILLS TRAINING IN HIGHER VOCATIONAL COLLEGES

2.1 The operation time of practical skills is too little

For the practical teaching of electrical skills in higher vocational colleges, there is too little time left in the cultivation of students' practical ability in higher vocational colleges. In order to cultivate students' practical ability, colleges and instructors must set aside enough training period.

2.2 Electrician skills training project is not perfect

For the practical teaching of electrical skills in higher vocational colleges, the practical teaching content is relatively rich. However, the content and strategy of practical operation should be more comprehensive, so as to improve the quality and effect of practical operation.

2.3 Failure to introduce advanced equipment to electrician skills training

At present, industrial production is changing rapidly. Mechatronics technology integrates pneumatic technology, hydraulic technology, PLC technology, sensor technology, network and communication technology. It is also the main component of Industrial Science and technology. However, some higher vocational colleges fail to introduce the relevant training

equipment to the electrical skills training teaching, If we fail to realize the importance of advanced scientific and technological equipment and technology to practical teaching in time, we should actively introduce advanced training equipment to electrician skill training according to the specific situation.

2.4 Electrician skills training mode is not rich enough For the practical teaching of electrical skills in higher vocational colleges, in order to make the teaching mode of practical operation more scientific and reasonable, teachers need to have a good teaching level. However, due to the lack of sufficient research on the needs of enterprises, in-depth study on the characteristics of electrical skills training itself, a clear understanding of the teaching content and teaching methods of electrical skills training course, and the failure to match the training course system with the training teaching mode and the needs and technical development of enterprises, the electrical skills training teaching in higher vocational

## 3. THE APPLICATION OF COOPERATIVE TEAM TEACHING MODE IN HIGHER VOCATIONAL ELECTRICAL SKILLS TRAINING

#### 3.1 Cooperative team teaching

colleges has not been carried out.

The so-called team practice teaching mode refers to dividing the students who participate in the electrician skills training into different teams. In the process of cooperation, the team members should complete the tasks assigned by the instructor and related to the practice teaching. After the end of the course, the team's practice operation should be regarded as one of the credentials of the course scoring, and through the teacher's practice guidance, It can ensure that the overall advantages of the cooperative team are brought into full play, and then complete the practical teaching task together, so that the team members can help and cooperate with each other. Cooperative team teaching mode can help teachers adjust the atmosphere of practical teaching classroom, improve the enthusiasm and enthusiasm of vocational students to participate in electrical skills training, and improve their cooperation ability and autonomous learning ability, as well as their ability to analyze and solve problems [1].

#### 3.2 Divide the cooperation team

The team cooperation teaching mode can improve the teaching results of electrician skills training class to a certain extent, but in the actual teaching, we can find that there are some problems and limitations in the team cooperation teaching mode. Therefore, for higher vocational colleges, we should take the initiative to

cooperate with the teachers to guide the electrical skills training, and use effective countermeasures to solve the problem. For example, teachers can use the complementary model in the process of building a cooperative team. They should comprehensively consider the operation skills, knowledge structure and personal interests of higher vocational students. They should also comprehensively analyze the individual characteristics of higher vocational students to ensure that the individual differences among members can be effectively guaranteed, Students can give full play to their own advantages in cooperation, and can really do their best [2].

4. OPTIMIZE THE STRATEGY OF THE PRACTICAL TRAINING OF THE ELECTRICAL SKILLS IN HIGHER VOCATIONAL COLLEGES BASED ON THE COOPERATIVE TEACHING MODE OF TEAM

4.1 Teachers are the key to the practical training of electrical skills in Higher Vocational Colleges

At present, with the continuous development and continuous reform of Higher Vocational Education in China, people attach great importance to and pay attention to the development of practical training materials. After the practice teaching of electrical skills, the students' ability in practical operation has been significantly improved. To some extent, the study and practice of electrical skills operation have laid a good foundation. At the same time, the practical training teaching carried out by higher vocational colleges should not only impart the necessary theoretical knowledge to students, ensure that they can fully use the theoretical knowledge they have learned in the practice operation, but also ensure that students can master the skills of practical operation comprehensively. In this link, vocational teachers can play a good role in promoting.

4.2 Practical training operation is the necessary strategy for the training of electrical skills in Higher Vocational Colleges

The teachers should organize and divide the teams strictly according to the content of practical teaching in the course of carrying out the electrical skill training teaching, and complete the arrangement of practical operation posts according to the specific characteristics and personality of the students in higher vocational colleges. First, the teachers should explain the theoretical common sense in the practical training course, and should use the integrated teaching method, including operation guidance, classroom questioning and courseware display, so as to ensure that students can master the relevant theoretical basis comprehensively. Second, before the practical training, the vocational students should complete the relevant preparation work, carry out the training operation in the form of group, and complete the task of receiving training equipment.

4.3 Team evaluation is an important link in the practice of electrical skills in Higher Vocational Colleges

For any kind of practical teaching, the effect evaluation is a must to be completed. Only by doing a good job in the effect evaluation work, teachers can understand the students' knowledge and content. Therefore, in the skill training, the effect evaluation is very important, so it is

necessary to ensure that the guiding teachers can fully understand the practical training operation ability of the students in higher vocational colleges. After the skill training, teachers should take the cooperative team as the evaluation unit when evaluating the results. The practical training performance of vocational students includes the overall team performance and individual operation performance. The proportion of the overall team performance is 60%, and the proportion of individual operation achievement is 40%. This scoring method can students improve their team cooperation consciousness, and can help vocational students who can not do their own study to improve their enthusiasm in the practice of electrical skills, and can actively carry out practical operation, and thus will not affect the overall performance of the team. Students actively participate in team cooperation learning, which can improve the teaching atmosphere and finally achieve the goal of improving the effect of electrical skills training.

#### 5. CONCLUSION

The goal of electrical skill training is to train students' operation skills and professional qualities, lay a good foundation for their future work and adapt to post employment more quickly. Teachers can use cooperative team teaching mode to give full play to their own advantages, closely combine theoretical knowledge, improve their enthusiasm and initiative, master basic operation skills of electricians, learn and use them, and improve their practical operation level.

#### **ACKNOWLEDGEMENTS**

2018B012 research on electrician skill training in Higher Vocational Colleges Based on cooperative team teaching mode.

- [1] Ren Youping. The application of cooperative team teaching mode in the practical teaching of electrical skills in Higher Vocational Colleges [j]. Chinese and foreign entrepreneurs, 2020, (10): 216.
- [2] Ren Youping. The research on the practical training of electrical skills in Higher Vocational Colleges Based on cooperative team teaching mode [j]. Economic outlook around Bohai Sea, 2019, (07): 189.

### Study on The Protection of Zibo Intangible Cultural Heritage Based on The Background of The Construction of a Strong Cultural Province

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Abstract: With the rapid development of economy and culture in China, many intangible cultural heritage have disappeared and lost, even by other countries to register cultural patents. Therefore, the protection of intangible cultural heritage in China needs to be strengthened. This paper will combine the advantages of intangible cultural resources in Zibo City, Shandong Province, and discuss from the perspective of cultural protection, and combine with the cultural resources of Zibo City, and put forward relevant strategies for strengthening the protection of intangible cultural heritage.

Key words: Cultural construction; Intangible cultural heritage; Cultural protection

#### 1.INTRODUCTION

Intangible cultural heritage is an important part of the development of national culture, which contains strong regional characteristics and social and historical value. It is an important way to promote the harmonious development of society and inherit traditional Chinese culture. In particular, Zibo City with historical and cultural heritage has important cultural resources, which is conducive to promoting the exchange of various cultures, driving the development of tourism, cultural and creative industries, and meeting people's growing spiritual and cultural needs.

## 2. FULLY TAP INTANGIBLE CULTURAL HERITAGE RESOURCES AND INTEGRATE WITH TOURISM RESOURCES

According to the relevant data survey, Zibo City of Shandong Province now has 13 national intangible cultural heritages, including Meng Jiangnu legend, Wuyin opera, Liaozhai folk songs, Cuju, Zhoucun Xinzi, gezili Xinzi, Zhegu opera, Langniu Zhinv legend, Zhoucun pancake making skill, Zibo ceramic firing skill, Lu school painting, Boshan glass firing skill, Zibo Lantern Festival; There are 54 provincial intangible cultural heritages, such as the legend of Yan Wenjiang, shaole, Sisi food custom, sun Binquan, etc; There are 172 municipal intangible cultural heritages, such as Boshan tofu box making skills, ganniushan temple fair, Tianheng family banquet, Linzi folk songs, etc. From the number of visible, Zibo City has a large number of rich intangible cultural resources, and these cultural resources have a long history, has a profound historical and cultural heritage value. However, these cultural resources are obviously lack of enthusiasm in the current publicity and inheritance, lack of penetration in people's mass cultural life, relevant departments have not made full use of tourism resources, lack of integration of tourism and intangible cultural heritage resources [1]. Therefore, the relevant departments can make use of people's support for tourism during the festival to combine intangible cultural heritage resources with tourism, and hold folk intangible cultural heritage resources Expo before carrying out, so as to make these historical and cultural heritage leave a deep impression on the public. At the same time, the relevant departments can use the promotion of offline activities or online new media platform to meet people's interest and expectations of cultural heritage, make the intangible cultural heritage resources perfectly fit with the tourism industry, break through the traditional idea of promoting the protection of intangible cultural heritage resources, and make the intangible cultural heritage resources no longer be isolated in the minority circle. For example, five tone opera and partridge opera of intangible cultural heritage have a small audience, and the publicity of relevant departments only stays at the cultural level, lacking public experience, appreciation, interest and other factors. Therefore, we can cooperate with cultural and creative enterprises to create representative and characteristic tourism cultural products, carry out innovative design, and show the development vitality of intangible cultural heritage cultural resources. 3. WITH THE HELP OF NEW MEDIA PLATFORM,

#### 3. WITH THE HELP OF NEW MEDIA PLATFORM, LET INTANGIBLE CULTURAL HERITAGE RESOURCES LIVE IN THE PRESENT

The intangible cultural heritage resources in Zibo City have distinctive characteristics and complete types, including folk custom, folk music, folk literature, handicrafts, folk dance, opera, traditional sports and sports, etc. Although rich in resources, each type has its own characteristics. It is difficult to formulate a unified set of standards for promotion in the traditional way of cultural publicity, which means that the overall publicity effect will be reduced. With the development of modern science and technology, the major new media platforms developed by virtue of the advantages of the Internet have huge data flow. Zibo City can strengthen the integration of intangible cultural heritage resources with the help of the publicity of the Internet platform, so as to form a perfect unified development scale and shared resources. The specific implementation plan is considered from the following aspects: firstly, the relevant management departments need to integrate various types of intangible cultural resources in Zibo City, and fully display a series of project activities about handmade, ornamental experience, product sales and other links carried out by the local glass culture park through the network platform

based on the previous cooperation and development with the tourism industry; Secondly, Zibo City can invite wellknown network culture bloggers or experts and scholars to publicize Zibo's cultural characteristics. Such as Zhoucun pancake making skills, Zibo Lantern Festival, Cuju, Wuyin opera, etc. Only by keeping pace with the development of the times, can we not be eliminated by the times, make the traditional culture full of vitality, and improve the cultural confidence and attraction; Finally, Zibo can display intangible cultural heritage with the help of internet live broadcast platform and short video platform, and display Zibo intangible cultural heritage products in the form of pictures, videos and audio, so as to expand the communication power and influence of intangible cultural heritage. And through the live broadcast platform, more people can understand China's history and culture, and show the diverse cultural forms of intangible cultural heritage culture, such as literature, performing arts, music, etc., so that intangible cultural heritage culture is no longer shelved, but based on the present, into people's lives [2].

## 4. INNOVATING DEVELOPMENT IDEAS AND COMBINING RESOURCE UTILIZATION WITH CULTURAL INDUSTRY PROMOTION

The best way to inherit and protect intangible cultural heritage in Zibo is to make full use of resources and integrate the promotion of cultural industry with the utilization of resources. In recent years, with the increase of cultural protection in our country, we need to enhance the national cultural confidence to realize the importance of intangible cultural heritage. Therefore, the relevant departments of Zibo actively organize publicity activities on intangible cultural heritage culture, and encourage inheritors of intangible cultural heritage to participate in and demonstrate the activities, so that more people can understand the richness and profundity of China's culture. According to the relevant reports of Zibo Intangible Cultural Heritage Inheritance and Development Conference on dazhong.com, it is learned that many responsible persons of intangible culture in culture and tourism attach great importance to the protection and inheritance of Zibo's cultural heritage, uphold the protection concept of "seeing people, seeing things, seeing life", follow the protection rules of intangible cultural heritage, and establish a "five in one" cultural heritage protection system, In view of the disappearance and loss of intangible cultural heritage with important historical value, we should establish corresponding rescue and protection measures, constantly optimize and improve the protection list of intangible cultural heritage, and gradually form the protection and inheritance mechanism. There are many types of cultural resources in Zibo. The local government needs to make good use of cultural resources, strengthen cooperation with cultural enterprises, and promote the optimization and upgrading of corporate cultural industry. Specifically, resources with regional cultural characteristics can be processed into handicrafts. For example, Linzi Juwang sporting goods Co., Ltd. relies on Cuju, a national intangible cultural heritage project, to develop hand-made tools for competitions

performances, as well as souvenirs related to Cuju, such as antique Ju, tea sets, commemorative coins, trinkets, inner painted pots, etc., which not only promote the development of cultural industry, but also strengthen the spread of culture. For example, when the general secretary visited Europe, he brought the antique Ju developed by the company to Britain and France, which not only enhanced the influence of Zibo's cultural industry, but also made the world understand China's characteristic culture.

#### 5. CONCLUSION

Based on the above analysis of intangible cultural heritage protection strategy in Zibo, as Zibo is rich in intangible cultural heritage and shoulders the responsibility and mission of intangible cultural heritage protection in the new era, the relevant departments of Zibo need to fully tap cultural resources, use modern technology, hold cultural exhibitions and other ways to carry out cultural publicity, so as to promote the prosperity and brilliance of intangible cultural heritage in Zibo.

#### **ACKNOWLEDGEMENTS**

on the Protection of Zibo Intangible Cultural Heritage Based on the Construction of Strong Culture Province (117).

- [1] Gao Tingting. Webcast and intangible cultural heritage protection in the context of cultural confidence [J]. Journal of news research, 2018, 9 (18): 79-80.
- [2] Promise. "Intangible cultural heritage": a study of folk songs in Zibo, Shandong Province -- Taking the musical characteristics and development status of "Liaozhai folk music" as an example [J]. Art Museum, 2018 (27): 233-234.

### Discussion on the Optimization Strategy of E-Commerce Marketing Management Under the Background of Big Data

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Abstract: Since 2011, China's e-commerce industry has entered a stage of rapid development. People use the Internet to carry out various marketing activities, use rich network media to carry out personalized communication, provide various personalized support for customers, and integrate various online and offline data to analyze and interpret consumer behavior, It promotes the development of e-commerce marketing in an all-round way. Therefore, in view of the current in-depth application of e-commerce in marketing activities, how to better use e-commerce to carry out more effective network marketing, create more customer value and enhance consumer experience, and speed up the pertinence and effectiveness of e-commerce marketing management under the background of big data, undoubtedly has important theoretical and far-reaching practical significance.

Keywords: Big data; Electronic Commerce; Marketing management; Optimization strategy

#### 1.INTRODUCTION

The so-called e-commerce marketing is based on e-commerce. From the perspective of e-commerce, it analyzes the methods and practices of how to better implement marketing strategies. It is the inevitable product of the development of social media. Today, with the rapid development of e-commerce marketing, how to strengthen e-commerce marketing management more effectively, To improve the quality and efficiency of e-commerce marketing has become one of the practical issues that enterprises, especially e-commerce enterprises, need to face and solve in the new era.

2. THE CONCEPT OF E-COMMERCE MARKETING E-commerce marketing is based on the development of e-commerce, which solves the problem of how to better implement marketing strategies and improve the business ability of enterprises [1]. E-commerce marketing mainly includes marketing environment, marketing strategy and marketing method, and runs through the whole process of marketing. Specifically, e-commerce marketing mainly includes three parts: marketing process, information integration and marketing decision.

#### 2.1 Marketing process

Marketing process is the key link for enterprises to implement e-commerce marketing [2]. In the e-commerce environment, enterprises make full use of the advantages of low cost and sharing brought by Internet technology, effectively solve the problems of time and space constraints and information asymmetry between the two sides of the transaction, and promote the whole marketing

process more smoothly and smoothly. Before carrying out marketing activities, enterprises need to actively understand customers' needs, design marketing plans and establish customer relationships; At the same time, we should do a good job in marketing management and cultivate loyal customers.

#### 2.2 Information integration

Marketing information is the basis of e-commerce marketing. With the rapid development of e-commerce, the overall environment, technology and methods of e-commerce marketing have undergone profound changes. The integration and sharing of marketing information is accelerating. In this process, enterprises not only obtain more marketing information, but also face the challenge of strengthening the integration of marketing information and improving the utilization rate of marketing information, In order to gain more market share.

#### 2.3 Marketing decision

Marketing decision is the core of e-commerce marketing. With the in-depth development of e-commerce marketing, more and more enterprises begin to realize the key significance of marketing decision-making in marketing activities. In this process, the most important thing is to let consumers understand the products and services of enterprises as much as possible, and provide consumers with all kinds of information they need. Therefore, enterprises should make efforts to strengthen marketing decision-making, We should make clear the market orientation of our products, understand the consumption psychology of consumers, especially potential consumers, and make full use of various media to implement aggregate marketing, so as to cultivate relatively stable consumer groups.

#### 3. ANALYSIS OF E-COMMERCE MARKETING ENVIRONMENT

Practice has proved that marketing environment has a direct impact on marketing management. E-commerce relies on Internet technology to carry out business activities. With the rapid development of information technology, e-commerce marketing environment has undergone great changes, which to a large extent affects the implementation of e-commerce marketing management and marketing strategy. Therefore, e-commerce marketing environment must be fully considered.

#### 3.1 Macro environment of e-commerce marketing

The macro environment of e-commerce marketing mainly refers to the external environment of the whole marketing activities. The macro environment has little influence on the short-term e-commerce marketing of enterprises, but has a great influence on the long-term development of enterprise marketing activities. This macro environment mainly includes the following points:

#### 3.1.1 Population and environment

People are the ultimate service object of e-commerce marketing, and the quantity and quality of population affect the market capacity and potential to a certain extent. People born in different times often have different consumption ideas and habits. Understanding their consumption habits can help enterprises conduct more accurate customer analysis and market analysis. For example, for 70 years later, they have become the main force in the consumer market, forming the main force in financial services, real estate and other industries; For another example, the success of Taobao is largely due to the fact that it has captured the young people and attracted a large number of young users with relatively high quality and low price goods.

#### 3.1.2 Economic environment

The consumer market needs not only people, but also purchasing power. The economic environment is closely related to various economic factors faced by e-commerce marketing activities. For example, since the reform and opening up, there has been an obvious phenomenon of income stratification in our society. Many enterprises may focus on high-income groups, while more enterprises will focus on middle-income groups. For example, Huawei has launched mobile phone products with different price ranges for different income groups, And then create a personalized market for different consumer groups, which provides a huge space for e-commerce with the function of integrating fragmented market.

#### 3.1.3 Technical environment

Science and technology is the most direct and powerful factor affecting e-commerce marketing activities. With the rapid development and application of the new generation of information technology such as big data and Internet of things, the influence of technical factors on ecommerce marketing activities is becoming more and more obvious. For example, with the help of B2B mode of Internet, distributors can be directly bypassed and direct transactions between enterprises and consumers can be realized. At the same time, the rapid development of information technology also provides strong technical support for enterprises to improve marketing management, For example, with the help of the rapid development of information technology, enterprises can pay more attention to improving the online experience of consumers in the marketing process, and realize real-time communication with customers. Enterprises themselves also gain greater competitive advantage in this process.

#### 3.2 Micro environment of e-commerce marketing

Micro environment is the general term of marketing environment that enterprises directly contact and face in the process of e-commerce marketing [3]. Generally speaking, the marketing micro environment is composed of the internal environment of the enterprise, product suppliers, competitors, customers and the public. In this process, the internal environment of the enterprise,

customers, competitors and the public have a greater impact on the marketing activities of the enterprise.

#### 3.2.1 Internal environment

The internal environment of an enterprise refers to the cooperation and division of labor among various departments in the process of making marketing plans and carrying out marketing activities. In this internal environment, there are three main factors that play a greater role in marketing activities: the ability of rapid response and adjustment of enterprise marketing strategy, the number and team building of marketing professionals, and the informatization and networking of enterprise internal marketing management.

#### 3.2.2 Customers

Customer is the ultimate service object of enterprise marketing, and also the most important environmental factor. In e-commerce marketing activities, enterprises need to understand customers and users' habits of using the Internet, fully grasp various factors that affect the target customers, and actively find customers through the Internet channel, attract customers and cultivate loyal customers, so as to establish a relatively stable marketing relationship with customers.

#### 3.2.3 Competitors

In the increasingly competitive e-commerce marketing market, enterprises must also analyze their competitors at any time. Due to the dynamic characteristics of network media, enterprises need to timely analyze the advantages and disadvantages of competitors, clarify their position in the market, and timely adopt different marketing strategies, so as to continuously improve their market share and occupy a favorable position in the market competition.

## 4. DISCUSSION ON THE OPTIMIZATION STRATEGY OF E-COMMERCE MARKETING MANAGEMENT UNDER THE BACKGROUND OF BIG DATA

Under the background of big data, the optimization of e-commerce marketing management needs to focus on the product management, service management, price management, channel management and customer relationship management of e-commerce marketing, continuously optimize the overall environment of e-commerce marketing, and realize the continuous optimization of enterprise marketing.

#### 4.1 Strengthen product management

When e-commerce enterprises make marketing strategies, they must first consider the problems of products, which is the effective link between enterprises and the market. Only by providing products with high quality and in line with market price expectations, can enterprises meet the needs of consumers and survive and develop in the market. In the process of product management, enterprises need to focus on product planning, development, production, marketing and a series of links. As far as the products of e-commerce marketing are concerned, we should pay special attention to product quality, because in the process of e-commerce marketing, consumers can not experience the products before they buy them, they can only understand the products through the product introduction on the network, so product quality can be said to be the

key support for the development of e-commerce. With the rapid development of e-commerce, e-commerce marketing products will pay more attention to two aspects in the future. One is the difficulty of online transactions, and the other is the added value of e-commerce marketing to products. This requires e-commerce enterprises to continuously enrich the types of products and increase the added value of products in the process of strengthening product management, On the other hand, we should strengthen brand building, and be good at actively using Internet thinking to strengthen network brand building under the background of big data. For example, we should build brand into a living and memorable symbol, such as Tencent's Penguin logo. After a long period of brand operation, it has not only become Tencent's logo, but also extended to all Tencent's products, We should strengthen product management and strengthen the share of enterprises in the market.

#### 4.2 Strengthen service management

As an intangible product in the process of e-commerce marketing, service has the characteristics synchronization and fuzziness. The biggest feature of ecommerce marketing service is its non-contact and intangibility [4]. Therefore, in the process of e-commerce marketing activities, enterprises need to constantly improve marketing services and promote the tangible of marketing services, so as to better enhance customer experience. At the same time, with the more personalized and differentiated characteristics of customer needs in the of e-commerce, customers also comprehensively and detailedly understand the product and service information in order to meet their own needs, This requires enterprises to continuously optimize services, provide higher-level and more personalized services, or provide customers with more diversified and rich customized services as far as possible. In this regard, on the one hand, enterprises should make full use of the portal website, which should provide customers with product related information, knowledge and links as far as possible, Let customers know all kinds of information they need through the website. At the same time, to provide network personalized service, we should start from the service mode, service content and other aspects to provide users with more accurate and humanized personalized service.

#### 4.3 Strengthening price management

The enterprise is essentially the main body of the market for profit, so the price is very important to the enterprise. The high price of products has a direct impact on the level of profitability of enterprises. At the same time, it is an important link for enterprises to participate in market competition, and has a direct impact on customers' consumption choice and consumption behavior. In the process of price management, enterprises should make full use of big data and other technologies to timely track and analyze the price information of various raw materials, customer taste and other enterprises in the same industry related to products and services, so as to scientifically determine the pricing target of enterprise products and determine the product price.

In the process of product pricing, e-commerce enterprises should use different pricing strategies according to the actual situation. For example, for multinational ecommerce enterprises, their product pricing strategies should adopt global pricing, and fully consider the impact of different geographical differences. For example, for Amazon and other e-commerce enterprises, they should establish different regional websites in different countries, It adopts the way of globalization and localization to price; For some specific commodities, we can also adopt the low price strategy. When pricing, we only use the cost plus lower profit. In this way, we can quickly gain a larger market share in the short term, attract and cultivate more customer groups. For example, Taobao adopted this strategy at the beginning of its establishment, and it attracted a large number of young users in the short term, However, the premise of this way is to reduce the cost of products. At the same time, we also need to pay attention to comparing the price of the same type of enterprise website and the market price in this process. Otherwise, consumers are likely to find products with lower price through the network search function. The low price strategy can play a negative role at this time, so this pricing strategy should be used with caution.

#### 4.4 Strengthening customer relationship management

E-commerce marketing takes customers as the center and emphasizes personalized marketing, which is one of the most significant characteristics different from traditional marketing [5]. Customer management is an inevitable requirement after the emergence and development of ecommerce marketing. The so-called customer relationship management means that e-commerce enterprises should fully regard customer resources as one of the most important resources for the long-term development of enterprises in the process of marketing management, and comprehensively strengthen and manage various relationships with customers in the marketing process, such as contract signing, order processing, delivery, etc, In this process, e-commerce enterprises must actively rely on big data technology. On the one hand, they should strengthen the establishment and management of customer database, establish a perfect customer database as far as possible, help enterprises accurately grasp customers' demand intention, and provide conditions to maximize customers' needs. Therefore, they must collect all kinds of customer information in a timely manner within the scope permitted by law, Strengthen the management of customer files and customer segmentation. For example, in the process of establishing customer files, customers of different professions are filed in one category. When customers of this profession browse the relevant product information again, the system can display the corresponding product information to customers according to the needs of this profession, This will not only bring great convenience to customers' purchasing activities, but also quickly establish a harmonious relationship between enterprises and customers.

#### 5. CONCLUSION

In short, under the background of big data, e-commerce marketing management optimization strategy requires ecommerce enterprises to fully respect the basic laws of e-commerce marketing activities, focus on strengthening product management, price management, channel management, customer relationship management and other aspects of coordination, effectively optimize all aspects of e-commerce marketing process, and finally produce the overall force of marketing activities, Promote the continuous improvement of e-commerce marketing management level under the background of big data technology, and realize the maximization of enterprise marketing ability and overall development ability.

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#### REFERENCE

[1] Fu Lei. Discussion on the optimization strategy of e-

- commerce marketing management under the background of big data [J]. Modern marketing (next issue), 2019 (04): 192.
- [2] Lin Yimin. Research on the optimization strategy of e-commerce marketing management under the background of big data [J]. Modern marketing (next issue), 2020 (12): 268-269.
- [3] Peng Jingjing. Discussion on the optimization strategy of e-commerce marketing management under the background of big data [J]. Modern marketing (Information Edition), 2020 (01): 130.
- [4] Hu Jiani. Research on marketing strategy of FMCG in e-commerce era [D]. Hubei University of technology, 2016
- [5] Lu Hai Ye. Hisense TV's product strategy optimization research under the background of "Internet plus appliances" [D]. Jilin University, 2016.

## Analysis and Countermeasures of Digital Labor Alienation

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Abstract: In essence, digital labor is a new form of labor performance, especially in the current market model, its role of alienation has a congenital advantage. Combined with the definition of digital labor alienation, this paper analyzes the path of digital labor alienation in detail, and makes in-depth research on the development countermeasures, in order to better balance the advantages and disadvantages of digital labor, better coordinate the relationship of labor alienation, and improve the economy of digital labor.

Key words: Digital labor; Labor alienation; Digital capital

#### 1.INTRODUCTION

With the development of economy and technology, the relationship between production and labor force has changed to some extent. Digital labor is not only possible, but also presents various forms through its own alienation. In this regard, we should pay enough attention, through the in-depth analysis of digital labor alienation, grasp its key points, so as to timely change the form of labor, realize the liberation of human based productivity, and promote capital exchange.

#### 2. THE DEFINITION OF DIGITAL LABOR AND ITS ALIENATION

The concept of digital labor is closely related to the Internet. It can also be said that it is the process of taking information technology as the carrier to embody digital information as labor value. To analyze the alienation of labor, we should stand on the subjective position of workers, so as to explore the all-round development of labor freedom. Although digital labor has certain virtuality, it can not be completely separated from the social relations of production. Therefore, we should face the problem of digital labor alienation, and deeply explore all kinds of opposites, so as to find effective countermeasures to realize the liberation of labor force [1].

#### 3. ANALYSIS OF THE ALIENATION PATH OF DIGITAL LABOR

#### 3.1 Capitalization of digital labor

Resource sharing highlights the dominant position of digital labor. On the one hand, the application of digital technology improves the efficiency of labor production. At the same time, it also takes digital labor as a means of capital expansion and gradually privatizes with the development of the market. On the other hand, digital labor has a certain guiding role, which can expand commercial capital through the prediction of market trends, so as to accurately improve the dominance of digital labor.

#### 3.2 Alien existence of digital labor products

There is no opposition between labor products and labor activities in traditional labor, but digital labor is different, and its attribute is split to a certain extent. Especially in the current big data background, the fruits of digital labor are mostly used for free, which is essentially the opposite. For example, the development of artificial intelligence needs to be built on the basis of machine learning, and the ability given by human will eventually replace human labor activities, which is actually the most representative phenomenon of alien existence of digital labor products.

#### 3.3 Invisible rule of digital labor

The invisible rule of digital labor is mainly reflected in the following aspects: first, digital labor is more likely to appear in life without the limitation of working time. Secondly, the workers only produce digital differences, rather than being able to direct the labor process. More often, they are in the status of passive choice. Finally, labor supervision is invisible, and the original labor employment relationship has changed.

#### 3.4 Self loss under the control of media

The development of digital media enlarges the alienation of people's psychological mechanism, that is to say, labor behavior is not necessarily a true self feeling, but a manifestation of objectification. For example, when we buy and consume, we will choose according to the mainstream consciousness of digital media, which is virtually eroded by digital labor. It can also be said that we are lost under the control of the media.

#### 3.5 Digital hierarchy of social relations

In other words, the more we can master the law of digital labor, the more we can transform digital labor into economic value, and even reflect the deeper social influence.

#### 4. STRATEGY ANALYSIS OF DIGITAL LABOR ALIENATION

4.1 Carry out theoretical research on digital labor value With the continuous development of economic globalization, the research on the law of labor value is more critical. Although Marx's labor theory of value has the limitations of the times, it has the same guiding significance for the elaboration of labor relations and the construction of value analysis system. Through the research on the value theory of digital labor, we should first identify the value generated by digital labor, so as to find out the relationship of all kinds of labor activities and maintain the ownership of digital labor products. Secondly, we should attach importance to the impact of liberalism on digital labor capital and consolidate the theoretical position through specific academic research and guidance. Finally, we should pay more attention to the problem of exploitation in the alienation of digital labor, and determine the balance point of liberation and development of productive forces [2].

4.2 Identify the era orientation of digital labor

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First of all, based on the perspective of economic globalization, with the guidance of digital labor, we should eliminate regional economic differences, share the results of digital labor, and strive to improve the participation of digital labor in different regions without changing the labor force. Secondly, the alienation of digital labor has a certain advantage of backwardness. Once we grasp the economic autonomy, we can compete with mature capital. For example, China has the largest number of Internet users, so the development of digital economy has inherent advantages. Finally, at this stage, digital labor can not be the source of rootless, it needs to establish a coordination mechanism with the entity labor, so as to realize the attribute transformation of digital labor results.

4.3 Using digital labor technology to implement alienation governance

On the one hand, the transformation of digital labor technology can improve the level of artificial intelligence, so as to liberate workers from labor activities and have the opportunity to try a higher level of labor, which is the best way to manage labor alienation combined with the law of digital labor alienation. On the other hand, because digital labor makes the labor process more dispersed, it also increases the difficulty of measuring the amount of labor. Taking advantage of blockchain technology can effectively solve the above problems, and realize the reasonable distribution of labor income through objective digital explanation. At the same time, the sharing concept based on the Internet itself can effectively alleviate the alienation of digital labor and maintain an equal labor system.

4.4 Actively explore new digital labor organization relationship

One is to build a non-profit Internet platform, such as Khan college and Wikipedia, to enlarge the sharing function, so as to prevent the commercialization of digital labor products from being monopolized by capital. Second, give full play to the guiding function of the government,

establish a big data management platform, do a good job in the collection, distribution and use of digital labor resources, and improve the order of digital labor. The third is to build a commodity trading platform, ensure that digital workers receive due remuneration through the application of various technologies, and continue to explore new digital labor organization relations to ensure the due rights and interests of all kinds of users.

4.5 Actively seeking economic transformation in the era of artificial intelligence

In essence, it is because of the subjectivity of human beings that leads to the differentiation of labor level and labor ability. Especially in the era of artificial intelligence, the labor mode has undergone tremendous changes. At this time, we should seize the best opportunity of economic transformation to realize effective control of labor alienation. Through the analysis of the influence of digital labor on artificial intelligence, we can find that the data processing and analysis can be realized through machine equipment, while digital workers realize the transformation of labor status, which is the self liberation we pursue in the process of labor alienation, and also the development trend of digital labor.

#### 5. CONCLUSION

In order to study the analysis and Countermeasures of digital labor alienation, we should first understand the definition of labor alienation, and then combine the values behind it to solve the problems related to labor alienation, and make the plan of innovative coordination mechanism to improve the management level of labor activities in China.

- [1] Liu Haixia. Digital labor alienation Contemporary Interpretation of alienation labor theory [j]. Monthly journal of theory, 2020 (12): 14-22.
- [2] Han Jianfeng, Wang Chenchen. The criticism of digital labor in the perspective of Marx's labor value theory [j]. Journal of Xinyang Normal University, 2021 (02): 21-25.

## The Advantages Of "Online and Offline" Hybrid Teaching Mode in College English Teaching In The New Media Era

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Abstract: In the new media era, College English teaching position has gradually shifted from offline to online, and the "online and offline" hybrid teaching mode has been formed. At present, this English teaching mode has been favored by the relevant staff. Therefore, this paper briefly describes the connotation of the "online and offline" hybrid teaching mode used in College English Teaching in the new media era, and discusses the application advantages of this mode, hoping that relevant staff can bring reference.

Key words: New media era; College English teaching; Mixed teaching; Online teaching

#### 1.INTRODUCTION

English has always been an important subject in higher education. Improving the quality of College English teaching and creating cross-cultural talents are the consistent pursuit of Contemporary Colleges and universities. In this process, College English teaching methods continue to innovate, from the original offline teaching methods to online teaching methods, but also derived from the "online and offline" hybrid teaching mode. In practice, "online and offline" hybrid teaching mode has a high application value.

### 2. THE CONNOTATION OF "ONLINE AND OFFLINE" MIXED TEACHING MODE

Offline teaching mode mainly refers to the traditional classroom teaching mode, which is based on face-to-face teaching between students and teachers to complete teaching tasks. Online teaching mode is a new teaching method rising after the popularity of the Internet, with diversified characteristics. At present, online teaching methods mainly include live teaching, video teaching, MOOC teaching, video teacher teaching and synchronous classroom based on learning software. Generally speaking, online teaching mode requires relatively high software and hardware configuration for teachers and students, and computers, mobile phones and online learning platforms are widely used in related work. The so-called "online and offline" hybrid teaching mode is actually a new teaching mode that can realize the effective linkage and complementary advantages between online teaching and classroom teaching. This mode belongs to the compound teaching mode, which has the flexibility and efficiency of online teaching, and also has the intuitive and effective characteristics of offline teaching. For example, flipped classroom mode based on micro class, "MOOC platform + traditional offline classroom" mode and "blue ink cloud class + offline teaching consolidation" mode are very

common "online and offline" hybrid teaching mode [1].
3. ADVANTAGES OF "ONLINE AND OFFLINE" MIXED TEACHING MODE

The basic reason for the popularization and application of "online and offline" hybrid teaching mode is that this mode has the characteristics and advantages of both online and offline teaching modes, and the organic combination of the two can give full play to the effect of "1+1>2". Based on this, taking college English Teaching in the new media era as an example, this paper briefly analyzes the application advantages of "online and offline" hybrid teaching mode.

#### 3.1 Increase students' interest in learning

Compared with the traditional offline classroom teaching, online teaching method is more novel and more in line with the learning habits of college students. In College English teaching, the application of "online and offline" hybrid teaching mode not only realizes the mixing of teaching theories, but also realizes the mixing of teaching means, teaching environment and teaching resources. It can provide more complete and high-quality teaching services for college students, more easily meet their personalized learning requirements, and easily stimulate their interest in learning. Moreover, online teaching resources are very rich, which provides College English teachers with diversified choices. Teachers can choose teaching resources based on students' hobbies and interests, so as to attract students' attention and stimulate their learning enthusiasm. For example, College English teachers can provide students with rich teaching resources to help them understand the characteristics of English grammar and oral expression. Taking oral English teaching as an example, in the advertisement lesson, the teacher can choose the advertisement of Coca Cola company as a case, make a micro lesson or play the advertisement video online, and guide the students to memorize and analyze the representative advertising slogans such as "where there's coke, there's hospitality", "what you want is coke", "Coca Cola. Enjoy", So as to master the expression points of English advertising slogans. At this time, teachers need to stimulate students' interest in learning through diversified and intuitive teaching videos, animations or other types of online teaching resources.

#### 3.2 Improving teaching flexibility

The application of "online and offline" hybrid teaching mode in College English education can break the shackles of teaching time and place, and increase the flexibility of teaching time and space. English is a highly practical subject. Only theoretical teaching and teacher-student interaction in class can not fully meet students' learning needs. College students need more sustainable and flexible teaching methods to learn English anytime and anywhere. The "online and offline" hybrid teaching mode can just meet their actual needs and help them get rid of the time and space limitations of English Teaching [2]. For example, the flipped classroom teaching mode based on micro class or MOOC can enable students to use mobile phones or computers for self-study at any time. It can also provide students with opportunities to answer questions and solve doubts and consolidate practice based on offline classroom teaching, which can provide guarantee for improving teaching pertinence and students' learning autonomy and efficiency.

3.3 Promoting resource sharing and method innovation In College English teaching, the application of "online and offline" hybrid teaching mode can effectively improve the sharing efficiency and scope of teaching resources, and actively promote the innovation of teaching methods. For colleges and universities, high quality and rich teaching resources are the basis of talent training. In the past, the sharing of offline teaching resources is relatively difficult, and the space for resource selection is small, so most colleges and universities use resources for their own use; However, in the new media era, online education is developing very fast, and the types and quantity of information and digital teaching resources are growing explosively, which lays a good foundation for the realization of multi-directional sharing, utilization and multiple choices of resources. Based on the "online and offline" hybrid teaching mode, colleges and universities across the country jointly build a resource library, realize the sharing of teaching resources, and provide assistance for the effective development of online and offline teaching.

At the same time, the hybrid teaching mode based on "online and offline" can also realize the multiple interaction between teachers and students, which will change the College English teaching mode and teaching thinking, and promote the innovation of teaching methods. In the new media era, more and more new media platforms are applied to the teaching field. The integration of live broadcast, intelligent teaching cloud platform and online classroom teaching platform provides opportunities for enriching teaching means and methods. Moreover, with the popularization of "online and offline" hybrid teaching mode and the increasing application requirements of teachers and students, it is bound to promote the improvement of existing software or platform functions, so as to promote the innovation of teaching tools and teaching methods.

#### 4. CONCLUSION

To sum up, "online and offline" hybrid teaching mode realizes the combination of the advantages of online and offline teaching, and more effectively makes up for the defects of a single education mode. The characteristics of complementarity and mutual assistance lay the foundation for further improving the advantages of English teaching mode. In the new media era, the effective application of "online and offline" hybrid teaching mode in College English teaching can not only increase students' interest in learning, improve teaching flexibility, but also help to realize the sharing of teaching resources and innovation of teaching methods.

- [1] Liu Hui, Gu Shimin. Research on the blended teaching mode of College English culture courses based on the combination of "online and offline" [J]. Chinese Journal of multimedia and network teaching (first issue), 2020 (06): 1-3.
- [2] Leng Hongyan. Application and research of online and offline "hybrid" teaching mode in College English reading and writing course of private colleges [J]. Fujian tea, 2019, 41 (11): 104-105.

## Practical Thinking on Ideological and Political Education in Universities Under the Internet Plus Perspective

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Abstract: The development of Internet plus has brought far-reaching influence on the ideological and political education in Colleges and universities, and has also posed new challenges and subjects. Therefore, we should dig deep the potential of Ideological and political education in Universities under the background of "Internet plus". The Internet plus is a major task for ideological and political educators in Colleges and universities in the new era. Colleges and universities should focus on strengthening the Internet thinking in the ideological and political education of college students, strengthen the online and offline collaborative education of Ideological and political education, and do a better job in the ideological and political education of colleges and universities in the new era.

Keywords: Internet plus; Ideological and political education in Colleges and universities; Practice; Reflection

#### 1.INTRODUCTION

With the rapid development of the new generation of information technology such as big data, Internet of things and artificial intelligence, the deep integration of Ideological and political education and information technology in Colleges and universities in the new era and the realization of information development have become the inevitable choice for deepening the reform of Ideological and political education in Colleges and universities [1]. Colleges and universities should actively promote the reform of Ideological and political teaching methods, promote the application of modern information technology such as big data in the ideological and political course, construct the interactive teaching mode of Ideological and political course supported by all media, and realize the optimization and upgrading of Ideological and political education in Colleges and universities.

- 2. NEW CHALLENGES TO IDEOLOGICAL AND POLITICAL EDUCATION IN UNIVERSITIES UNDER THE BACKGROUND OF INTERNET PLUS
- 3. Internet plus has brought new challenges to the ideological and political education in Colleges and universities in the new era. The internal and external environment of Ideological and political education in Colleges and universities has undergone a comprehensive change.
- 2.1 The leading position of Ideological and political education in Colleges and universities is challenged A new generation of college students generally grow up in the network environment, their ideological characteristics

show distinct subjectivity, activity and other characteristics, which makes the dominant advantage of Ideological and political education in the traditional environment is gradually losing, the traditional ideological and political education "indoctrination" education effect is not ideal [2]. Ideological and political educators need to timely adjust and update their own educational philosophy and knowledge structure, and fully communicate with students with a more open and positive attitude, so as to better adapt to the changing needs of contemporary college students.

2.2 The initiative and autonomy of contemporary college students have been greatly improved

The main group of contemporary college students is the Post-00 generation. Growing up in the network environment, they have more channels and ways to get more information. They are no longer the role of "sitting and waiting for teaching". At the same time, they also have more autonomy in choosing learning time, content and methods. Under the background of "Internet plus", the multiple cooperation has become the main way to carry out ideological and political education. There is a need for full cooperation among diverse subjects. This also means that teachers are no longer just theoretical disseminators, and young college students are no longer just recipients of theory.

2.3 The content of Ideological and political education tends to be more diversified and three-dimensional Internet plus and new media are more open and have huge amounts of information resources. These information have been affecting the thinking of college students every hour and moment, and have influenced their way of thinking and value orientation. Especially, the complicated information abroad has already caused some

thinking and value orientation. Especially, the complicated information abroad has already caused some impact on the formation of world outlook, outlook on life and values of some young students. As a result, the effect and quality of Ideological and political education are facing great threats and challenges.

3. INTERNET PLUS HORIZON IDEOLOGICAL AND POLITICAL EDUCATION IN COLLEGES AND UNIVERSITIES

In the context of "Internet plus", the ideological and political education in Colleges and universities needs to actively co-ordinate the cyber source, constantly enhance the supply of network ideological and political education, and release the dynamic energy of Ideological and political education on the Internet. Specifically, we should focus on the following aspects:

3.1 Optimize ideological and political teaching content

innovation, improve students' classroom experience

Internet plus provides massive teaching resources and teaching information to the ideological and political education in Colleges and universities. Especially in the ideological and political education workers, the university should actively follow the principle of "content is king", combine closely with the characteristics of the Internet plus era, accelerate the innovation of Ideological and political education mode, enrich the content of Ideological and political education, and let the ideological and political education of the Internet enter the mind more. First, we should pay attention to the selection of teaching contents suitable for the development of young college students from the network information, and constantly improve the content system of Ideological and political education in Colleges and universities by refining and adapting them into the ideological and political teaching materials. The second is to strengthen the Internet education content in the traditional ideological and political education process, such as adding psychological consultation, network psychological education and network legal education in the ideological and political teaching process.

3.2 Enrich the carrier of Ideological and political education and create ideological and political wisdom classroom

Internet plus has the characteristics of cross border integration, openness and sharing. The ideological and political education in Colleges and universities should actively adapt to this trend, and focus on enriching the carrier of Ideological and political education with the help of "Internet plus", and create [3] of Ideological and political wisdom. First of all, we should start from the hardware, and build the ideological and political wisdom classroom from the two aspects of software and hardware. For example, with the help of mobile live broadcast, virtual simulation laboratory and technologies, we should build the virtual teaching experience scene of Ideological and political education characterized by interactive sharing, so as to provide students with a more intelligent interactive and situational learning environment. Through the establishment of learning groups, we can realize the interaction between students and students The communication between students and teachers can enhance the efficiency and information characteristics of Ideological and political courses; In order to provide more abundant digital resources for ideological and political classroom teaching in the new era, various video, audio, image and other methods are used to digitize the traditional ideological and political education content.

3.3 Improve teachers' information teaching ability and build a team of high-quality ideological and Political Teachers

Internet plus Internet plus cannot do without ideological and political education in Colleges and universities. It is indispensable to build a [4] system for ideological and political education in the era of Internet plus. Colleges and universities should actively adapt to the requirements of the development of the network era, and actively improve

the network literacy of Ideological and political educators through regular training and out of town training, so as to better carry out the network-based ideological and political education in teaching practice. At the same time, we should actively improve the assessment mechanism of Ideological and political educators, increase the content of Internet technology assessment, and urge teachers to learn more about new technologies and knowledge, and constantly improve the level of information technology teaching in Ideological and political education, and better carry out ideological and political education in Universities under the background of "Internet plus".

#### 4. CONCLUSION

In short, the further development of Internet plus has posed greater challenges to ideological and political education in Colleges and universities, and has also opened new ideas for ideological and political education in Colleges and universities. Universities should fully apply the convenience of the Internet plus era, expand the positions of Ideological and political education, optimize the content of Ideological and political education, enrich the carrier of Ideological and political education, enhance the information teaching ability of teachers, and create high-quality ideological and political teachers, so that the ideological and political education work in the era of "Internet plus" will be more contemporary. Enhance the pertinence and effectiveness of Ideological and political education, and improve the quality and efficiency of education.

- [1] Wu Qiong, Zhuang Debao. Teaching evaluation reform of "Ideological and political theory" course in Colleges and Universities -- from the perspective of intelligent technology empowerment [J]. Education and teaching forum, 2021 (11): 81-84.
- [2] Ma Yue, Li houxuan. Practical thinking on the "three complete education" mode of Ideological and political education in Colleges and universities [J]. Housing and real estate, 2019 (34): 245.
- [3] Li Huiqing, Liu Limei. Practical thinking on the combination of College Students' mental health education and ideological and Political Education [J]. China Adult Education, 2010 (13): 73-74.
- [4] Fang Sishi. On infiltration education and its application in Ideological and Political Education [D]. Fujian Normal University, 2003.

## Research on the Innovation of Ideological And Political Education Mode In Universities Under The Internet Plus Background

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Abstract: In recent years, the status of Ideological and political education in the university education system has become increasingly prominent. This article mainly introduces the connotation of the innovation of Ideological and political education mode in the Internet plus background, and explores the innovation path of Ideological and political education mode in the Internet plus background from three aspects: changing education awareness, updating educational methods and constructing teaching platform. The purpose is to further improve the effectiveness and depth of Ideological and political education.

Key words: Ideological and political education mode; Educational methods; Education platform

#### 1.INTRODUCTION

Under the new era and new situation, the ideological and political education in universities and Colleges under the Internet plus background is faced with challenges from the innovation of educational methods, the challenge of students' all-round development and the challenge of information development. Under such circumstances, educators should integrate internet literacy with traditional teaching thinking, so that Internet technology can effectively help the development of information technology teaching. To improve the flexibility of Ideological and political education in Colleges and universities to meet the needs of education.

## 2. INTERNET PLUS BACKGROUND INNOVATIVE THINKING OF IDEOLOGICAL AND POLITICAL EDUCATION MODE IN UNIVERSITIES

Under the background of Internet plus, the innovation of Ideological and political education mode in Colleges and universities fully embodies the characteristics of education advancing with the times. The current ideological and political education courses in universities are committed to the unity of Ideological and political nature, the unity of theory and practice, the unity of science and value, the unity of inheritance and development, and the unity of comprehensiveness and creativity. Effectively show the guiding function, guarantee function, education function and development function of Ideological and political curriculum. With the development of the times and the progress of society, the comprehensive innovation of Internet plus ideological and political education mode is the key path to consolidate the guiding position of Marx in the ideological field of universities, and it is also an urgent need to improve the ideological and political literacy of college students.

Through in-depth research on ideological and political courses in universities, it is found that there are fewer fulltime teachers in Ideological and political education in some universities. There are some related problems, such as the unreasonable structure of teachers, teachers' Marxist theoretical literacy still needs to be cultivated, and teachers' teaching ability needs to be improved. At the same time, the object of Ideological and political education in Colleges and universities does not have the corresponding knowledge reserve and acceptance ability, which is easily affected by the negative environment, and the ideological and political education work is difficult to meet the substantive requirements. In this case, actively promoting the innovation of Ideological and Political Education mode in Colleges and universities can comprehensively highlight the core and focus of teaching content, and make the teaching work fit in with the development of the times.

## 3. INTERNET PLUS BACKGROUND INNOVATIVE WAY OF IDEOLOGICAL AND POLITICAL EDUCATION IN UNIVERSITIES

#### 3.1 Change of educational consciousness

Under the background of Internet plus, the influence of the heterogeneous information environment on the thinking of the educational objects is increasingly obvious. Under such circumstances, teachers should actively change their educational consciousness and improve the effectiveness of Ideological and political education.

First, the university should organize the ideological and political teachers to actively participate in the review lectures on the reform process of Ideological and political teaching in Colleges and universities, and give a key experience on the work contents of the teaching restoration and reconstruction stage, the standardized initial governance stage, the comprehensive strengthening stage and the improvement innovation stage, so that teachers can reform the curriculum content, teaching methods and build their own theoretical system, Comprehensively deepen the understanding application of innovative education consciousness. Secondly, teachers should analyze the teaching environment mainly based on one-way injection teaching method, pay attention to the two-way interactive teaching environment and the teaching environment of special teaching method in the process of changing the educational consciousness, explore the students' learning performance and subjective initiative in different learning environment, and then combine theory teaching with practical teaching, Improve the attraction of curriculum

teaching in an all-round way. Finally, in the process of changing the educational consciousness, teachers should fully realize the essence of Ideological and political curriculum, shift the teaching concept from teacher centered to student centered, passive learning into active learning and deep learning, and integrate classroom teaching, practical teaching and network teaching.

#### 3.2 Updating education methods

Education methods directly affect the effectiveness of education. Based on the new planning of Ideological and political education in Colleges and universities and the new requirements put forward by the fundamental task of moral education, relevant educators should comprehensively update their education methods

First, the transmission efficiency of data and information in the Internet plus environment is greatly improved. Teachers can integrate Internet thinking with traditional teaching. For example, data can be integrated on the Internet, and data can be spoken in the classroom, data decision and data management can be used to optimize teaching thinking and guide the teaching object [1] scientifically. Secondly, the flexibility of education in the Internet environment has been greatly improved. Teachers can use Internet technology as a means of education to build a new education model based on network connection. According to the subjective needs of education objects, they can build a new education model and optimize the personalized teaching environment. At the same time, they can also complete the data analysis of teaching content and teaching methods with the support of Internet technology, In order to form a diversified teaching path and multi-level teaching theory system. Finally, based on the new requirements of Ideological and political education in Colleges and universities in the new era, teachers can effectively use the Internet technology to build the "Three Stresses" Ideological and political classroom with intensive lectures by teachers in class, mutual lectures by experts after class and frequent lectures by campus culture, so as to realize the linkage within the curriculum, between Ideological and Political Curriculum and between traditional teaching and new media technology, and comprehensively deepen the influence of education. It is worth mentioning that the ideological and political education in Colleges and universities is based on constructivism theory and interactive synergy theory. In the process of updating teaching methods, teachers should pay attention to the cultivation of students' Internet improve students' Internet technology application level, show the truth and charm of teaching, strengthen students' ability to master data and information, and consolidate the dominant position of Teaching [2].

#### 3.3 Construction of teaching platform

Under the Internet plus environment, ideological and political education in universities has a new opportunity for development. Teachers can build teaching platform through flexible use of Internet technology to improve the flexibility of education.

First of all, in the process of constructing the teaching platform, we should strive to realize the curriculum content reform, highlight the integrity and logic, optimize

teaching methods, support the construction of professional team, establish the platform development goal of deepening science, strengthening pertinence, improving timeliness and promoting synergy. Secondly, considering diversified development and comprehensive development of students, in the process of constructing teaching platform, teachers should adhere to the principles of combining generality with individuality, combining classics with reform and innovation, and combining theoretical teaching with practical teaching, deeply grasp scientific and effective teaching methods, and establish a modern teaching system of "course study research" integration, Connect the traditional teaching platform with the modern teaching platform to realize the exchange and sharing of information and the comprehensive integration of teaching experience. Finally, technical service is an important guarantee for the construction of teaching platform. Teachers can effectively use Internet technology and big data technology to build modern teaching platform and information security system, effectively cope with the new challenges faced by universities in the Internet plus era. It is worth mentioning that in the process of constructing the education platform, teachers should be committed to improving the connectivity of teaching objects, so that students can realize effective communication of learning information and sharing of learning experience in excellent Internet space, so as to deepen students' understanding of Ideological and political spirit and content.

#### 4. CONCLUSION

In short, based on the new development demand of the ideological and political education mode in the Internet plus background, relevant educational staff and managers should actively change their educational consciousness, renew their educational methods, build educational platforms, promote traditional teaching innovation and all-round development of students, and further optimize the teaching structure of Ideological and Political Education in universities. Highlight the spirit of humanized education.

- [1] long Mei Xing. The study of Ideological and political education mode of University Counselors in the Internet plus background [J]. public relations world, 2021 (02): 139-140
- [2] Wang Yun. Innovative development approaches of Ideological and political education in Colleges and Universities under the background of Internet [J]. Cradle of journalists, 2020 (12): 64-65.

## Difficulties and Countermeasures in Developing English Phonetic Teaching Model

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Abstract: In English teaching, phonetic teaching is very important, which is related to the students' voice knowledge level and the ability of speech knowledge application. If students have low knowledge level or weak application ability, it will inevitably lead to the students' obstruction in English communication, so modern colleges and universities should carry out English phonetic teaching mode. However, many colleges and universities have encountered many difficulties in the development of this mode, which leads to the low effect of teaching mode application and can not guarantee the quality of teaching. Therefore, this paper will carry out relevant research, mainly discuss the common difficulties encountered in the development of the mode, and put forward relevant countermeasures to facilitate the college to do a good job in English pronunciation teaching.

Key words: English phonetic teaching; Speech knowledge; The quality of English Teaching

#### 1.INTRODUCTION

At present, China's colleges and universities in English phonetics teaching mode has absorbed foreign advanced mode, but also integrated into China's education thought, forming a new mode, but the mode is not perfect in terms of the current situation, so there are obstacles in the implementation, and these obstacles have appeared in front of people for a long time, and still exist today, indicating that these obstacles have formed a dilemma. In this case, in order to help colleges and universities break through the dilemma of English pronunciation teaching mode, it is necessary to carry out relevant research, understand the nature of the dilemma, and put forward countermeasures to solve practical problems, which has practical significance.

- 2. DIFFICULTIES IN THE DEVELOPMENT OF ENGLISH PHONETICS TEACHING MODE
- 2.1 Students' interest in learning is low and their enthusiasm is weak

At present, more colleges and universities have found that students' interest in learning English phonetics is relatively low, which makes the learning attitude not serious. Many teachers say they have nothing to do about this phenomenon. They have tried many methods to stimulate students' learning enthusiasm, but they have not achieved good results. The main reason for this problem is that colleges and universities do not correctly position students in the development of English phonetics teaching mode, and fail to put forward interest elements from students' interest orientation, so that teachers do not know how to improve students' interest, and can only use oral emphasis, which has little effect, indicating that English phonetics teaching mode has encountered difficulties [1].

2.2 Students' learning style is single and lack of enthusiasm for training

The development of English phonetics teaching mode is divided into two parts, namely, teachers' classroom teaching and students' autonomous learning. In the second stage, students' self-learning activities should be carried out independently to continuously learn and consolidate English phonetics knowledge, or to continuously train their own English phonetics application ability. But in reality, many students' learning method in autonomous learning activities is "rote learning", rarely integrated into thinking, and in autonomous training activities, most students are lack of training enthusiasm. The reason for this phenomenon is that students do not pay enough attention to English Phonetics Learning and think that they seldom have the chance to use English in their life or future work. Therefore, there is no need to be so strict with themselves and have a negative training attitude, which is also a big dilemma for English Phonetics Teaching mode. 2.3 Teachers' teaching is unified, which is difficult to meet the needs of all students

At the teacher level, many colleges and universities carry out English phonetics teaching mode, and find that teachers will use a unified teaching standard to teach all students, and different students are affected by the differences in personal learning ability, learning talent and other aspects, there are differences in learning progress under the unified standard, in this case, some students' learning ability, learning ability, learning ability and so on Students with relatively weak English phonetic talent will gradually fall behind the schedule and open a gap with other students. With the passage of time, this gap will become larger and larger, which eventually leads to such students' inability to understand the teacher's lectures and the uneven quality of English phonetic teaching. It can be seen from this that teachers ignore the characteristics and needs of all students in teaching, and unified standards will inevitably lead to some students lagging behind others. Therefore, before the problem is solved, the development of English phonetics teaching mode will always be in the dilemma of uneven quality, and colleges and universities should start to deal with it.

- 3. STRATEGIES TO BREAK THROUGH THE ENGLISH PHONETIC TEACHING MODE
- 3.1 Around the interest oriented thought, the interest theme teaching method is adopted Students are not interested in English phonetic knowledge in the development of English phonetic teaching mode, so in the aspect of countermeasures, it is necessary to set up points that can make students interested in the development of the mode, so that teachers do not have to do useless work completely through oral emphasis. In this case, it is

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suggested that colleges and universities and teachers should focus on the interest oriented idea to correctly understand the orientation of students in the development of English phonetics teaching mode. Students should be regarded as knowledge constructors[2], so that they can become the dominant of learning activities, while teachers should be regarded as guides to carry out guided English phonetics teaching according to students' actual interest orientation, Only in this way can English phonetics teaching be carried out smoothly. For example, a teacher chooses "Basketball" as a topic of interest to teach English phonetics. The main method adopted by the teacher is the interest topic teaching method. In the application of the method, around the "Basketball" theme, the teacher puts forward some guiding questions to the students, which is similar to "when you and foreigners successfully cooperate and win a game, How would you like to celebrate with your foreign friends, This kind of problem is in line with the students' interest, so the students' learning enthusiasm is increased, and then it is expressed, so that the teacher can understand the students' defects in the application of English pronunciation, and then point out the shortcomings, so that the students can correct them. 3.2 Around the idea of cooperative training, cooperative teaching method is adopted

It is undeniable that under the Chinese social environment, college students do not have the opportunity to use English in their life or future work. Therefore, it is reasonable that students do not pay attention to English phonetics learning, but it does not mean that English phonetics is not important. On the contrary, learning a foreign language well is conducive to students' future development, especially English, an international language. In this case, colleges and universities and teachers should create opportunities for students to communicate with each other in English pronunciation teaching mode. At this time, it is suggested that cooperative teaching method should be adopted around the idea of cooperative training, so that students can communicate with each other and correct each other. For example, a teacher often organizes students to participate in some activities such as "book club" with himself. In the activities, students are encouraged to cooperate and communicate in English to discuss the problems in the book. However, teachers do not participate in the communication between students excessively, and generally only observe on one side. In this way, students become more proficient in the application of phonetic knowledge through communication, At the same time, it can accurately judge the difficulty problems of other students' phonetic knowledge, and ask other students to rectify them in time. In this way, students' English phonetic level will naturally improve.

3.3 Around the idea of differentiation teaching, group teaching method is adopted

Teachers must pay attention to the characteristics of each student in English phonetics teaching mode. They should not confuse all students and adopt unified standards for teaching. Here, colleges and universities should emphasize the idea of differentiated teaching to teachers and let teachers use group teaching method to carry out English phonetics teaching. Group teaching method is to let teachers follow the principle of "complementary ability and similar level" to group students, and use the corresponding progress standards for teaching according to the learning situation of different groups of students, so as to take into account the needs of all students. For example, a teacher grouped the students around the relevant principles, and adopted a faster teaching schedule for the group with higher learning ability, while slowed down the schedule for the group with relatively low learning ability, which can at least ensure that each student can grow up in a rhythm suitable for himself.

# 4. CONCLUSION

To sum up, through this paper, we know that modern colleges and universities have encountered many difficulties in the development of English phonetics teaching mode, which leads to the difficulties in the teaching work under the mode and the problems in the teaching quality. The Countermeasures in this paper can help colleges and universities break through the difficulties. Teachers should adhere to relevant ideas and use corresponding teaching methods to cultivate students' English pronunciation ability.

- [1] Quan Chengwei. Reflections on College English Phonetics Teaching [J]. Xueyuan, 2016000 (001): 42-45, 49.
- [2] Fang Xingyan. The Enlightenment of constructivism theory on College English Pronunciation Teaching [J]. China's off campus education, 2014 (30): 126.

# The Application of Hybrid Teaching Mode in English Teaching of Higher Vocational Colleges

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Abstract: With the rapid development of cloud computing and big data and other new information technology and the deep integration with higher vocational education, the new teaching mode such as hybrid teaching mode has been gradually applied in the higher vocational English teaching, which greatly promotes and improves the quality of Higher Vocational English teaching. Higher vocational English teaching needs to deeply integrate into the "Internet plus" thinking, and focus on increasing the coverage of blended teaching mode in daily teaching, and promoting the integration of online and offline teaching in Higher Vocational English teaching, and continuously improving the pertinence and effectiveness of English teaching.

Keywords: Mixed teaching mode; English Teaching in higher vocational colleges; Application

### 1.INTRODUCTION

With the development of Internet technology, foreign language teaching and learning are no longer only dependent on the traditional paper media, tapes, tape recorders, etc. the application of more advanced and convenient language technologies such as machine translation and speech recognition provides strong technical support for the reform of English Teaching in higher vocational colleges, It also provides new possibilities for Higher Vocational English teaching to explore new teaching modes such as blended teaching mode. In the process of using hybrid teaching mode, we should try to avoid and solve the common problems in the process of using this teaching mode, maximize the advantages of this teaching mode, and improve the level of Higher Vocational English teaching.

# 2. PROBLEMS IN THE APPLICATION OF BLENDED TEACHING MODE IN HIGHER VOCATIONAL ENGLISH TEACHING

Hybrid teaching mode is a teaching form that combines the traditional offline teaching with online teaching. This teaching mode takes into account the leading role of teachers in the teaching process and the main role of students in the English learning process, and emphasizes the complementarity and integration between online and offline Teaching [1]. At present, blended teaching mode has been applied in a certain range in Higher Vocational English teaching, which has greatly promoted the process of Higher Vocational English teaching reform, but at the same time, some common problems have been exposed in this process, mainly in the following aspects:

2.1 Lack of systematic design between online and offline

**English Teaching** 

In the process of Higher Vocational English teaching, the use of hybrid teaching mode must systematically and scientifically combine the characteristics of traditional offline teaching and the digital advantages of online teaching, so that the two can truly complement each other in the teaching process, which is the key to the success of hybrid teaching mode [2]. At present, the prominent problem of Hybrid Teaching Mode in the process of Higher Vocational English teaching lies in the lack of systematic design between online and offline. It needs to be further strengthened in the aspects of deep combination, highlighting the characteristics of Higher Vocational English teaching and meeting students' personalized learning needs.

2.2 Teaching resources failed to be excavated in depth The emergence and use of hybrid teaching mode further breaks the time and space limitations of traditional teaching mode, and will bring the overall reconstruction of teaching situation in higher vocational colleges. The deep exploration of teaching resources is an important part of the deep promotion of Hybrid Teaching Mode in Higher Vocational English teaching, The main problems of domestic higher vocational English teaching are as follows: first, it focuses on theoretical teaching, and does not really excavate and integrate the teaching content, teaching environment and teaching media from the perspective of vocational competence development of vocational college students. Second, online teaching is only used as an auxiliary and supplement of offline teaching, and it can not really play the role of outgoing teaching in English teaching, especially in practice teaching.

2.3 Problems in teaching practice need to be solved

The application of hybrid teaching mode to higher vocational English teaching undoubtedly provides new ideas and directions for the reform of Higher Vocational English Teaching in the new period. However, there are still many problems in the practical teaching level of Higher Vocational English, which need to be solved urgently. For example, the online teaching is relatively single, lacking of interaction and innovation, Some teachers only use the teaching platform in the teaching process, and the use rate of the network platform is low. At the same time, offline teaching is lack of correspondence with online teaching, which need to be solved in the teaching practice level.

3. RESEARCH ON THE APPLICATION OF BLENDED TEACHING MODE IN HIGHER VOCATIONAL

### ENGLISH TEACHING

The deep application of blended teaching mode in Higher Vocational English teaching should focus on cultivating students' English professional ability, especially their language expression ability, speed up the construction of o2o blended teaching mode in Higher Vocational English, and strive to improve the level of Higher Vocational English teaching.

3.1 Building a high quality English teaching team in Higher Vocational Colleges

Teachers are the key to the efficient application of blended teaching mode in Higher Vocational English teaching. In view of the outstanding "professional" characteristics of Higher Vocational English teaching, higher vocational colleges should speed up the overall optimization and construction of the existing English teaching team through various channels, and build a diversified and multi structure Higher Vocational English teaching team with Chinese full-time teachers as the main body, foreign teachers, off campus experts, industry Part-time Teachers as the auxiliary. Make full use of various advanced network media, through online live broadcast, forum, wechat and other diversified means, explore the threedimensional cooperative teaching path of English teachers, and actively build a high-quality English teaching team combining online and offline.

3.2 Create teaching content deeply integrated with the Internet

The content of curriculum teaching is an important carrier for the effective implementation of hybrid teaching mode. The goal of Higher Vocational English teaching is to cultivate students' language expression ability and application ability. At present, it is necessary to reconstruct the teaching content of Internet Based Higher Vocational English curriculum group. We should pay more attention to the influence of Internet plus on students' occupation ability, and listen, speak, read, write and write according to the requirements of the employment market and students' sustainable development. Translation skills training is a line of the way, and the cross-cultural communication ability and the Internet foreign language tool ability are taken as the filling line, and the teaching contents of English Teaching in higher vocational colleges are systematically updated and reconstructed.

3.3 Create a multi-media intelligent teaching environment Intelligent teaching environment is an important guarantee to realize the application of blended teaching

mode in Higher Vocational English teaching. At present, the blended teaching mode is widely used in Higher Vocational English teaching, and teachers' "cramming" still exists. To a certain extent, it ignores students' active construction and internalization of English knowledge and skills. Therefore, higher vocational English teaching should actively take the blended teaching mode as the carrier, and construct the teaching mode based on MOOCS, MOOCS, and English teaching Micro class, even we media and other multi-media support of Higher Vocational English blended teaching network classroom, provide necessary support for students' fragmented and personalized learning at any time, and effectively expand the space-time environment of English teaching; We should actively provide students with a variety of teaching environments, such as traditional classroom, online classroom, student associations and social practice. We should use the combination of traditional offline classroom and online classroom, English associations and various English professional competitions to expand, and actively make use of the advantages of online and offline teaching to build a multi environment to meet the personalized English learning needs of higher vocational students Multimedia intelligent teaching environment.

### 4. CONCLUSION

Practice has proved that the blended teaching mode plays an important role in optimizing the English teaching structure and improving the teaching effect. English teachers in higher vocational colleges should actively use Internet plus thinking to speed up the efficient application of blended teaching mode in Higher Vocational English teaching, and strive to promote the integration of online and offline teaching in Higher Vocational English teaching, and constantly satisfy students' increasingly personalized English learning needs.

- [1] Li Xin. Research on the application of Blended Teaching in Higher Vocational English Teaching [J]. Journal of Hubei correspondence university, 2016, 29 (15): 151-152.
- [2] Wang Yaqin. Application of mobile phone in blended teaching in Higher Vocational English in the Internet plus era [J]. education modernization, 2018, 5 (50): 337-338.
- [3] Lu Yan. Research on the application of blended teaching mode in Higher Vocational English Teaching [J]. Journal of Baotou Polytechnic, 2019, 20 (01): 54-56.

# Analysis Of Ancient Chinese Technological Thoughts Based on The History of Metallurgical Technology

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Abstract: Ancient Chinese technology has a long history, and metallurgical technology with a long history has created a unique metallurgical technology culture, which is an important force to promote the development of Chinese culture. At present, there is a lack of corresponding rational understanding of its technical thought. Metallurgical technology is a representative technology in ancient Chinese technology system. Based on the research of metallurgical technology documents and the analysis of ancient Chinese technological thought, the author thinks that its main characteristics are the simple dialectical thought of "universal connection of material world", which stresses the three elements of time, location and human.

Keywords: History of metallurgical technology; Ancient Chinese technology; Ideological characteristics

### 1.INTRODUCTION

Cihai's explanation of technology refers to the process operation method developed according to practical production experience, which broadly includes corresponding production tools and production process methods. Every technology is a system engineering, involving the relationship between technology and social happiness, organization and management, and the main body engaged in technical activities. There are profound technical thoughts behind any technical activities. Ancient China is good at technology and contains profound technical thoughts. Metallurgical technology has rich ideological foundation, which enriches the treasure house of ancient Chinese technology, ideology and culture. From Malachite to copper food is the development course of copper smelting technology in ancient China. From the understanding and utilization of meteorite to the perfection of wrought iron and steelmaking technology, it is the development vein of metallurgical technology. The history of Chinese mining and metallurgy civilization is the history of copper and iron. With the development of metallurgical technology, the idea of metallurgical technology gradually matures. Craftsmen accumulate experience to guide the practice and innovation of metallurgical technology. Most of the metallurgical technology ideas stay in the perceptual cognitive stage, lack of systematic ideological and theoretical summary. There are few records of metallurgical technology thought in ancient times. This paper analyzes the ancient technological thought through the history of metallurgical technology, which has important academic value.

**SIMPLE** DIALECTICAL **THOUGHT** UNIVERSAL CONNECTION OF MATERIAL WORLD Dialectical materialism holds that the material world is generally connected, and the metal minerals in nature are generally connected. Ancient metallurgists realized the symbiotic relationship. Guan Zi Di Shu records the symbiotic relationship of minerals, copper, iron, gold, silver, lead, tin and Gong metals. Some metal elements in nature have an impact on the growth of plants. Craftsmen search for metal deposits according to the distribution of related plants. There are relevant records in Volume 16 of the first volume of Youyang Zazu written by Duan Chengshi in Tang Dynasty. It shows that the ancient Chinese metallurgists had a deep understanding of the symbiotic relationship of metal deposits, and extended the connection of homogeneous category homogeneous category.

In ancient China, the metallurgical methods were divided into block ironmaking, carburizing and pig iron decarburizing. Infiltration technology highlights the concept of universal connection between metallurgical technology and things. The high carbon content in pig iron leads to brittleness, and decarburization reduces the carbon content into steel. After years of technical practice, metallurgical craftsmen invented iron and steel smelting processes such as cast iron, steel and so on, which promoted the process of Chinese civilization. It highlights the concept of positive and negative connection of things and enriches the materialist dialectics of ancient philosophy. The practice of metallurgical technology embodies the simple understanding of the idea of the connection of material world.

# 3. EMPHASIZE THE IMPORTANCE OF UNDERSTANDING

The ancient Chinese metallurgists remained perceptual cognition to the prospecting and smelting practice, which reflected the importance of teaching metallurgical technology and advocating teaching form for teachers and apprentices, and emphasizing the importance of understanding in smelting. If the pure fire refers to the experienced craftsmen in smelting to judge the suitable temperature of alloy casting by the color of furnace fire, they need to constantly explore and master in the long-term practice. The craftsman is skilled in mastering the

existing experience and improving the technical level through understanding. In fact, it is the reason why ancient metallurgical craftsmen master the exquisite technology through practice.

The fire conditions of "not to be quick" need to be mastered by understanding, and metallurgical metals emphasize the fire weather more [2]. Human knowledge can be divided into two categories: explicit knowledge and recessive knowledge, which can be expressed completely through language and text, and recessive knowledge can not be expressed clearly through language and text. Most of the ancient Chinese metallurgical technology is tacit knowledge, which can only be understood by practitioners, and needs to master the fire conditions of various technical links. The master of metallurgical links fire is the standard to measure craftsman's skills.

# 4. PAY ATTENTION TO THE THREE ELEMENTS OF TIME, LOCATION, AND PEOPLE

The three talents of heaven, earth and man are the systematic concept of traditional philosophy, which highlights the importance of the harmonious relationship among the three elements. The history of Chinese nation's technology thought is the history of the application of the theory of three talents in ancient philosophy. The ancient technology departments used the theory of three talents to form characteristic thoughts, such as 24 solar terms in agricultural production technology. In ancient metallurgical technology, craftsmen were influenced by philosophy, such as General Preface to Kao Gong Ji.

In practice, ancient metallurgists had to follow the weather. For example, the folk smelting furnace was opened in autumn. In Guangdong new language, "molten iron comes from cold", which reflects that the ancient folk smelting followed the law of time sequence The author of Tiangong Kaiwu points out that casting clocks can't be carried out in summer. In South China, the air humidity is high in summer, and the temperature of liquid metal drops quickly after it comes out of the furnace. Casting large areas of thin pieces with fine patterns often turns into waste. It is the embodiment of the thought of following the laws of nature. Geographical advantage emphasizes the idea of adjusting measures to local conditions in practice, which is an important methodology in the practice of ancient metallurgical technology. For example, the author of KAOGONGJI reveals the importance of following the regional characteristics by using "local Qi ran Ye".

In the process of metallurgical quenching, different texture materials will affect the quality of products. For example, according to the record in volume 4 of the story of Zhuge Liang, the craftsman Pu yuanqiang called the importance of water quenching. Shujiang is bright and talented. The reason is that the water quality in different places is different, and the trace elements in water react with metal products violently, resulting in different results. The story shows that ancient metallurgists knew the law of different results caused by different raw materials in quenching technology. Harmony is a harmonious interpersonal relationship, which emphasizes the unity of the main body in the technical practice. It is difficult to make complex metal products by personal strength alone.

According to the records of Tiangong Kaiwu, many craftsmen are required to cooperate closely to make metal products of Wanjun clock. Pouring metal solution should be done in order, and the unity and cooperation of craftsmen are emphasized to make complex metal products. It needs organization and management arrangement, which is the embodiment of people and ideas in metallurgical technology. We must actively participate in practice and give full play to people's initiative.

# 5. PAY ATTENTION TO THE PHILOSOPHY OF HARMONY

Harmony is an important concept in ancient Chinese philosophy, which was first defined by Shi Bo, the historian of Zhou Dynasty. Shi Bo's view of harmony and reality in Guoyu is a representative discussion about the complementary production of all living things with different functional attributes. Philosophically, harmony is the combination of different things to produce new things. The same is the same thing repeated, can not produce new things The book of rites records that Heye is the way of the world. Ancient philosophers believed that all things in the universe were mutually dependent and had a balance between nature and man. The ancient and modern philosophy influenced the technical practice of metallurgists.

In the path of ancient metallurgical technology, craftsmen invented pig iron smelting and casting technology. The invention of pig iron metallurgical technology requires mature high-temperature technology. After the Yin and Shang Dynasties, China began to smelt and cast bronzes. Simu Wufang Ding is the representative of metallurgical technology, and the premise of technology is to have perfect metallurgical facilities. The continuous progress of blast technology is the key factor for the invention of pig iron smelting and casting technology. With the progress of the times, metallurgical craftsmen innovate blast equipment, which is conducive to improving furnace temperature. On the basis of complete blast furnace facilities and sufficient dyestuff, ancient Chinese Metallurgical craftsmen invented pig iron smelting and casting technology to improve the efficiency of cast iron and make ironware widely used. The invention of technology is the product of science and philosophy. Based on the control of advanced blast technology and other related technologies, pig iron smelting and casting technology is essentially the application of philosophy. Under the guidance of the ancient metallurgical craftsmen and the thought, they created and invented the materials that steel contributed to the world's modern civilization. The philosophy of harmony is very broad, emphasizing the sum of interpersonal relationship, the idea of harmony between man and nature. The idea of "harmony between nature and man" is the highest goal pursued in the field of ancient technology The book of examination of work embodies the philosophy thought in metallurgical technology practice, only complete and four elements can the workers be the heaven. The simple material world is generally connected with dialectical thought, and the three elements of heaven and earth people are the characteristics of ancient Chinese metallurgical technology. Because of the guidance of ideology and theory, ancient metallurgical technology is ahead of other countries.

# ACKNOWLEDGEMENTS

The key technology of high efficiency, energy saving and environmental protection of the fully closed automatic magnesium melting production line, Department of Science & Technology of Liaoning Province, Number: 2020JH2/10100019.

Study on the preparation of building ceramics by waste granite powder from southern Liaoning, Liaoning Provincial Department of Education, Number: L2020lkyjc-04.

- [1] Xie jianfeng. On the ancient metallurgical technology and culture of China [j]. Frontier, 2008 (09): 187-191.
- [2] Xie jianfeng. A glimpse of the philosophy of "he (he)" in the practice of ancient metallurgical technology in China [j]. Study of Dialectics of nature, 2008 (08): 105-108.

# Research on The Influence of Internet on Strengthening the Party Construction in Higher Vocational Colleges

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Abstract: In the new historical period, the Party Construction in higher vocational colleges has received great attention and ushered in a new opportunity. Under the background of "Internet +", we need to change the thinking of Party construction, give full play to the advantages of network, contact with the reality of Party construction, and take a variety of means and methods to ensure that the party construction conforms to the requirements of the times. This paper will be based on the "Internet +" era, to explore a variety of ways of Party building work in higher vocational colleges, in order to provide the basis for improving the level of Party building work.

Key words: Party building work; Internet background; Higher Vocational Colleges

### 1.INTRODUCTION

With the rapid development of information technology and the integration of Internet and multi fields, how to complete the party building work with high quality in the context of Internet has become the latest topic of higher vocational colleges. In the new era, the Party Construction in higher vocational colleges needs to seize the historical opportunity, take a variety of channels and angles to promote the party construction work, integrate the resources inside and outside the school, and jointly commit to the development of the party construction cause.

2. THE INFLUENCE OF INTERNET IN PARTY BUILDING

- 2.1 Internet brings new opportunities
- 2.1.1 Provides a new way for Party Building

In the context of the Internet, Party building work is facing new opportunities. As for higher vocational colleges, Party building work in the new era needs to further expand the influence of Party building with the help of advanced platform. In practical work, we should make full use of the Internet, maximize the role of new channels, vigorously disseminate ideological and political education materials, and ensure the correct leading role of materials. We should not only conform to the law of Internet communication, but also conform to the reality of campus, meet the psychological demands of Party members, and actively occupy the "new position". Improve the effectiveness of Ideological and political education through the Internet, and form ideological and political atmosphere and atmosphere in higher vocational colleges. At the same time, under the influence of the Internet, a variety of social tools continue to emerge, which also provides a variety of channels for Party building. In practical work, we can actively use these convenient social tools with high popularity to let ideological and political thoughts enter the "circle of friends" and expand the appeal of Party building. We should vigorously carry forward and display the advanced deeds of the party since its founding, emphasize the spirit of fearless dedication, and carry forward the advanced deeds of the party with the help of real people and real things. In this way, we can strengthen the party members' thinking, play a vanguard and exemplary role, and further improve the quality of Party building. It can be seen that the Internet era has a positive effect on Party building, and also provides a new way for Party building.

2.1.2 Is beneficial to catalyzing party members' autonomy and Cultivating Party members' advanced nature

The Internet has distinctive innovative characteristics, which is very consistent with the pursuit of personality liberation in the new era. Under this background, we can use the Internet to catalyze party members' autonomy, carry forward the advanced nature of Party members through various channels, and achieve high-quality interconnection of Party building work in higher vocational colleges, enhance participation and Party member cadres' enthusiasm. Through the advanced network platform, let the party members consciously integrate into the party organization and live freely in the organization, so as to improve the management quality of Party members and overcome the practical problems of inconvenient management of "party members" [1]. At the same time, during the party building work, we can also organize activities to complete the practice of interconnected party building work. In practice, we can stimulate the autonomy of Party members, strengthen the sense of responsibility and responsibility, and improve the personal ability of Party members.

### 2.1.3 Improving organizational efficiency

The integration of the Internet also helps to improve the efficiency of the organization. In reality, with the help of mobile Internet, we can convey effective party building information from all directions and angles, ensure timely and accurate information, facilitate the high-quality development of Party building, and build more platforms for Party building. Party organizations at all levels can receive key party building information at the same time through the Internet, so that they can learn and discuss simultaneously, breaking the shackles of the traditional model, improving the hierarchical relationship of the organization, and breaking the information barrier in real work, which can not only be transmitted from top to

bottom, but also be transmitted one-way and layer by layer, greatly improving the efficiency of Party organizations, It is of great significance to standardize the party building work

### 2.2 New challenges of Party Building

Although the emergence of the Internet provides a great opportunity for the party building in higher vocational colleges, it also faces challenges and must be highly valued. The challenges in the new era are mainly reflected in the following points.

2.2.1 It makes ideological and political education more difficult

Under the influence of the Internet, students at this stage are relatively open-minded, curious about foreign ideas and cultures, and prone to behavior deviation and wrong ideas. In this context, teachers need to guide correctly, strengthen ideological and political education, and ensure that students' three outlooks are correct. The study found that the Internet era has greatly improved the convenience of information dissemination, and the means and methods of dissemination are increasingly perfect, and the main body of dissemination is also showing diversity, which is the distinctive characteristics of the mobile Internet. Based on this background, it is easy to induce the status quo of good and bad, leading to the formation of wrong ideas. Such as individualism, consumerism and so on, these distorted ideas are widely publicized on the Internet. Under the long-term influence of this concept, it will impact the values of Party members and students, make party members and cadres confused, and their mentality will become at a loss.

2.2.2 Higher requirements on the comprehensive quality of Party staff

Combined with practical experience, due to the limited integration ability of Higher Vocational Colleges and the short establishment time, there is an urgent need for highquality party work team in higher vocational colleges. At this stage, the team structure is simple, and most of the party work is performed by experienced teachers. Although the personnel engaged in Party building work have many years of experience, they are often not familiar with the emerging Internet technology, so they can not achieve the effective combination of the two. Compared with experienced teachers, although the young party workers are relatively familiar with network technology, they are lack of experience in party work, and they do not know how to use the Internet to complete high-quality party building work. Based on this situation, with the development of the Internet, the requirements for the comprehensive quality of Party personnel are higher. In order to ensure the quality of Party construction, it is necessary to improve the comprehensive quality of personnel and build a high-quality team. At present, it has become an urgent task for Party Construction in higher vocational colleges.

# 3. RELYING ON THE INTERNET TO STRENGTHEN THE EXPLORATION OF PARTY BUILDING

# 3.1 Innovative ideas

In the new historical period, if we want to do a good job of Party building in Colleges and universities, we need to

implement it from all angles. First of all, we need to innovate ideas, integrate the network and Party building work with high quality, give full play to the advantages of the platform, and expand the influence of Party building with the help of the network. In the practical work, we need to combine with the actual needs, persist in thinking from the overall situation, actively implement the party building work, and recognize the role of the Internet in promoting the party building work, so as to meet the objective requirements of the information age. At the same time, if higher vocational colleges want to strengthen the effect of Party building, they should also strengthen the supervision and management of the Internet, standardize the use of the Internet, build a high-quality platform around the core tasks of Party building, and improve the party building work system. On this basis, colleges and departments should be responsible for the unified management of the platform. In reality, the management of Party members inside and outside the school should be standardized, We should focus on different work patterns[2]. Finally, in the new era of Party building, we should make full use of information technology, do a good job in comprehensive security work, and improve the management level of Party members.

3.2 Improve the working mechanism of Party Building

3.2.1 Develop grid management system

If we want to promote the work of Party building with high quality, we must formulate a grid management system, which is a basic guarantee and can not be ignored in our work. We should make full use of Internet technology to complete high-quality ideological and political thought exchange, improve the convenience and timeliness of communication, and establish student branch in combination with the actual requirements of Party construction. In practical work, the grid management system should cover a variety of contents, such as education and training, Party member development and management, etc., build the whole process supervision system, improve the efficiency of party work, and ensure the implementation of Party Constitution and discipline. On this basis, with the help of grid management, strengthen the ideological awareness of personnel, achieve effective management, achieve the state of "leaving school without leaving the party", and effectively improve the party building ability and work effectiveness. 3.2.2 Improvement of interactive learning system

Besides the system support, we should try to improve the interactive learning system, play the role of interactive learning, and make use of the obvious characteristics and strong interactive advantages of Internet visualization, promote the enrichment of ideological education, grasp the methods of political learning, and carry out fragmented learning through the network platform, and gradually form the ideological system. At the same time, in the party building publicity, we can also add interesting guidance, take the main position of public opinion, actively spread positive energy, master the channels of communication that the grass-roots people are willing to accept, give full play to the implicit party spirit education and enhance the party members' consciousness [3].

Practice has proved that the interactive learning system has strong function, which can be beneficial to ideological exchange, strengthen the cognition of Party members and make party members have higher ideological awareness.

3.2.3 Improve the supervision mechanism of informatization

In the party building work, the supervision mechanism is indispensable, which is the key to retaining the advanced nature of the party. Under the background of the wide application of Internet technology, the supervision mechanism should also be innovated. The integration of information technology and supervision means can create a new information supervision mechanism, so as to strengthen the effect of supervision, meet the objective requirements of strict party governance, improve the awareness of Party members and cadres, ensure the openness and transparency of party affairs, and maintain the purity of the party [4]. In real work, through the means of information supervision, we can realize the whole process management, publicize the core links such as the development of Party members, standardize the work process, accept the supervision of the masses, and properly feed back the opinions of the masses on this basis. In order to reflect the characteristics of the times, we can also grasp the dynamics of student party members through the circle of friends, microblog and other channels, carry out targeted education combined with practical problems, and play the role of information supervision.

# 3.2.4 Build a high-quality team

In practical work, the formation of a high-quality team is the guarantee for the smooth development of the party building work, and we must attach great importance to it. The formation of high-quality team needs the help of training and continuous education. Through training, strengthen the ideological and political awareness, correctly grasp the basic technology of the Internet, and reasonably analyze the characteristics of information dissemination, so as to improve the ability of Party construction. In our work, we should encourage and support party officials to emancipate their minds, constantly stimulate innovative thinking, apply new technologies and tools to Party building, and play a high-quality role as a fighting Fortress (the role of the party organization).

3.3 Innovate the working methods of Party Building

In addition to ideological progress and mechanism innovation, we should also find ways to upgrade the working methods of Party building, ensure the smooth and high-quality development of Party building, give full play to the effectiveness of Party building, and push the management of higher vocational colleges to a new height. The specific methods are as follows.

3.3.1 Strengthen brand building and improve the position of Party Building

The work of Party Construction in higher vocational schools should be combined with the characteristics of the school, according to the actual situation of running a school, to create a characteristic party construction work, to give full play to the specialty and outstanding characteristics of vocational education, and to accomplish

the task of Party Construction excellently according to the practical requirements of Party construction work. In the party building activities, we should actively look for the theme close to teachers and students, close to daily learning and life, build the Internet Party building brand with distinct theme and high quality, improve the position of Party building work in the work, and constantly improve the influence of Party building.

3.3.2 Strengthen the integration of resources and actively carry out "striving for excellence"

Practice shows that in order to give full play to the advantages of Party building and ensure the achievements of Party building in higher vocational colleges, we should pay attention to the integration of resources, adhere to unified leadership, establish a leadership organization with clear responsibilities, pay attention to the use of data resources, open interactive channels, and use the above measures to improve the current situation of repeated educational content and avoid single propaganda content, So as to avoid the problem of service lag at the source. In addition, we should learn from the mobile party members and learn from this experience, strengthen cooperation with the government, maintain communication and liaison with enterprises, and integrate social forces into resultant forces, and maximize the advanced nature of Party members in real work. For example, to provide more communication platforms for Party members and cadres, encourage them to participate in the demonstration activities of Party members, and further enhance their own advanced nature while strengthening their practical achievements, fully feel the strength of Party organizations and recognize that the party is an objective reality everywhere.

3.3.3 Strengthen communication and interaction, and try every means to enrich the content of Party building

In the work of Party construction, we should avoid boring and repetitive content propaganda. Only in this way can we improve the quality of Party construction. In the new historical period, with the help of the Internet, we can complete high-quality real-time interaction, publish party building topics regularly with the help of the platform, guide Party members and cadres to participate in discussions, and fully mobilize their autonomy. Through interactive communication, we can understand the ideological trends of members and grasp all kinds of demands in time. On this basis, we can carry out professional and targeted education, strengthen the ideological understanding of Party members and help solve practical difficulties. For example, in real work, we can open the branch secretary's microblog account, or establish a branch circle of friends, strengthen the communication with Party members, and realize the benign contact and interaction. At the same time, the use of network channels, multi angle propaganda of advanced theory, and sharing of theoretical results, patriotic film resources in the platform, through a variety of resource integration, to create mobile education classroom for Party members, in order to enhance the executive power and attractiveness of Party building work. It can also promote the spirit of hard study of Party members by using the mobile Internet, advocate the deeds of dedication, continuously expand the influence of Party members and enrich the connotation of Party building.

At this stage, social networking platforms are rapidly rising. In the work of Party building, we can also deepen the understanding of Party members' content by building WeChat official account. For example, we will set up a "special column on Party building" in which we will regularly share some articles and the spirit of the advanced conference. The content of the party building column can keep up with the current affairs, including current affairs, politics and the construction of Party style. At the same time, it can also report various activities held by higher vocational colleges, such as the training of party activists and the development of probationary party members. In a word, the party building work in higher vocational colleges should be combined with the reality. When carrying out wechat communication, we should select novel themes, achieve high-quality integration of reality education and network, so as to strengthen the role of network education, give full play to the advantages of diversity, establish common beliefs, change negative thoughts, and overcome bad styles, Imperceptibly form ideological and political ideas, break the shackles of traditional party building, improve the possibility of Party building work.

# 4. CONCLUSION

To sum up, the party building work in higher vocational colleges is still facing challenges in the new era. Although the Internet has played a role in promoting the party building work to some extent, the party building work in Colleges and universities is still grim. In order to achieve good party building effect and enhance the advanced nature of Party organization, we need to start from the details, fully utilize the network advantages, realize the reasonable integration of resources, innovate management mechanism and work method of Party building, expand the data platform of Party building, and provide effective guarantee for the high quality and efficiency of Party building.

- [1] Zhou Jinzhang, Wang Guangzhu, Du Huanhuan. Research on the path of strengthening the party construction of Higher Vocational College Students in the new era [J]. Modern communication, 2021 (01): 162-164. [2] Zhuang Jianquan, Li Xinyu, you Ao. Research and Practice on strengthening the grassroots party construction in Higher Vocational Colleges -- Taking the Information Technology College of Guangdong Polytechnic of light industry as an example [J]. Journal of Liaoning Communications College, 2020, 22 (03): 63-67. [3] Meng Qi. Research on long term mechanism construction of strengthening students' Party building in Higher Vocational Colleges [J]. Public standardization, 2020 (02): 95 + 97.
- [4] Li Xiaoming, Zheng xionglin, Zhang Yong. Research on the practical path of strengthening and improving the grassroots party construction in Higher Vocational Colleges in the new era [J]. Journal of Jiujiang Polytechnic, 2019 (02): 63-65.

# Environmental Protection Design Method of Highway Bridge Substructure

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Abstract: This paper first introduces the impact of highway bridge construction on the environment, and further expounds the importance of environmental protection design method of highway bridge substructure. Then, based on the consideration of environmental protection, it puts forward the construction points of highway bridge substructure, including the environmental protection design and construction points of abutment, pier and bridge foundation, In order to realize the effective implementation of environmental protection design concept in bridge construction.

Key words: Highway bridge; Substructure; Environmental protection design; Construction

### 1.INTRODUCTION

With the continuous progress of technology and the gradual improvement of people's environmental awareness, in the construction of highway bridges, in addition to the safety of infrastructure and the operability, the environmental protection is also an important consideration. The substructure of bridge is a structure which bears the gravity of the whole bridge, and it is in the key position in the whole structure of the bridge. In the design of bridge structure, the safety and environmental protection should be fully considered, and the environmental protection design and safety design of the substructure of highway bridge should be well done.

# 2. THE IMPACT OF HIGHWAY AND BRIDGE CONSTRUCTION ON THE ENVIRONMENT

After the completion of highway bridge construction, the service life is relatively long, which will be effectively integrated with the surrounding environment. The impact on the environment in the construction of highway bridge is mainly reflected in the following aspects. First, the impact on the ecosystem, construction and excavation in construction will cause certain damage to the surrounding vegetation, soil and water sources. Secondly, for geological topography and bridge construction, it will have an impact on the original stability of rock and induce certain disasters. Third, for water and the atmospheric environment. The pollution discharge in construction will cause certain pollution to water and the surrounding air environment. The substructure of bridge in highway bridge construction involves three parts: foundation, pier and abutment, which play an important bearing role, and is the main project in bridge construction, and has an important influence on the surrounding environment. The construction points of the highway bridge substructure are analyzed in detail from the perspective of environmental protection.

3. CONSTRUCTION POINTS IN THE SUBSTRUCTURE OF HIGHWAY BRIDGES BASED

ON ENVIRONMENTAL PROTECTION CONSIDERATIONS

3.1 Design method and construction points of abutment Abutment is the key structure connecting the bridge and the roadbed, and also the key point in the design of the In the design, the surrounding geomorphology, the geotechnical properties and the foundation condition should be clearly investigated in advance, especially the connection between the abutment and the roadbed should be handled well in [2]. When the geotechnical characteristics of the highway along the line are relatively stable and the bearing stratum is in good condition, the layered bench design method can be considered to reduce or avoid the excavation of the slope, which can effectively avoid the impact on the stability of the slope. When there is soft soil foundation near the highway, the design method of high pile cap foundation can be used, which can not only reduce the damage to the slope, but also shorten the construction period [3]. In addition, it should be noted that there is an inherent difference in stiffness between the subgrade and the bridge, so it is inevitable to have the problem of uneven settlement. In view of this problem, in order to fully ensure the smooth connection between the abutment and the subgrade, the approach slab is often used for connection design, which can effectively achieve the functional requirements of smooth transition.

3.2 Key points of bridge foundation design and construction

In bridge design, the foundation is the key bearing structure of beam load transfer to the rock and soil layer, and it is also an important influence factor of the bridge for the geological and soil environment. Based on environmental protection considerations, we should fully consider and try to avoid the settlement and sliding problems of the foundation in the construction and operation process, which will have a significant impact on the geological landform [4]. There are three kinds of common foundations: pile foundation, open cut foundation and open caisson foundation. First of all, if you choose pile foundation, you need to pay attention to the following points. First, in the choice of the way to enter, try to choose the place that has little impact on the surrounding environment. Second, it should be embedded in the casing. The function of the casing is to keep the stability of the hole wall and block water. The buried depth should be determined according to the soil conditions, and the inclination inspection should be carried out. Third, in drilling, hole forming and hole cleaning. In the drilling construction, we should adhere to the speed sequence of slow first and then fast. In the hole cleaning, we can use the methods of slag extraction, slurry

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extraction and slurry exchange, among which the slurry extraction method has a greater application advantage. Fourth, in the reinforcement cage production and concrete pouring work. When the length of the skeleton is long, it can be made in sections. The long sentences of the sections should be consistent with the requirements of the hoisting construction. At the same time, a certain cushion block should be set outside the skeleton as the protective layer. The underwater concrete should be poured with conduit, the pouring of concrete should be consistent, and the lifting of concrete should be checked in time. In the process of pulling out the conduit, the low and uniform speed should be maintained to avoid mud core and reduce the quality of pile foundation. Secondly, if we choose the open cut foundation, we should pay special attention to the protection of groundwater. We should design the open cut scheme in advance, make preparations for the drainage of groundwater, and design the relevant drainage emergency plan, so as to reduce or avoid the impact on groundwater as much as possible. Finally, if the open caisson foundation is selected, the biggest disadvantage is that the open caisson foundation will occupy a lot of land. Therefore, the open caisson foundation is often used in large bridge engineering or anchor foundation structure. In the design, the scope of land use should be reasonably planned to reduce the occupation of farmland as much as possible, And we should also consider to minimize its construction in the river, or reduce its water blocking area. 3.3 Design method and construction points of pier

Pier is an important force transfer component connecting superstructure and foundation of bridge span structure. The structural types of pier are quite diverse, and different structural styles have significant differences in floor area. At present, pile pier is the most common bridge structure. If the pier is farmland, it will occupy a lot of farmland. If the road is below, the pile pier can not provide enough clearance under the bridge, so it will cause some trouble to the bridge and the road or other bridges. But the advantage of pile pier is strong stability, which can ensure the safety of bridge design(As shown in Figure 1).

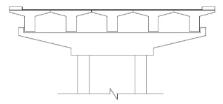


Figure 1 Schematic diagram of pile pier

Single column pier or vase pier, compared with pile pier (as shown in Figure 2), occupies less land area at the lower part, which can not only improve the utilization rate of space at the lower part, but also has less impact on the land and space at the lower part during construction. However, this kind of structure has a certain risk of side wall instability.

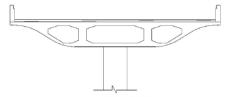


Figure 2 Schematic diagram of single column pier / vase pier

In the design of piers, we should consider the actual situation, combine the actual characteristics of the project, according to the local geological conditions, comprehensively measure the requirements of safety, stability, ecological and environmental protection, and select the most appropriate design solution.

### 4.CONCLUSION

With the continuous promotion of the concept of sustainable development, and the continuous upgrading of bridge construction technology, the future bridge construction needs to consider more environmental protection elements to form an ecological and harmonious human and natural environment. The substructure of highway bridge plays an important role in the safety, stability and durability of bridge design. In the selection of design method, in addition to the safe and stable foundation, reasonable economy and feasible technology, its impact on the environment should be fully considered, so as to avoid or reduce the pollution or damage to the surrounding environment in the design method of highway bridge substructure. We should strictly follow the technical requirements in the construction, improve the quality of the project, and master the construction points. Make the substructure of highway bridge play a better role as a link between the preceding and the following.

- [1] Wang Yong. Environmental protection design method of highway bridge substructure [J]. Sichuan cement, 2021 (02): 102-103.
- [2] Peng Yu. Environmental protection design method of highway bridge substructure [J]. Heilongjiang traffic science and technology, 2020, 43 (09): 248 + 250.
- [3] Song Ningqiang. Key points of environmental protection design and construction of highway bridge substructure and foundation [J]. Traffic world, 2019 (34): 115-116
- [4] Zeng Xin. Research on environmental protection design method based on highway bridge substructure [J]. Traffic energy saving and environmental protection, 2018, 14 (02): 83-85.

# Application of Entrance Education in Ideological and Political Education of College Students

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Abstract: As the starting point of College Students' daily ideological and political education, entrance education has a direct impact on College Students' Ideological and political education. Colleges and universities should focus on strengthening the enrollment education of freshmen, make efforts to do a good job in education and guidance at the beginning of enrollment, help the ideological and political education of college students, and make a good start after enrollment.

Key words: Entrance education; College student; Ideological and political education; Application

# 1.INTRODUCTION

Entrance education is a series of educational work in the aspects of ideology, learning, life and psychology for freshmen, which is an important part of Ideological and political education for college students[1]. The effect of entrance education has a direct impact on the change of Freshmen's role and psychology, and is related to the growth and development of college students in school. Therefore, paying attention to entrance education and doing a good job in education guidance is an important foundation for the ideological and political education of college students to achieve good results.

- 2. THE SIGNIFICANCE OF ENTRANCE EDUCATION For the freshmen who have just gone through the college entrance examination, they are facing a new life and learning environment. The important significance of entrance education is to guide the freshmen to adapt to the new changes in the role, learning and life of the university stage faster and better, and integrate into the learning life of the University as soon as possible.
- 2.1 Entrance education is the objective need to guide college students to change their roles

After entering colleges and universities, the first thing that college students need to face is the change of their role, which is mainly reflected in the following aspects: first, the change of their role in the school. Many college students may need to change from the top students in middle school or students who hold important positions to ordinary students. The second is the change of social role. After entering the university stage, the family and society have higher expectations and requirements for college students, especially in career choice. The third is the change of self role. Many college students often study in different places. In fact, after entering the University, they already know that they have entered the ranks of adults and are far away from their relatives and friends, which requires a process of self role change.

2.2 Entrance education is the objective need for college students to adapt to the changes of study and life

After entering the campus, college students also need to face significant changes in learning and life, once it is difficult to adapt, it is very easy to produce a variety of psychological problems [2]. In terms of learning, one is the change of learning tasks. In the university stage of learning, we no longer only focus on belonging and basic knowledge, but also need to master relevant professional skills. The second is the change of learning content. In the middle school stage, the learning content focuses on consolidation and deepening, while in the university stage, there are more subjects, faster pace, broad and cuttingedge learning content, with high requirements, more content and heavy tasks. The third is the change of learning style. In the middle school stage, the study is often based on subject teaching, and students rely on teachers more. In the university stage, self-learning is emphasized, which requires students to have a strong sense of self-learning and self-discipline. In terms of life, one is the change of life style. Most college students live on campus, and many things are no longer handled by their parents, but decided and handled by themselves. Second, changes in the scope of life. Most of the middle school students take the campus as their main activity scope, and their life scope is relatively single. However, their life in the university stage is more extensive and rich, and their life fields and scope are greatly broadened, which makes their living environment more complex and easy to be eroded by bad temptations from all aspects, And then bring new challenges to the ideological and political education of college students.

3. PAY ATTENTION TO THE ENTRANCE EDUCATION AND CARRY OUT IDEOLOGICAL AND POLITICAL EDUCATION OF COLLEGE STUDENTS

Entrance education is of great significance in the process of Ideological and political education of college students. Instructors and other educators should pay attention to the use of entrance education and help freshmen establish scientific world outlook, outlook on life and values. In this process, counselors need to focus on the education of ideal and belief, love school, professional ideological education and school discipline and school discipline education, It will lay a good foundation for the ideological and political education of college students.

3.1 Focus on the education of ideals and beliefs

Only if you have faith in your heart can you reach a long distance[3]. It is of great significance to strengthen the

education of ideal and belief of young college students for the purpose of "the first button" in college students' life, to guide them to firmly believe in theory and practice, and to strive to grow into a new generation with full responsibility. As a counselor, we should take the entrance education as the carrier, and carry out the ideal and belief education from the entrance of college students, and constantly make unremitting efforts to this work. On the one hand, counselors should educate students on the history of the party, enlighten the young college students with the history and theory of the party, and let them be rational, moral, trustworthy and active in the process of learning history, so that they can mature as soon as possible in their thoughts. On the other hand, we should strengthen the ideological and moral quality education, carry out ideological and moral education in the form of professional report meeting, class meeting, essay collection and speech contest, and constantly improve the moral quality and political literacy of college students.

# 3.2 Focus on school love education

Patriotism is the deepest and most lasting emotion, and it is also one of the important contents of College Students' daily ideological and Political Education [4]. To educate freshmen in patriotism, counselors should first start with the education of loving the school, rely on the main goal, development process and talent cultivation concept of the school development, stabilize the freshmen's thoughts, let students understand the school as soon as possible, and organize freshmen to visit the history museum and the main buildings of the school, Let them understand and get familiar with the school and the environment as soon as possible, and enhance their pride in learning at school.

### 3.3 Focus on school discipline education

Legal education is an important part of College Students' daily ideological and political education, and school discipline and school rules are the epitome of the legal concept, which mainly includes the content of study style education, school rules and school discipline and safety education, which is an important guarantee for college students' normal life and learning. Counselors should actively organize freshmen to make use of class meetings and other channels to focus on learning system documents related to school spirit and discipline, typical cases of

college students violating school discipline and rules, organize freshmen to focus on academic performance assessment, rewards and punishments, student manuals, etc., and check students' learning achievements through corresponding examinations, so as to enhance college students' sense of discipline and law-abiding.

### 4.CONCLUSION

In short, as the starting point of College Students' daily ideological and political education, entrance education is of great significance in helping college students adapt to the college environment as soon as possible and enhancing the quality of College Students' daily ideological and political education. Counselors should actively use classroom teaching method, activity education method, model demonstration method and other ways, take ideal and belief education, school discipline education, love school education as the breakthrough point, strive to help college students successfully complete the transformation from middle school students to college students in the freshman stage, and effectively enhance the pertinence and effectiveness of College Students' daily ideological and political education, And then lay a good foundation for the orderly development of Ideological and political education in the future.

- [1] Zhao Zhiqing, Wang Yimin, Wang Pingping. Analysis of current situation and development strategy of freshmen enrollment education at home and abroad [J]. University education, 2019 (04): 6-10 + 24.
- [2] Qu Yunjin, Jiang song. Research on the effectiveness of freshmen entrance education [J]. University education management, 2009, 3 (06): 80-84.
- [3] Wu Lili. Research on the innovative mode of freshmen entrance education in the post epidemic era [J]. Journal of Anhui Vocational and Technical College of Commerce and business (SOCIAL SCIENCE EDITION), 2020, 19 (04): 77-80.
- [4] Liu Chang. Analysis on the entrance education mode of Higher Vocational College Freshmen led by socialist core values [J]. Vocational and technical education, 2019, 40 (35): 65-68.

# On The Location Advantage and Industry Development Direction of Hainan Free Trade Port

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Abstract: Hainan free trade port has unique geographical advantages. It has abundant natural resources and unique leadership advantages. And it has a vast economic hinterland. In the process of industrial development, we should combine our own advantages. This paper will briefly describe the location advantages of Hainan Free Trade Zone, and explore the industrial development direction of Hainan free trade port from the development countermeasures of high-tech industry and eco-tourism industry.

Key words: Hainan free trade port; Location advantage; Industrial development direction

# 1.INTRODUCTION

Hainan free trade port has an advantageous geographical location and a long history of trade development. It plays an important role in China's foreign trade. It is one of the important dimensions of trade exchanges between China and the world. It can contact the trade resources and advanced technologies of many countries, which is very beneficial to the development of high-tech industries. Its rich natural resources can provide support for the ecotourism industry, which has an important role in promoting the economic development of Hainan.

# 2. LOCATION ADVANTAGE OF HAINAN FREE TRADE PORT

The location advantages of Hainan free trade port mainly include the following aspects: first, the unique geographical location and the advantages of outlying islands. Hainan Island is separated from the mainland by Qiongzhou Strait, which is an independent island. It has certain advantages in customs supervision measures and tariff policy. Due to the physical space separated from the outside world, the flow of goods, personnel and funds is relatively free. Second, Hainan has a good ecological environment and abundant island resources, which provides necessary conditions for the development of tourism and plays an important role in promoting the construction of Hainan tourism area and tourism consumption center. In addition, Hainan is rich in drug resources, known as "natural drug bank", which provides resource support for the development of medical and health industry. Not only that, Hainan has a beautiful environment, pleasant climate and beautiful scenery, which has a certain attraction for talents at home and abroad, and provides a talent base for the development of high-tech industry. Third, the southwest economic hinterland of Hainan is very broad, which can not only attract international resources, but also drive the economic development of surrounding areas. Hainan's pillar industries mainly include high-tech industry and modern service industry. On the industrial level, it forms a complementary pattern with the processing industry and heavy industry in Southwest China and Pan Beibu Gulf region, which can promote the balance of industrial development in the region and realize good complementarity [1]. Fourth, compared with the mainland, Hainan's development space is more open, free and independent, and has obtained many preferential policies to support industrial development, which can attract talents and enterprises to gather. In addition, the convenience of bonded processing and the sale of duty-free goods also provide convenient conditions for the development of processing industry.

# 3. INDUSTRIAL DEVELOPMENT COUNTERMEASURES OF HAINAN FREE TRADE PORT

# 3.1 High tech industry development

In order to realize the leap forward development of economy in any region, it is not enough to only rely on traditional industries. It is necessary to vigorously develop high-tech industries, optimize industrial structure and realize structural upgrading. In recent years, the state has launched a series of policies to support Hainan's economic development, and the Hainan government has also actively responded to the national policies. With the efforts of various parties, the high-tech industry has developed rapidly, and a number of high-tech industrial development zones have been established. A large number of high-tech enterprises have emerged, and the high-tech industry presents a trend of cluster development. In order to further promote the development of Hainan's high-tech industry, the Hainan government needs to speed up the implementation of national support policies, and actively promote capital opening and investment freedom. We should strengthen international exchanges, relax restrictions on high-tech industries, and lower the entry threshold. At the same time, we should formulate a negative list of industries. We should relax the restrictions on foreign investment so as to achieve the goal of introducing international high-quality resources. Hainan Province is adjacent to Guangdong, Hong Kong and Macao Dawan District, which is rich in high-tech industries and resources. Hainan free trade port can introduce and make use of the advanced technology and human resources of Dawan district to build a platform for exchange and cooperation with Dawan district and achieve mutual benefit and win-win results. At the same time, the development of high-tech industry also needs a lot of talent support. Hainan Province should make full use of its policy advantages to develop education industry and cultivate technical talents in the field of information industry. It should also introduce a large number of domestic and foreign scientific and technological innovation talents, constantly expand the team of hightech talents, optimize the talent structure, and provide talent support for Hainan's scientific and technological innovation and the development of high-tech industry. In addition, we should formulate corresponding talent management system, not only to introduce talents, but also to retain talents. While promoting the development of high-tech industries, we should also establish a sound talent security system, improve housing, education, medical conditions, simplify the process of entry-exit and capital exchange, and improve supporting service measures to solve the worries for the development of

# 3.2 Development of ecotourism industry

Tourism is one of the pillar industries of Hainan free trade port, and its development momentum is rapid. The superior geographical location, warm climate in four seasons and rich natural resources make the number of tourists in Hainan Province increase year by year, and the total income of tourism industry also increases year by year. But in the process of rapid development, there are also some problems. First of all, the popularity and influence of Hainan International Tourism Island are relatively weak. Compared with Bali, Hawaii and other international islands, there is a huge gap, and the number of international tourists attracted is not much. Therefore, the Hainan government needs to vigorously promote its tourism brand, so as to establish its international reputation. In order to attract more international tourists, Hainan should make full use of its natural resources, combine cultural resources with natural resources, and create a unique brand of Hainan eco-tourism. Secondly, Hainan's tourism industry has the problem of unbalanced development. The tourism areas are mainly concentrated in the eastern coastal areas, and the central and western regions have not been fully and deeply developed. The rural tourism resources can not be effectively utilized, resulting in the phenomenon of economic imbalance and great differences between urban and rural development. And the tourism market is mainly domestic, the international market has not been effectively developed. In this case, Hainan government should carry out in-depth development of the central and western regions, make full use of the advantages of rural ecological environment, natural resources and folk customs, drive the development of rural eco-tourism economy, change the rural economic structure, and promote the balance of urban and rural

development. In addition, we should also vigorously develop the international market, improve the relevant service system of international tourism, do a good job in exchange, language communication, international communication and other services, and provide convenient tourism conditions for international tourists. Third, consumption forms are not rich enough. In this regard, we should strengthen the development of sports and entertainment industry, bring more rich tourism experience to tourists, and make tourists happy consumption. We can also hold some influential international activities, such as international sports events, music festivals and film festivals, to enhance the popularity of Hainan Tourism Island and attract foreign tourists to come to spend. The development of tourism industry will drive the development of consumer industry. The construction of Hainan free trade port has provided a broad development platform for the consumer industry, and also obtained the corresponding policy support [2]. Residents of the island can buy imported goods duty-free, stimulating the growth of local consumption. Since 2020, the spread of COVID-19 has also affected the situation of the tourism economy. For health and safety, more domestic tourists choose domestic tourism, which has brought tremendous business opportunities to Hainan's tourism industry and promoted the growth of Hainan's tourism economy.

# 4. CONCLUSION

To sum up, Hainan free trade zone has superior geographical location, rich natural resources and good ecological environment, which can attract foreign investment. Therefore, it is suitable for the development of eco-tourism industry and high-tech industry. In the future development, we should respond to the state's supporting policies, give full play to our own advantages in environment and resources, improve the international reputation through publicity, make rational use of human and technological resources, vigorously develop high-tech industries, and promote the economic development of Hainan.

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Rural Revitalization Study of Hainan Province in the context of Free Trade Area Construction Project number, Haikou College of Economics, Hjky (Zd)19-06.

- [1] Liu Jiajie. Hainan eco tourism development strategy from the perspective of free trade port construction [J]. China market, 2021 (04): 22-23.
- [2] Lin Jiancai. System comparison and Enlightenment between Hainan free trade port and foreign free trade port [J]. Economic Management Digest, 2020 (04): 4-7.

# On The Important Role of Japanese Second Classroom Teaching in Improving Students' Innovation and Employment Ability

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Abstract: The second class learning of Japanese is an extension and beneficial supplement of the conventional teaching, and an important means and way to enhance the application level of Japanese in Colleges and universities. The teachers should teach according to the students' professional characteristics and the mastery of grammar and vocabulary. In the process of learning, we should constantly broaden the learning channels, adopt flexible learning methods, and combine the second classroom with social practice. In order to improve the students' Japanese level, it will also help students' work and life in the future. Key words: Japanese; The second class; Social practice; Diversity; Applicability

# 1. THE SECOND CLASSROOM TEACHING OF JAPANESE IS OF GREAT SIGNIFICANCE TO IMPROVE STUDENTS' PRACTICAL LEVEL OF JAPANESE

With the development of market economy, the standard of cultivating talents in Colleges and universities is more and more inclined to whether students can apply what they have learned. Therefore, more and more colleges and universities take the second classroom teaching as an important auxiliary means of conventional teaching[1-2]. 1.1 The second classroom teaching of Japanese can provide valuable practical opportunities, which is conducive to students' mastery of knowledge and transformation into their own necessary skills

According to the author's questionnaire survey, the vast majority of students have no chance to use Japanese except for taking the exam. Therefore, students' oral ability is far lower than their written ability. The second classroom just makes up for this problem, and applies the knowledge from books to various scenes of work and life, realizing the effective transformation from knowledge to skills

1.2 The second class of Japanese is conducive to students' contact with society and increase their experience

Most of the students in Colleges and universities are directly promoted to school. Although they have reached the stage of physiological development and maturity, they lack social knowledge, which makes it difficult for most students to integrate into society quickly after graduation, and the second class makes up for this deficiency. The author thinks that the second class should try to take social practice as the main form, so that students can have a sense of identity in their study, which will be of great benefit to their work and life in the future.

1.3 The practicability of the second classroom teaching

method of Japanese is conducive to students' choice of career

For a long time, a large number of Japanese majors have to abandon their major and engage in other industries when they are employed, which leads to the waste of knowledge learned. The teaching of the second class should try to choose the content related to the employment of students, so as to ensure that the Japanese knowledge of students can improve the competitiveness of employment.

# 2. JAPANESE SECOND CLASSROOM TEACHING SHOULD STRENGTHEN THE DIVERSITY OF FORMS

To sum up, the second classroom teaching should be highly targeted, should take the form of "going out" and put the form of social practice in the first place. According to the author's investigation, for a long time, the main forms of students' social practice activities are mainly divided into inter school communication, part-time job, internship, etc., of which part-time job is the main way, but limited by their own ability, part-time job is mainly engaged in tutoring and low education, high physical strength service industry, and it is difficult to give play to their own characteristics.

The author believes that the second classroom teaching should be composed of three forms. The first is the school activities, such as competition, rehearsal of Japanese dramas, appreciation of Japanese movies and so on. The emphasis is on consolidating the basic knowledge of Japanese, which is an effective extension of the first classroom; The second type is collective activities organized by instructors, such as friendship with Japanese students of other grades or colleges, exercise the use of spoken language, understand the living habits of Japanese society, language use in different scenes, and the differences between spoken and written language, so that students can adapt to various contexts in intuitive communication; The third type is the social practice activities related to or similar to the students' employment direction, such as internship in Japanese material translation in relevant scientific research institutions, receiving Japanese tourists with tour groups, etc. It not only obtains valuable practice opportunity, but also has certain economic income.

# 3. THE ROLE OF TEACHERS IN THE SECOND CLASS OF JAPANESE

Teachers play more roles in connection, guidance, supervision and guarantee in the second classroom. Students are the center and main body of the second

classroom. The traditional teaching method focuses on the study of students' common character, but pays less attention to the differences of students' personality. In the second class, students are treated differently as individuals, and "there are no classes" can be realized.

- 3.1 Teachers shall prepare detailed and appropriate student files before organizing the second class study, including students' employment intention, Japanese proficiency, personal expertise and hobbies, family economy, etc., and make different second classroom arrangements due to individual differences. The author has made archives for 20 students majoring in Japanese in grade 2, and lists different forms such as reception tour group, internship in translation agency, making friends with Japanese students and rehearsing Japanese dramas. And adjust according to the feedback of students.
- 3.2 During the second classroom learning of Japanese, it is necessary to establish an evaluation mechanism, evaluate each student's performance regularly, and make timely adjustments when problems arise, so as to ensure that the second classroom can play its due role.
- 3.3 Establish necessary psychological counseling mechanism for students. The development of the second classroom can make students enter the society ahead of time, but when students expand their horizons and increase their social experience, they will inevitably find it difficult to integrate into the society. The gap between imagination and reality will easily lead to students' depression and even conflict with the second classroom. Therefore, teachers should give students necessary psychological guidance regularly.
- 3.4 Establish effective safety and supervision mechanism.

Teachers must ensure the legitimacy and safety of the second classroom, and supervise the whole process. For example, before students participate in the travel society to receive Japanese tourists, teachers should communicate with travel agencies, sign internship agreements, and formulate a variety of plans to ensure the personal and property safety of students.

Since the development of the second classroom, its concept and connotation are constantly developing and innovating, which is also an important part of the teaching reform. It truly achieves the goal of "student-centered", in the form that students like to hear and see, so that students can fully experience the fun of learning, and let students consciously transform "let me learn" into "I want to learn" in a pleasant atmosphere, So as to improve the quality of teaching at the same time, also enhance their social communication ability and employment competitiveness, play a role in promoting the cultivation of compound people.

### **ACKNOWLEDGEMENTS**

Research on the construction of the second classroom teaching mode of Japanese major in Private Colleges XZ201812.

- [1] Wang Xiaoming, research on the construction of Japanese second classroom practice teaching mode [J], Journal of Jilin Institute of Education (late 2012).
- [2] Xucihui, On the Practice of Second Class Teaching from the Perspective of Administration -- Shanghai Foreign Studies University as the J], Japanese Learning and Research 2015.

# An Analysis of Corporate Crisis Public Relations from The Perspective of Cultural Discourse

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Abstract: The essence of public relations is to strive for unity and development of business management art, to establish a mutual trust relationship between enterprises and the public. The sprout of western public relations appeared in the newspaper propaganda campaign in the 1930s, and public relations became an important part of enterprise integrated marketing communication. Enterprises spread their values to the public through the media to create a good corporate image. Enterprises must be prepared to deal with the potential crisis in their development. Three ways of product quality crisis public relations cases ring the alarm bell for enterprises. This paper studies the introduction of discourse into the field of enterprise crisis public relations, and holds that crisis public relations is a discourse practice with enterprises as the main source of information. This paper systematically studies the discourse strategies of Fonterra group in response to Botox crisis. The author thinks that public relations discourse layout should be adopted, but the interaction with the media and the public is weak.

Key words: Cultural discourse; Business management; Crisis public relations

# 1.INTRODUCTION

Since the melamine incident happened in Sanlu Group in 2008, crisis public relations has become an important concept in China's public discourse system. People pay attention to the improvement of national food safety supervision law, and attach importance to the openness of crisis handling methods and response measures. Crisis public relations gradually turn to the communication between enterprises and the public. Attaching importance to the discourse practice of corporate crisis public relations is an important measure to help enterprises promote dialogue and interaction with the public. The current mainstream crisis public relations theory discusses the crisis communication strategy, and provides suggestions for enterprises to deal with the crisis. However, the study ignores the internal cultural thinking of corporate crisis public relations. Corporate discourse communication is deeply influenced by historical and cultural factors.

# 2. CORPORATE CRISIS PUBLIC RELATIONS FROM THE PERSPECTIVE OF CULTURAL DISCOURSE

The operation of enterprises needs the guidance of business philosophy and scientific management. Enterprises should maintain a stable state of public relations in the environment of media and other factors. The emergence of crisis will have a negative impact on the

corporate image and brand benefits. Public relations crisis is a kind of crisis caused by unexpected events, which damages the organization image and gets into trouble. Enterprises use public relations strategies and measures to carry out crisis communication. Crisis public relations is the standard to measure the comprehensive strength of enterprises and prevent the crisis in the development of enterprises.

The study of cultural discourse rose in the early 21st century. Scholars explored the basis of cultural dialogue and produced academic achievements characterized by inheriting Oriental wisdom. Shi Xu put forward the theory of cultural discourse research. Cultural discourse research adheres to the principle of radical local governance, and is committed to describing the discourse practice of many industries. Cultural discourse research theory defines discourse as the use of language for purposeful social activities, and holds that the essence of culture is the heterogeneous relationship of social activities to distinguish social groups[1]. From the perspective of discourse as a social event, the theory makes a systematic analysis of dialogue from the perspectives of dialogue subject, symbolic channel and cultural relationship. Corporate crisis public relations discourse is the use of language symbols to explain the causes of crisis, covering the choice of corporate communication discourse content, the discourse effect and so on.

# 3. RESEARCH ON THE PUBLIC RELATIONS DISCOURSE OF THE NETWORK CRISIS OF FONTERRA BOTOX INCIDENT

In 2013, Fonterra group recalled the protein powder from the list of botulinum contaminated concentrated milk. Fonterra actively announced the source of the problem and cooperated with the Ministry of primary industry of New Zealand for review. As a result, the market efficiency of New Zealand milk powder in China has declined. Fonterra's response to Botox crisis is a cross-cultural dialogue between enterprises and Chinese consumers. The understanding of corporate discourse is influenced by the amplification of traditional thinking and the public's attention to food safety. Fonterra's crisis stems from the effectiveness of public relations strategies and discourse. Under the guidance of discourse theory, the study explores the shortcomings of its discourse strategies [2]. Based on the SIMPHC discourse analysis, we discuss the choice of media for the crisis response by Fonterra, and what social status it presents, the topic of discourse, and whether it is a dialogue with Chinese mainland media. This study takes Fonterra's official response to the mainland crisis as the object, and selects enterprises to actively release words in the event. The research is expected to include official website announcements and Sina official micro blog related microblogs. This paper examines the discourse interaction between Fonterra and the mainland news media.

Fonterra chooses the main body of crisis public relations discourse to present the enterprise as the core, the leadership of the enterprise on the official website as the leading, and makes public the information of relevant events. In the early stage of the crisis, the government agencies and other authoritative institutions were quoted to release information to clarify the starting point of enterprises, so as to reduce the panic of mainland consumers. Fonterra has no intention of two-way communication with different discourse subjects. Enterprises are lagging behind in releasing Chinese information, which indicates that enterprises lack attention to the Chinese market. Enterprises only pay attention to the characteristics of editing series of topics when publishing microblog topics. The establishment of WPC80 investigation committee, which is initiated by enterprises, is difficult to attract the attention and discussion of microblog netizens.

# 4. PUBLIC RELATIONS ANALYSIS OF CORPORATE CULTURE DISCOURSE CRISIS BASED ON FONTERRA EVENT

The form of microblog media has the attribute of promoting the communication between enterprises and other discourse subjects. Kent, a western scholar, puts forward the theory of dialogic public relations. The research puts forward the principle of public relations to supplement the theory, emphasizes the two-way communication, and provides credibility of network information. From the perspective of discourse subject, this paper analyzes the public relations crisis case of Fonterra, and finds that the interaction of corporate public relations discourse is weak, which affects the brand image of New Zealand in China [3].

Table 1 Statistics of Fonterra's use of discourse media in network public relations

Discourse Types of discourse form Information media content in various discourse forms(Piece) Official Enterprise News (Chinese) 7 website of Corporate news(English) 23 Fonterra Enterprise 4 announcement(Chinese) Enterprise 3 announcement(English) Video(English) 1 Fonterra Sina Publish text message 32 official micro Initiate a topic 17 Forward microblog 6 Post link

Fonterra's discourse strategy of crisis public relations is one-way information transmission for enterprises. The content of corporate discourse aims to clarify the negative news of enterprises, and tends to state the causes of events in the form of reports. The form of discourse communication is easy to cause information asymmetry between the two sides. The readability of Fonterra's

published discourse content is weak, the enterprises ignore the topic search participation attribute in the official micro publishing, and the official micro publishing does not get the attention of netizens. English is the main language of the information published on the official website of the enterprise, which is not conducive to the enterprise to guide the public's cognition of the event.

Fonterra's diversification and subject assisted voice strategy can not be sustained after the crisis, so it is difficult to win the trust of netizens. It is difficult to form interaction with media discourse due to the fact that corporate advertising is the main theme of corporate discourse. In order to deal with the crisis, enterprises should make use of multi discourse subjects and multi angle voice, and discourse content transmission should make accurate response to the issues concerned by the media. In practice, we should reach the principle of sincere communication and authoritative confirmation.

### 5. CONCLUSION

This paper introduces discourse research into crisis public relations, mass in all aspects of public relations. Enterprises should communicate with crisis stakeholders through multiple discourse media, and correct the wrong information in time by presenting the discourse content. Based on the case of network pr of hengnatural event, the paper analyzes the discourse strategy of enterprises systematically, and thinks that the interaction between hengnatural and Chinese media is weak in practice, which leads to the loss of market share in China in the short term. The paper proposes that the research on the public relations discourse of enterprise crisis can pay attention to the use of media channels, and hope to provide discourse perspective assistance for enterprises to deal with crisis events.

# ACKNOWLEDGEMENTS

Research on public relations text discourse of enterprise crisis event, 20200061.

- [1] Han Yukun. Strategic analysis of corporate crisis public relations in the international perspective -- Taking the event of "Jingdong liuqiang Dong" as an example [j]. Introduction to news research, 2019, 10 (16): 92+188.
- [2] Lv yexin. Analysis of the gain and loss of corporate crisis public relations in the Internet era [j]. Enterprise science and technology and development, 2019 (05): 295-296.
- [3] Zheng hongfang. Analysis and Thinking on corporate crisis public relations [j]. Shanxi youth, 2019 (05): 217+216.

# The Analysis of The Role of Sports Psychology in Promoting the Core Quality of College Students' Sports

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Abstract: Psychological research finds that students improve their quality through physical exercises during their physical education. Sports psychology can effectively guide college students to carry out sports activities, which is very important for their mental health. This paper, by summarizing the content of sports psychology, explores the role of sports psychology in promoting the core quality of College Students' sports, and improves their psychological load ability, and lays a foundation for the development of sports teaching in the future.

Key words: Sports psychology; College Students' sports; Core literacy

# 1.INTRODUCTION

The innovation and reform of college physical education system put forward new requirements for students' comprehensive quality. Physical education mainly cultivates students' physical quality and sports ability. It is very important to fully integrate sports psychology with college physical education. Therefore, it is necessary to deeply analyze the positive effect of sports psychology on College Students' Sports Core literacy, strengthen the practical application of sports psychology knowledge, and optimize the teaching quality of physical education curriculum.

# 2. OVERVIEW OF SPORTS PSYCHOLOGY

The main object of sports psychology is sports, which mainly aims at strengthening students' physical quality. The broad sense of sports psychology is to explore the psychological laws formed by people's participation in sports activities, and the narrow sense of sports psychology is to analyze the psychological laws formed by school sports activities. Sports psychology is a combination of psychology and pedagogy, which has strong practicability. When carrying out sports activities in universities, teachers carry out teaching by combining the characteristics of students' psychological activities, so as to improve the quality of sports teaching, promote the development of their physical and mental health, and realize the role of teaching and education. For example, there will be abnormal play in sports events, which has a great impact on the psychological quality of competitors. 3. THE ROLE OF SPORTS PSYCHOLOGY IN COLLEGE STUDENTS' SPORTS CORE LITERACY

3.1 Improve the intelligence level of College Students Intelligence is an important indicator of College Students' mental health, which belongs to the concept of psychology and can improve their intelligence level. If students want

to complete the learning task, they need to have a certain With the increasing social intellectual ability. competitiveness, they are easy to face greater pressure in their study and life, and then they are in a high tension situation for a long time. If college students can't complete self-regulation in time, they will easily have mental illness. Efficient sports has the function of fitness and mental health. With the help of physical exercise, students can improve their intelligence from both physical and psychological aspects, eliminate their tension, help their physical and mental health development, improve their imagination, memory and thinking ability, and maintain a stable mood and cheerful personality. When students receive physical education, their cerebral cortex will be very excited. Sports psychology points out that when college students participate in physical exercise, due to the alternation of mental activities and physical activities, their motor central nervous system is constantly excited, which can relieve their fatigue and improve their learning efficiency. Relying on sports psychology to carry out physical education, improve college students' learning ability and intelligence level [1].

# 3.2 Improving college students' personal emotions

The physical education based on physical psychology can help students to stabilize their emotions gradually in the process of physical exercise. Students' mental health is affected by sports. By participating in physical exercises, students can help them to achieve psychological balance and improve their mental health level. When people realize good experience, they will get a sense of pleasure and satisfaction, which is a very ideal experience. University sports have obvious characteristics of the times, such as fitness, diversity, entertainment and humanity. With the help of sports, students can get the sense of relaxation and pleasure after sports. Sports psychology can help students maintain stable and good mood, inspire their spirits and better meet their future study life. In addition, sports psychology can help college students form a sound personality, establish a correct outlook on life, and effectively control their psychology and behavior. For example, relying on the scientific design of sports activities in sports psychology, improving the process of activity preparation, activity development and activity summary, we should establish a good outlook on the world and life of students and form a healthy and optimistic psychology. At the same time, set up scientific sports load, improve its physical quality, alleviate psychological problems.

3.3 Improve the social adaptation level of College

### Students

In the new era, with the rapid development of our society, higher requirements are put forward for college students' employment, which requires them to have certain social adaptability. Relying on sports psychology to carry out sports teaching can innovate sports activities, improve the attractiveness and interest of sports classroom. At the same time, collective sports activities can form team forces, enhance college students' sense of participation and collective honor with the help of sports competitions, strengthen their adaptability to the new environment, and promote the harmony between them and their classmates. Good physical education learning can help students adapt to the changes of social environment in advance, actively carry out sports activities and improve their environmental adaptability. Through participating in sports activities, college students can improve their willpower, improve their psychological quality, and establish a positive and enterprising learning attitude.

3.4 Improve students' mastery of knowledge and skills In the stage of physical education learning, students should set up sports situation according to sports psychology theory, meet their inner needs, innovate activity mode and strengthen quality education. Sports teaching effect will have a great impact on College Students' sports ability and physical and mental health. Therefore, by strengthening the application of sports psychology, combining with the current social development trend and the actual law of students' psychological activities, we can improve students' physical and mental health and sports skills. With the help of scientific, strict and systematic training, students' learning enthusiasm can be improved and good learning requirements can be formed. Therefore, sports activities have the advantages of counteracting, venting and fighting against negative emotions, and the integration of sports psychology can alleviate students' anxiety.

When some students participate in sports, they are very afraid of test and practice due to lack of sports ability, which will lead to psychological "helplessness" and lack of confidence, which will affect the learning effect. Therefore, through the theory of sports psychology, teachers find the important factors of their fear and timidity. If they have a sense of fear due to the difficulty of movement, they will strengthen the details of movement education, strengthen practice, overcome their psychological stress, help them control their emotions and carry out adaptive training.

3.5 Improve students' learning concentration

Attention is very important in psychological activities, which can arouse students' interest in learning and facilitate teachers' organization and teaching. Sports psychology emphasizes that teachers can use the relaxed mode to mobilize their attention, and help students focus on their attention through humorous sentences and eye watching, and achieve the tacit sense of physical education and help them focus on their attention. Relying on physical psychology, teachers can realize scientific teaching criticism, praise, summary, strengthen the twoway communication with students and complete information feedback. Teachers can guide students to practice their actions by combining teaching tasks to improve their learning enthusiasm. Through the clear classroom learning attitude, teachers can cultivate students' enthusiasm, carefully guide everyone's actions, arrange the contents of the next course, and improve students' self-confidence and core literacy. In addition, combining with physical psychology teachers will teach students according to their personality characteristics and psychological status, and give suggestions to students with extroverted personality and encourage them to strengthen their practice. For students with introverted personality and strong fear of sports, they will be encouraged to participate in sports, explain technical points, ensure the safety of practice, guide them to practice boldly and eliminate psychological obstacles.

# 4. CONCLUSION

With the increasing social competitiveness, college students are faced with greater pressure, which is easy to produce psychological barriers and mental diseases. Therefore, it is necessary to attach great importance to the positive role of sports psychology in college students' core literacy, optimize the effect of sports teaching, carry out various forms of sports activities, create a good sports cultural environment, scientifically apply sports psychology to ensure college students' good mental health, improve their sports core literacy, and promote the development of teaching.

### REFERENCE

[1] Ma daiyin. Analysis on the application of sports psychology in College Physical Education [J]. Journal of Jiamusi vocational college, 2021, 37 (04): 107-108.

[2] Wei Xiaona, Qiu Zehan. The role and implementation strategy of sports psychology in promoting college students' Sports Core literacy [J]. Journal of Hanshan Normal University, 2020, 41 (06): 59-66.

# Exploration and Practice of Ideological and Political Education of Mechanical Courses in Higher Vocational Colleges from the Perspective of Fused Curriculum

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Abstract: In order to effectively integrate ideological and political education into the teaching of mechanical courses, higher vocational colleges should guide the goal of education by the top-level design of their majors, seek the best foothold of ideological and political education of mechanical courses, and evaluate the way of course teaching, so as to achieve the goal of cultivating people by virtue.

Keywords: fused curriculum; higher vocational colleges; mechanical courses; ideological and political education

# 1. INTRODUCTION

When presiding over a symposium for teachers of ideological and political theory courses, General Secretary XI stressed:" Ideological and political theory course is the key course to carry out the fundamental task of moral education ". To promote the reform and innovation of ideological and political theory courses, we should constantly enhance the ideological and theoretical nature, affinity and pertinence of ideological and political theory courses. We should adhere to the unity of explicit education and recessive education, excavate the ideological and political education resources contained in other courses and teaching methods, and realize all-round education for all staff[1]. Therefore, it can be seen that strengthening ideological and political education in higher vocational colleges is the essential requirement of "educating people" in vocational education, while implementing ideological and political education is an important measure to carry out the fundamental task of cultivating people by virtue[2].

Mechanical courses are indispensable in the curriculum system of higher vocational colleges. Such courses are generally important professional foundation courses, compulsive courses, or even core courses. The specialized courses of various mechanical majors often contain profound theoretical knowledge and abstract formulas, so teachers often put most of their energy on the explanation of professional knowledge in the past teaching process, and rarely involved in the mining and impart of ideological and political education resources contained in the

textbooks. This will miss a good opportunity to carry on ideological and political education to students in the teaching of specialized courses. From the perspective of fused curriculum, this paper explores the ideological and political education thoughts contained in machinery specialized courses in higher vocational colleges. By leading the goal of "educating people" from the top design of the major, and looking for the best foothold of ideological and political education of mechanical specialty courses, as well as the way of course teaching evaluation, ideological and political education is fully integrated into the education of mechanical specialty courses.

2. CONNOTATION OF FUSED CURRICULUM AND ITS SIGNIFACANCE TO CURRICULUM REFORM IN HIGHER VOCATIONAL COLLEGES Fused curriculum refers to a course that breaks the boundary of disciplines and combines the knowledge of different disciplines with internal connections into one course. It is usually the amalgamation of some subjects in the same field of study. It was first seen in the initiative of English philosopher Alfred Whitehead. In 1912, Whitehead advocated combining modern history with mathematics in what he called "statistical social analysis". After the 1930s, fused curriculum has been more common in the curriculum of universities, middle schools and primary schools in Europe and America.[3] The fused curriculum is not the combination or mixing of the traditional subjects, but breaks or surpasses the inherent logic of the integrated subjects. As the fusion course, it is fused in form and in spirit. Fusion is a reorganization on the basis of the original, which needs a certain way or form to form a new organism -- the logic of fusion curriculum. In recent years, Chinese scholars and educational circles have also begun to pay attention to the practice of fused curriculum reform, and the related research on fused curriculum is also increasing day by day. Higher vocational colleges are also the focus of fused curriculum research.

Curriculum reform is the basic unit of teaching reform in higher vocational education and plays an important role in cultivating skilled talents with high quality in higher vocational colleges[4]. At present, with the

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rapid development of China's society and economy and the realization of Made in China 2025, the key is to train hundreds of millions of high-level skilled workers and high-quality workers. Indeed, this heavy responsibility and demand fall on vocational colleges, especially higher vocational colleges. Students should not only a broad and solid basis of knowledge, skilled, good professional skills, more need to have healthy, noble personality quality, have to adapt to The Times and social development of the innovative spirit and thinking, creative ability, learning ability and the ability to migrate, in order to keep up with the changing of The Times background of "people" competition, realize the construction of "human resources strategy[5]" requirements. This needs from the students' well-round development and the overall promotion of professional quality, explore the knowledge learning, ability training, as well as a way of blending edify the curriculum concept of character, and to summarize the and lead the construction of higher vocational education curriculum system, through the system in-depth research to seek a set of complete course construction implementation plan, in order to realize the students' quality and improved.

The realization of such "cross-border education" should be accomplished through the integration of higher vocational curriculum teaching. Fused curriculum is not only the important content of the moral education integration construction, the discipline course teaching integration, the characteristic project course brand building, but also the important way and carrier of students' comprehensive quality cultivation, personality growth. The "fusion" of higher vocational curriculum teaching is to transcend the narrow boundary of the school curriculum "clinging" to the school itself. On the one hand, it is to liberate the one-sided training ideas of "knowledge only", "ability only" and "personality only" from the aspect of the curriculum construction concept, and to observe the course construction with the thinking of "humanization and integration". On the other hand, the "crossover" of each section is realized in the specific classification of courses, that is, "basic humanities courses" and "professional courses", "theoretical courses" and "practical courses", etc. "Fusion" is a specific operation on the basis of "crossover", that is, how to achieve mutual integration and communication between schools and enterprises in terms of course objectives, course contents, organizational forms, teaching venues, course teachers, etc., so as to achieve the purpose and effect of "junction".

3. THE PROBLEMS EXISTING IN THE IDEOLOGICAL AND POLITICAL EDUCATION OF MECHANICAL SPECIALTY IN HIGHER VOCATIONAL COLLEGES

The vast majority of mechanical students have a correct world outlook, view of life and sense of values, and identify with the quality consciousness and craftsman spirit. However, the course content of mechanical specialty has the characteristics of objectivity, occupation and practicality, and the teaching process lays emphasis on impart knowledge and skills[6]. Patriotism, ideals and beliefs, professional ethics and other content is less involved, the course ideological and political education often has the following problems:

- (1) It is lack of systematic design. Talent training programs all mention "cultivating all-round moral, intellectual, physical, aesthetic and labor development, and having good professional ethics and humanistic qualities". Most teachers think that this is the content of public courses, and it is the business of ideological and political teachers and counselors. When writing the syllabus and teaching plans of specialized courses, teachers of specialized courses attach great importance to "skills" but ignore " ethics". They design teaching objectives, teaching contents and teaching evaluation with systematic thinking without referring to talent training programs. This leads to the process of talent training, ideological and political courses and professional courses have distinct boundaries, have gone their own ways.
- (2) The implementation process is a formality. Although professional teachers have rich teaching experience, there are two difficulties in implementing ideological and political education of mechanical courses:in terms of teaching philosophy, teachers of specialized courses focus on impart knowledge and skills, failing to elevate the educational quality of specialized courses to ideological and political education, and failing to make clear that the primary goal of curriculum teaching is to cultivate a correct world outlook, view of life and sense of values;in the teaching implementation, teachers of specialized courses are not familiar with philosophy, the report of the 19th National Congress of China, the spirit of the National Education Conference and professional quality and other relevant theoretical knowledge points of ideological and political theory, do not know the method of integrating ideological and political elements, and have no experience in integrating ideological and political course into professional courses. As a result, the implementation of ideological and political education in the teaching process is superficial, unable to achieve the education[2]" of curriculum ideological and political education and the expected teaching objectives.
- (3) The evaluation system is incomplete. The assessment method of specialized courses is usually calculated according to a certain proportion of the ordinary grades and the final grades. In theoretical courses, students are evaluated by their mastery of knowledge points, while in practical training courses, they pay attention to their proficiency of skills. This evaluation system lacks the ideological and political part of the course, which cannot reflect the changes of students' professional quality and moral quality in the

learning process, cannot reflect the overall effect of the course including ideological and political education and the achievement of teaching objectives, and cannot cultivate "builders and successors of the socialist cause with all-round development of morality, intelligence, physique, beauty and labor".

4. APPROACH OF IDEOLOGICAL AND POLITICAL EDUCATION OF MECHANICAL COURSES FROM THE PERSPECTIVE OF FUSED CURRICULUM

The main task of higher vocational education is to foster virtue through education. If professional education aims at cultivating students' skills and means in a certain professional field, ideological and political courses, through comprehensiveness and integrity of knowledge, broaden students' horizons, cultivate students' ability of independent thinking and judgment, social responsibility and personality[6]. Based on the objectivity of specialized courses for staff, professional and high practicality and other characteristics, as well as the course ideological education of the common problems in the implementation process, the author combined with school education and teaching experience, the implementation of education, from the following aspects of mechanical professional courses education on the exploration and practice of education.

(1) Top-level design leads the goal of education.

Under the premise of unifying teachers' cognition of professional courses, we should start from the top-level design of the major, that is, from the formulation of talent cultivation plan, and combine ideological and political cultural elements of the college with systematic thinking to write curriculum standards, syllabus and teaching plans, so as to make ideological and political education deeply rooted in the hearts of the people.

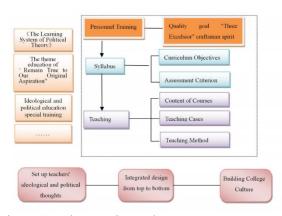


Figure 1 Implementation Pathway

①Study ideological and political knowledge, establish ideological and political ideas

Many teachers of professional courses believe that ideological and political education has nothing to do with professional courses. They even believe that ideological and political education in professional courses is a waste of time and will affect the progress

of professional knowledge teaching. School actively to carry out the spirit of national conference on education for all teachers, " Remain True to Our Original Aspiration" theme activities such as education, establish the system of politics theoretical study, politics theoretical study of not less than 40 hours a year, make the staff to master the necessary political theory foundation, let the teachers understand the meaning of education professional courses, to help teachers set up the ideological education concept. What we cultivate in higher vocational colleges is technology-oriented high-quality talents. In addition to knowledge and skills, it is more important to cultivate students' ability and quality, which will affect their career development and life trajectory. The "explicit education" teaching of ideological and political theory courses is mainly through the main classroom channels, covering all majors in colleges and universities and facing all students. Its educational objectives are very clear, but its courses are only a small part of classroom education and teaching, and cannot cover the whole process and whole link of talent cultivation in higher vocational colleges [7]. The "recessive education" of ideological and political education can make up for the deficiency of ideological and political theory course, and at the same time impart knowledge, cultivate students' good professional ethics.

②Design from top to bottom throughout the learning process

Starting with the personnel training programs, the author establishes three training objectives of knowledge, ability and quality, among which the quality objective reflects the core of ideological and political education. Based on the quality goal of cultivating the professional qualities of the "Three Excelsior" craftsman spirit, we should cultivate the craftsman spirit which is professionalism, pragmatic style and refinement of work.

According to the training objectives of talent training program, the course objectives of each course are determined. Taking Mechanical Drawing for the major of mechatronics as an example, its course objectives include cultivating the "honest and trustworthy" craftsman spirit of combining professional knowledge and action with work words and deeds, and the "professional ability" craftsman spirit of accurately, completely and clearly conveying mechanical product information and conscientiously implementing the national standards of cartography. As well as the work style of patience and meticulous and serious work attitude of "excellence" craftsman spirit. In the writing of syllabus and lesson plans, the goal is fully reflected and achieved, so that ideological and political education runs through the whole teaching process according to the integrated design.

(2) Searching for the best foothold of ideological and political education of professional courses

The professional quality of the high quality technical

personnel trained by higher vocational colleges includes the value idea of ideological and political education, which is realized through the recessive education of professional courses. The content of ideological and political education is life philosophy, professional ethics and professional ability. In curriculum implementation, through the teaching content, teaching methods and teaching cases, combined with the mechanical professional course objective, professional and practical characteristics, the best foothold of ideological & political education of mechanical courses is the teaching content combines life philosophy, teaching case contains the professional ethics, and build students' professional ability through teaching methods, so as to cultivate students' good professional accomplishment, to achieve the goal of education.

Table 1 The Foothold of Ideological and Political Education

	Content of Courses	Teaching Cases	Teaching Method
Philosophy of Life	_	reflect the philosophy of	Use different teaching methods to allow students to learn and grow through mistakes and positive encouragement.
Professional Ethics	production, let students understand the importance of the " Three	teaching cases to cultivate students' craftsmanship spirit of "honesty and	0 1
Vocational Capability	Accurately master the teaching content, cultivate the craftsman spirit of "professional ability" and " professional ability".	students' professional ability of thinking and	organization train students'

# (3) Process Evaluation Method

Ideological and political education of professional courses is an imperceptible process, which requires students to continuously improve and accumulate themselves. Therefore, its implementation effect cannot be quantitatively assessed independently, but it can be measured in the following two ways.

①Integrate into the final assessment. Based on the professional background, ideological and political elements will be integrated into the final assessment, such as course cases, professional decisions, relevant definitions, etc., to investigate students' understanding of the craftsman spirit, whether they have the right values, and whether they can make the right judgments in professional work. A certain proportion of ideological and political elements in the assessment can, on the one hand, reflect students' grasp of the situation to some extent, and students can also reflect themselves through this process. On the other hand, it does not affect the assessment of professional knowledge, and to some extent, it carries out a more comprehensive assessment of professional ability.

2 Record usual performance. In the course implementation, a variety of teaching contents, teaching cases and teaching methods have been

integrated into the ideological and political content, therefore, the effective record of students' daily performance can well reflect the process of students' self-improvement. For example, after the task is completed in group cooperation, the teacher will include the ideological and political elements into the scoring basis, such as whether to help and support the classmates in the group, whether the cooperation process is pleasant, etc., carry out the mutual evaluation among the group members, the mutual grading between the groups and the teacher's score, and record the usual performance. The multidimensional assessment process can record the whole process of students' learning and reflect the effects of ideological and political teaching in some aspects.

### 5. CONCLUSION

In order to give full play to the role of "implicit education" and make up for the deficiency of "explicit education", the ideological and political education of mechanical major courses needs to start from the top design, unify the ideological path of teachers who teach, and establish consistent educational goals in talent training programs, syllabus and teaching plans. In the process of teaching implementation, combining the teaching content, teaching cases and teaching methods, we find the foothold of ideological and political education, and integrate ideological and political education into professional courses invisibly. The effect of ideological and political education can be measured through the final examination and multi-dimensional process evaluation.

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# REFERENCES

[1]Zhang Shuo. President XI presided over a symposium for teachers of ideological and political theory courses in schools. Wang Huning attended the symposium[N]. The People's Daily, 2019-03-10(1). [2]Zhang Hongbin. How to Implement Curriculum Ideology and Politics in Higher Vocational Colleges[N]. China Education Daily, 2019-4-16(11). [3] Gu Mingyuan. Education Dictionary[M]: Shanghai Education Press, 1998.

[4] Huo Chong, Gen Nanna. Research on teaching

reform of "JavaScript Technology" curriculum based on OBE education concept[J]. Wireless Internet Technology, 2021, 18(06):152-153.

[5] China is accelerating its transformation into a human resources powerhouse [N]. China News, 2009-09-28.

[6]Wang Qian. Exploration and Practice of the Ideological and Political Education in the Course of Science and Engineering in Higher Vocational Education- Taking the course of "Mechanical Manufacturing Technology and Equipment" as an

Example[J]. Vocational Technology, 2019(7):65-68.

[7]Yu Xiangdong. To explore the organic combination of ideological and political courses and curriculum ideological and political courses around the fundamental task of moral education[N]. Guangming Daily, 2019-3-27(6).

[8] Long Shengchun, Jiang Jia, Li Qiang. Computer basic curriculum group based on "wide and specialized" curriculum system[J]. Computer Education, 2019(5):30-31.

# Analysis of the Actual Effect of the "Digital Finance" Sharing Model in Promoting the Transformation and Upgrading of Enterprises

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Abstract: The financial sharing mode is the latest mode in which the enterprise centralized management method is applied to financial management. It adopts an integrated operation mode to solve the problems of duplication and inefficiency in part of the enterprise's financial management process. The construction of a financial sharing platform is a practical operation platform built for the realization of financial sharing. The financial processes common to all companies and departments in the enterprise are concentrated on one platform to achieve high efficiency and low cost. It is also used in information sharing and resource management.Provide data support for various companies. Mainly from the standardization of the process and system of the corporate financial system under the financial sharing mode, the establishment of rights and responsibilities at various levels, the integration of financial sharing construction and other businesses of the enterprise, etc. Practice shows that the use of the platform is an effective measure to improve the informatization level of financial management.

Keywords: financial sharing; financial transformation; constructing strategies; countermeasures

# 1. INTRODUCTION

Technological changes have been promoting the progress and development of human society. In the current Industry 4.0 era, mankind has entered the era of sharing economy and digital economy, until the Internet of Everything and the data-driven "intelligent era"[1]. In the big data environment, artificial intelligence has been deeply and widely applied in many industries through service scenarios such as smart office and smart customer service from the

laboratory.Under the traditional financial management model, corporate accountants pay more

attention to basic financial accounting business, but do not pay much attention to the modern technology of financial budgeting, financial management and cost analysis[2]. With the development of science and technology and the advancement of information technology, how to effectively improve the way and efficiency of corporate financial management has

become a problem that all companies are exploring and working hard to solve today[3].

To a certain extent, artificial intelligence has driven a brand-new upgrade of financial work models. More and more companies have begun to establish financial sharing centers, based on standardized and streamlined operation modes, with a view to centralized processing of financial work. The financial sharing model is a new type of accounting and business management model formed based on modern big data and Internet technology, which has a significant impact on the financial management and business aspects of the enterprise[4].

All levels and departments follow the deployment of "accelerating digital development", improve fiscal governance capabilities and governance systems, and use big data, cloud computing, artificial intelligence and other information technologies to deeply integrate digital finance and financial services to build a "digital finance" sharing center, In order to promote the information construction of financial business and realize the modernization process of the financial system[5].

# 1.PROBLEMS IN THE CURRENT FINACIAL SHARING MODEL

- (1) The current financial sharing largely retains the original financial management model. After some companies have established a financial sharing center, the finance of each branch and department is still doing a lot of basic financial accounting work, such as cost accounting, tax declaration, and preliminary financial review. These companies have not introduced the "production assembly line" operation mode into the financial work. These companies need to centrally process the originally dispersed, repetitive, and standardized bookkeeping and accounting work, so as to control costs and improve efficiency. At present, most of these companies concentrate on workplaces, operations, etc., and do not involve indepth financial work processes.
- (2) The current financial sharing model reduces the chance of direct contact between financial personnel and employees of other departments to a certain extent, lacks effective communication, and fails to form a closed loop. These departments still have repeated checks on a large number of documents, and the work

efficiency of the financial sharing center is low. At the same time, there are also financial personnel transferred to the sharing center, which reduces the opportunity to connect with the tax authorities where the subsidiary is located, and greatly reduces the sensitivity to tax risks; poor communication with tax personnel may result in the failure of various tax preferential policies. Receipt in a timely manner, increasing the difficulty of preferential applications, resulting in the loss of opportunity costs such as tax incentives.

- (3) Due to the refinement of positions, the financial sharing mechanism has turned highly educated and skilled financial professionals into workers on the assembly line, resulting in limited development of financial personnel. There is no freshness in repetitive work, and there is no room for improvement[6].
- (4) The traditional financial sharing model is difficult to meet the requirements of resource sharing. It has realized standardized processes to a large extent, and can transmit financial data in a more timely and accurate manner. The scope of services is still concentrated on financial processes those are easy to standardize, and there is no requirement for business scenarios effectively satisfy.

# 2.PLANNING OF DIGITAL FINANCIAL SHARING CETER

As a new productive force, digitalization has entered various fields of society and economy, giving birth to a digital economy and a digital society, and has a profound impact on people's lives. The digital financial information sharing center is driven by enterprises, with overall planning, unified standards, and deep integration of new technologies such as artificial intelligence and big data, to build a financial business information platform for the digital economy and digital enterprises.

In the context of the digital economy, finance is an important component and support of corporate governance at the macro level. The original model of separation of business levels, corporate departments, and regional branches will inevitably not be able to adapt to the new environment and changes in the new situation. The digital financial information sharing center uses high-speed, safe, and mobile digital information technology as the support network system, breaking the barriers of different levels, different departments, and different regions of the enterprise, forming a collaborative office network space with interconnection of everything and human-computer interaction, integrating transactions, Service and supervision are integrated to promote the "one network" of financial and business matters, realize "at most one run" or even "no need to run", realize collaboration and remote office, and improve efficiency.

# 3.CONSTRUCTION OF DIGITAL FINANCIAL SHARING CETER

### 3.1 Construction goals

First of all, companies must make precise positioning

of the goal of sharing center construction. Through the unified construction of information sharing resources and strengthening the intensive construction of the financial information system, a unified platform for financial information, corporate business, and consulting is formed. The information sharing center has a big data center and a basic information database, and the system is fully collected, aggregated, integrated and stored data information resources to realize information sharing and interconnection between horizontal and vertical subjects. Achieve and cross-departmental vertical cross-level information sharing and interconnection. Provide the original data source for the business analysis and data analysis of the enterprise, combine with the enterprise budget management and control, carry out preliminary analysis and operation analysis of the enterprise as a whole, and provide strong support for the development of the enterprise.

Relying on the information resource database and the national data sharing and open platform, establish the sharing and intercommunication of enterprise information resources and departmental information resources, realize the sharing and interconnection of financial big data, improve the intelligent level of financial decision-making, and realize the high efficiency and high quality of the enterprise financial system running.

# 3.2 Construction principles

The platform should be designed by the functional departments of the enterprise to build and maintain the shared center business platform in a unified manner. The sharing center implements "one-stop registration" and unified data management, avoids repeated collection and verification of information, and realizes the mutual recognition of data and information sharing on various business platforms. Realize the aggregation of big data of different levels, different businesses, departments, and regions to form a massive, multisource, sharable information library.

4.OPTIMIZED COUTERMEARUREES FOR THE CONSTRUCTION OF ENTERISE FINANCIAL PLATORM UNDER THE FINANCIAL SHARING CETER

First of all, the person in charge of corporate finance needs to standardize the processes and systems of the financial system. The former is mainly to integrate the business of various departments, optimize the form of assembly line management, have an understanding of various business needs, start from the perspective of reengineering process, realize the refinement of the order link, reduce the phenomenon of human error, and configure the same process as the business to reduce Redundant process. In terms of the financial system, it is mainly reflected in the unification of operations, the key points of review, and the unification of subjects, the implementation of refined management and control, strengthening of risk management and control, and ensuring the overall work efficiency and level of the enterprise.

powers refine and Secondly, set and the responsibilities of each post, and refine the hierarchical division, setting, and job iob responsibilities of the financial sharing center. Recheck the current work content and workload of the staff, the research and judgment of the work content and development ability they are good at, reduce the loss of staff due to the discomfort caused by the shared financial model, and give full play to their respective expertise and improve efficiency.

Third, the financial sharing construction plan of the enterprise must be integrated with other businesses of the enterprise to carry out system integration and fill the system breakpoints. The construction of financial sharing penetrates into the internal management work, integrating the business system, financial system, tax system, and bank integrated business system to complete end-to-end closed-loop control. Companies must do a good job in top-level design projects, share financial sharing in the construction of target systems, construction principles, implementation plans, system architecture, and other basic safeguards, and gradually design projects in detail and implement specific tasks at different stages.

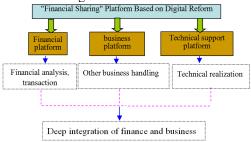
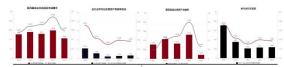


Figure 1 Schematic diagram of platform 5. RESULT ANAYSIS

The financial sharing center splits into an intelligent sharing center. Based on big data and artificial intelligence technology, companies can obtain real, accurate and consistent financial and business data from internal units and external suppliers and customers in real time from the source of transactions. These data can become high-quality, low-cost, and clear-cut data through technologies such as data capture, intelligent analysis, mining management, and visualization. With this data, enterprises can implement real-time scenario applications and feed back front-end business. With the continuous accumulation of operating data, the massive data of the sharing center has evolved into an important asset of the enterprise, meeting the needs of managers at all levels for financial analysis, financial forecasting, and decision-making analysis, and data service capabilities have been continuously enhanced.



(a) Comparative analysis of data in various industries



(b)Enterprise main data display
Figure 2 The effect of using the system
6 CONCLUDING REMARKS

The construction of a digital financial information sharing center is the only way for the construction of financial information. It promotes the transformation of financial governance models, the improvement of financial governance capabilities, and the intelligent and digital governance of the governance system. At the same time, it optimizes the business environment and improves the efficiency of public services.

- (1) Through the summary of the corresponding data information, it is possible to realize in-depth exploration of application scenarios in the context of financial big data, realize the perfect accounting data interface standard, unify the rules, and realize the one-time collection and sharing of data information.
- (2) Realize financial standardization and uniformity through further strengthening of management accounting. Based on the analysis of data information, while realizing resource allocation, effective prediction and optimization of unit development are carried out to avoid resource waste.
- (3) Supported by digital financial technology, break down the barriers of different levels, different departments, and different regions of the enterprise, realize "at most one run" or even "no need to run", realize collaborative office and improve efficiency.

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# REFERENCES

ACKNOWLEDGMENT

- [1] Li Min. The problems and countermeasures of the integration of industry and finance in the application of enterprise management [J]. Accounting Study, 2021(06):40-41.
- [2] Gao Jie. The construction of enterprise financial accounting system under the financial sharing center [J]. China International Finance and Economics (Chinese and English), 2018 (1): 57-58.
- [3] Liu Xin. Analysis on the construction of enterprise financial accounting system under the financial shared service center [J]. Contemporary Accounting, 2017 (9): 26-27.
- [4] Chen Heping, Hu Lei. Analysis of the transformation path of corporate accounting personnel under the financial shared service model [J]. Finance and Accounting, 2018 (03): 72–73.
- [5] Yang Chenzhu. Research on the transformation of

traditional financial personnel based on the financial shared service model--Taking China First Metallurgical Group as an example [J]. Knowledge Economy, 2019 (07): 79.

[6] Jiao Hongchao. On the transformation path of corporate accounting personnel under the financial shared service model [J]. New Financial World, 2019 (01): 110–111.

# Research On the Development Of Film And Television Industry Under The New Media Environment

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Abstract: With the continuous development and maturity of streaming media technology, the way of media publicity and information transmission has also undergone great changes. The new media era is gradually coming, which brings new opportunities and challenges to the development of film and television industry. Timely adaptation to the requirements of the new media environment, to achieve the innovation and development of the film and television industry, has become an important part of the construction process of the film and television industry.

Keyword: Streaming media technology; New media environment; Film and television industry; The development research

# 1. COMMUNICATION CHARACTERISTICS OF NEW MEDIA

With the rapid development of streaming media technology and the rapid rise of new media, the wave of new media represented by the Internet and mobile phones has exerted a great impact on the pattern of traditional media. It can be said that the film and television industry, as an important type of traditional media, is now facing great challenges brought by new media. At the same time, the gradual rise of new media has also provided a more advanced and broad platform for the film and television industry, and thus the production and promotion of the film and industry gained television have opportunities. For the film and television industry, only by timely combining all kinds of methods and technologies emerging in the era of new media, utilizing convenient and efficient Internet media and exploring new development paths, can it build more lasting competitiveness.

# 1.1 Distinctive Features

With the progress and popularization of new media communication technology, the speed of information transmission has been greatly improved and the coverage area has also been greatly expanded, which makes many characteristics of mass media fully reflected. Traditional media tend to be aimed at the general public, lack of effective to distinguish between different categories of information, users need to identify all kinds of information, and although the

new media also has popular features, but the new media environment of various kinds of media channels are more audience segment, according to individual and collective needs of different subdividing information. The spread of new media platform can also according to the personalized needs of audience individual rational selection of information dissemination, and platform adopted by the media, the media form selection and adjustment in a timely manner, in a timely manner to convey the information that users need timely to the user, so users can according to your own need to customize personalized information content, It can also obtain the same information and content combination, which is very different from the traditional media which only allows the audience to passively read or observe the same

# 1.2 Multi-angle fusion

In the era of new media, the way of communication is no longer simple, nor is it a simple connection between media ", but a comprehensive integration and interaction of various media communication channels and methods. In the era of new media, there is a high degree of integration between network media and traditional media. The complementary advantages within network media and the mutual radiance between traditional media and emerging media are all important features in the era of new media. In the era of new media, communication has the interactivity, accessibility and coverage, This provides an important way for the integration and interaction among information producers, media communicators and audiences.

# 1.3 The expansion of information flow is increasingly obvious

Under the comprehensive effect of various communication channels, new media can be said to be the master of all kinds of information and communication means. New media is a collection of various means of communication, which can be divided into paper media, new media and we media from the perspective of communication carrier and tools. It integrates multiple communication channels, and can realize the allround integration of media communication. From the perspective of the technology carrier that the

communication content depends the information communication under the new media environment not only relies on the traditional paper and audio-visual, but also depends on the electronic communication and Internet and communication various forms of media technology, which greatly increases information load of the new media communication channel, and the scale of information transmitted by the media channel is also expanding. Therefore, we can call new media the synthesizer of human information communication means.

1.4 More and more audience participation

New media channels rely on the Internet, and an important feature of the Internet platform is that there is a strong interaction between different groups or individuals, so the new media channels based on the Internet platform also show a strong public participation. At the same time, in order to meet the needs of the audience, some new media channels have a lot of content from the grass-roots culture, which can arouse the recognition and resonance of the audience. People are more willing to participate in it, and the characteristics of network platform such as interactivity and realtime are also consistent with the needs of the broad audience [3]. Traditional media communication content and form are relatively cautious, rarely combined with the needs of the audience to adjust, and the new media channel in the dissemination of content and form of performance is more casual, and the communication between the audience is relatively more, can timely change the content or way of communication process, the audience's wishes can be well reflected in the new media channel, the audience participation More and more people are willing to go to the media.

# 2. PROBLEMS IN THE DEVELOPMENT OF FILM AND TELEVISION INDUSTRY UNDER THE NEW MEDIA ENVIRONMENT

2.1 Insufficient use of communication channels The new media era provides many new media communication channels and ways for the film television industry, which convenient conditions for the film and television industry to strengthen the application of various communication channels. However, from the current point of view, the use of multi-level communication channels in the film and television industry is still insufficient. Many film and television art creators and communicators are not really aware of the important value of new media technology to the production and publicity of works. They still use the traditional way of writing scripts, making sample films and cutting into films. They do not take advantage of the creative advantages brought by new media technology, which leads to the unsatisfactory quality of film and television works. At the same time, many disseminators did not use the resources in the new

media era to propagate and promote the dissemination of films and TV programs. In fact, in the new media era, blogs, tiktok, bean paste and trembling sound are important media channels. But the Internet related media channels in the industry are often based on official website and official micro-blog. However, there is no compound media communication channel.

# 2.2 Communication interaction is limited

The mass communication of traditional media generally belongs to one-way communication, with the media as the center of the whole communication activities, and the audience is just a simple information receiver, and the film and television industry is no exception. In the new media era, the new media communication mode relies on the Internet, and the Internet itself is highly interactive, which is also fully reflected in the new media communication mode. If the film and television industry can not achieve good interaction with the Internet, it is easy to have a negative impact on the popularity of film and television works, and the sublimation of film and television program content and the development of the program will also be hindered. But at present, many film and television programs still use the same way of hosting, and their positioning is only a simple information producer and media communicator, rarely involving other work related to interaction in the program, such as editing based on the audience's point of view, copy-writing and language design, interaction with the audience, ideas to enhance the audience experience, etc. Compared with other users, users who watch programs and receive information through the Internet have a stronger desire to participate, win the recognition of the audience and make corresponding contributions to the improvement of the overall level of film and television programs, which is a new challenge for the film and television industry.

2.3 The content deviates from mainstream culture Although many of the content and creativity in the film and television works come from the grassroots culture and grass-roots, they need to use grounded language or behavior to gain the recognition and resonance of the audience, but this does not mean that the film and television works can ignore professional ethics and use all kinds of words and deeds arbitrarily. At present, the era of all media is gradually coming. The audience of film and television programs are mainly the post-80s and post-90s. Some producers, in order to cater to the interests of some audiences, talk about some vulgar topics, which deviates from the social responsibility of a program to a certain extent. Even in the new media era, film and television programs have a high dependence on the Internet, the film and television industry still bears the responsibility of actively promoting positive energy and promoting mainstream values. However, many TV programs or hosts based on new media are blindly close to the needs of some audiences for the needs of program development audience recognition, ignoring responsibilities in promoting social morality and mainstream values, which may bring certain benefits to the program in the short term, but from a long-term perspective, this program production idea will bring some benefits to the film and television industry The development of the industry in the future has brought a lot of obstacles. 3 THE DEVELOPMENT OF FILM AND TELEVISION INDUSTRY IN THE NEW MEDIA ENVIRONMENT

- 3.1 Actively integrate various means of communication
- 3.1.1 Combined application of traditional media and new media

For the film and television industry, the combination of traditional media and new media is very important. The film and television industry should actively rely on the television station as the matrix, with the help of a large number of TV stations broadcasting propaganda films and trailers, preheat the programs in advance, strengthen the early publicity and promotion of the programs, carry out large-scale publicity for the audience of the TV station, deeply root the program's own characteristics and brand in the broad audience, so as to help the film and television programs accumulate a certain amount of experience in advance The audience, for the late publicity and promotion to lay an important foundation. On this basis, the film and television programs should actively use various new publicity tools to promote the video, tidbits and posters of the program through the Internet in the stage of shooting and production. Besides official account sites, micro-blog and WeChat public, we should strengthen the utilization of the major forums, share the creative process and the content with the netizens, and help the film and television works to be constructed in an all-round way. It is a new media communication platform.

# 3.1.2 TV network interaction

After a long period of development, the media such as TV station, radio station, Internet and other media are deeply integrated, and all kinds of new media have been widely used. The integration between traditional media and new media has gradually deepened. The interaction between the network and the network has become an important way for many propaganda organizations to use in the publicity of the program. As early as the early 21st century, many programs used this promotion method in the publicity. The forms of picture and text, audio-visual synchronization and multi-point interactive play have been widely used. The combination of multiple terminals greatly

improves the efficiency of media communication. The film and television industry should actively promote interaction between the network and realize the organic combination of portal websites, digital radio and television, Internet TV and print media, and promote the connotation and concept of programs in various forms, thus providing a basis for simultaneous interpreting of different media.

3.2 Using new media technology to improve creative quality

The connotation and style of all kinds of works in the film and television industry, like the brands of all kinds of goods or services, is an important response of the audience to the film and television works. This impression will guide the public's aesthetic tendency to a certain extent, improve the audience's recognition of the program, and also an important support for the film and television works to gain loyal audiences and win lasting competitiveness. The arrival of the new media era has provided many new forms for the program creation of the film and television industry. Under the background of the gradual popularization of the Internet, various new media creation forms supported by new digital technology are often easier to win the recognition of the broad audience, which means that the film and television industry must actively use the new digital technology to innovate the creation methods of film and television works, which is the trend in the new era It's an indisputable fact that the works are regarded as creative works. With the support of all kinds of new media technology, the production means of film and television works are not only shooting on the spot, but also setting up scenes, blue or green screens, digital skylight, motion capture, expression capture and other lens and forms. Creators can actively use digital technology to jump out of the traditional and linear mode of thinking, and actively use new creative technology to form a new mode of thinking based on "new" and "strange" Beauty connotation, to create a whole with a strong visual impact of film and television works.

# 3.3 Enhance communication interactivity

The film and television industry must timely adapt to the trend of social development, make full use of all kinds of new technologies and methods in the new media environment, and effectively use the form of communication to innovate and extend the work content and form. The film and television industry can not only rely on language, text, video and other single communication, but on the basis of absorbing the public ideas, artistic preferences and other connotations, turn the text language into audio language, win the public's recognition and resonance, and make better use of the new media channels supported by the Internet platform to realize the interaction with the audience. The

connotation and aesthetic tendency of film and television works are different, and the audience's pursuit of appreciation and aesthetics is also different. This requires the film and television industry to form a variety of media communication styles and program guidance Producers methods on this basis. communicators should timely collect audience's experience and views on hosting methods, actively develop themselves on this basis, grasp the correct communication purpose, better reflect the cultural value of the public or Internet users before or during the program broadcast, add their own creativity and opinions, and fully respect and integrate the audience's thinking and creativity, In this way, the host can achieve information creation and resource sharing with a new attitude and a new field, which will play an important positive role in the promotion and extension of the program.

3.4 Enhance the connotation of the program

The new media channel relies on the Internet and carries out promotion and publicity with the help of Internet resources, but the producers and hosts should actively abide by the professional ethics of the industry and create positive energy program connotation. Under the socialist market economy, although the capital channel is the lifeline of the production and operation of China's network variety show and TV variety show, the guidance of the audience's thought and spirit and the shaping of the host's charm are still the focus of the production and operation of variety show. Therefore, in the era of new media, the film and television industry should attach great importance to the impact of various communication platforms and contents on the audience, adhere to the excellent, advanced and positive network culture as the basis, the media should actively improve the industry self-discipline, actively absorb the aesthetic trend with positive energy that the majority of the audience pay attention to, and realize the popularization of correct values and spiritual guidance. Producers must constantly enrich their own experience, deepen their understanding of public life and practice, and use new media communication forms to convey better character, temperament, moral quality, good and upward cultural heritage, sincere, confident and modest attitude to the audience through film and television works. Only in this way can the film and television industry show the program style and media style in combination with the audience's hobbies Charm provides support.

# 4 SUMMARY

The rapid development and continuous change of new media have a great impact on the film and television industry. In the promotion and publicity of film and television works, using new Internet media and focusing on the use of new forms of communication can help the film and television industry to flexibly choose the combination of marketing and communication, use a variety of media channels and forms to promote the transformation of program communication, and better grasp the psychological needs of the audience In order to help the film and television industry rapidly improve the level and efficiency communication, media we comprehensively consider the audience's way of receiving information and grasp the characteristics of the audience. Therefore, the film and television industry must actively use and learn from the advantages of new media, so as to make itself invincible in the new media environment.

- [1] Ma Fei. The development path of film and television production and communication based on the new media environment [J]. Art and technology, 2018 (12): 98.
- [2] Lu Di, Zhao Jing, Wu Xiaoli. Analysis on the development characteristics and industrial chain of new media film and television industry in 2014 [J]. China TV, 2015 (6): 52-58.
- [3] Chen Jingfang, Li Feng, Zhang Peng. Research on the development of film and television culture industry of local TV stations under the new media environment [J]. News research guide, 2018 (21): 44.
- [4] Yang Rong. Exploration on the development of film and television production and communication in the new media environment [J]. Research on communication power, 2019 (2): 46-47.
- [5] Cheng Bo, Zhu Qin. On the cross media connection between online drama and film in the context of new media -- from the perspective of the adaptation of the film "that year in a hurry" [J]. Contemporary film, 2015 (11): 187-190.
- [6] Lu keying. The current situation and development mode of Chinese contemporary micro film in the new media environment [J]. Journal of Sichuan cadre correspondence college, 2015 (2): 55-58.

# Ideals and Dilemmas: A Probe into Multicultural and Ethnic Education

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Abstract:At present, cultural interactions within our nation and cross-cultural international exchanges are becoming more frequent, forming a multi-cultural relationship that coexists. But this has triggered reflections on national cultural identity, cultural consciousness, and national education. Education, the important cultural responsibility it shoulders, also stands at the crossroads of multiple choices. With the continuous update and development of Internet technology and new media, multicultural exchanges, blending, and confrontation are frequent, and it is necessary to deepen the understanding of multicultural and ethnic education.

Keywords: multiculturalism; ethnic education; action path

Ethnic education is most closely related to research in the field of multiculturalism, and is sometimes even equated. However, the connotation and boundaries of multicultural education have not yet reached a consensus in the academic world. In the current multicultural context, national and ethnic education has huge room for development, but it is also facing unprecedented difficulties. The root of national education lies in national culture, and multiculturalism is the basic feature of national education in our country. [1]To clarify the relationship between the two, it is necessary to realize the contradiction between ethnic education and multiculturalism.

# 1.THE CONTRADICTORY RELATIONSHIP BETWEEN ETHNIC EDUCATION AND MULTICULTURALISM REVEALED

1.1 The relationship between unity and diversity Diversity means that national education recognizes cultural differences, respects the cultures of different regions and nationalities, communicates with each other and understands "other cultures". Oneness actually refers to the protection and persistence of localization. The contradiction is that ethnic education not only emphasizes the diversity and openness of culture, but also calls for the protection of its own characteristics. It is difficult to grasp and coordinate the degree of openness and the state of adherence to the border.

1.2 Cultural tension and educational pressure

The relationship between culture and education is complementary. Culture and education are a blending relationship of mutual inclusion, interaction, and mutual means. [2] The current pattern of world economic development makes the relationship between education and culture complicated and tense. The tension of

culture itself has successively brought about the pressure of education, and it has also brought new challenges to the inheritance of culture and national education. Wilson found that in the relationship between cultural evolution and educational evolution, the more the culture evolves, the more types of education. However, as an independent social phenomenon, education has its own laws of development, and is sometimes restricted by the relationship between specific cultural fields and educational elements. When cultural choices and educational requirements conflict, the relationship between the two will be negative and passive.

2. ANALYSIS OF THE CURRENT PROBLEMS AND REASONS IN THE IMPLEMENTATION OF MULTICULTURAL EDUCATION IN OUR COUNTRY

2.1 Scratching each other's boots: diverse interests Different nationalities have different interest demands, and sometimes within the same group, their needs are also different and diverse. Ma Rong pointed out in "Ethno Sociology" that multiculturalism should uphold voluntarism in practice. Its main spirit is that every individual has the right to choose his own cultural belonging and the freedom to identify with a certain ethnic group. Then the degree of voluntary and the constraints of the external system are not well controlled, and it will go against our original intention to promote multicultural education. In terms of cultural shaping and acquisition, it's just a taste of it, and itching to piece together achievements. Problems such as these will show up over time. Therefore, when a nation faces foreign cultural shocks, it can absorb high-quality cultural nutrition on the basis of maintaining its own value system and accumulate its own cultural strength. Through various means of communication, based on protection and competition, promote their own cultural value consciousness.

2.2 Food for foreigners does not change: respect for pluralism and ignore oneness

Diversity and unity are first and foremost the realistic starting point for the coordination of national interests, and the coordination of the national and national interests. At present, the relationship between diversity and unity is not coordinated, blindly emphasizing diversity, not chewing and savoring the cultural essence of others, not being able to extract cultural nutrition, and choosing the good to absorb and learn from the outstanding cultural achievements. "Integration" is an inherent requirement for the development of a multiethnic country, and diversity is the characteristic of a

multi-ethnic country, and it is also an inherent requirement for the survival and development of ethnic minorities. If the Chinese nation cannot handle the relationship between "multiple" and "one body", it will affect the harmony of ethnic relations and social stability.

## 3. MULTICULTURAL EDUCATION IS AN IDEAL DIRECTION OF EDUCATION

3.1 The unbalanced dynamics of ethnic education---balanced and dynamic harmonious movement

Education itself is based on national culture. It spreads national values, promotes cross-national understanding and interaction, and eliminates cultural differences between nationalities, so that the relationship between the elements of education and culture is in harmony, symbiosis, and balance. Dynamic movement of development. Jacques Delors, chairman of the Education Commission for the 21st Century, mentioned in the UNESCO report "Education-Wealth Contained in It": "Education is not a'magic bullet' that opens the door to a world that can realize all ideals, nor is it' Sesame, let's open the door. But it is indeed a major means to promote a more harmonious human development." [3]So the task and mission of national education is to coordinate the various elements of education, in the education system, Undertake the mission of culture and education in the selection of teaching materials, selection and screening.

3.2 The state of freedom of cultural inheritance-the transition of self-contained state

Recently, the General Office of the Central Committee of the Communist Party of China and the General Office of the State Council have issued the "Opinions on the Implementation of the Inheritance and Development Project of Chinese Excellent Traditional Culture", requiring all regions and departments to conscientiously implement them in light of actual conditions. The significance of this document is to further enhance people's cultural awareness and selfconfidence, which provides an opportunity for the implementation of multicultural and ethnic education in our country. "Without the inheritance and development of civilization, the promotion and prosperity of culture, there would be no realization of the Chinese dream. The realization of the Chinese dream is a development process in which material and spiritual civilizations fly together. Chinese civilization and the rich and colorful civilizations created by the people of the world Together, to provide mankind with correct spiritual guidance and powerful spiritual motivation." This is Xi systematic interpretation of traditional culture and the Chinese dream at the UNESCO headquarters in Paris. Inheriting and developing the excellent Chinese traditional culture is the common responsibility of all Chinese people.

3.3Policy Consciousness---Practice Conscious Action Path Leap

The development and practice of ethnic education in our country basically operate within the government system and within the framework of ethnic policies. Among them, "national prosperity", "national equality" and "national autonomy" are more important keywords. According to different historical stages and the characteristics and development needs of ethnic minority areas, my country has formulated many ethnic minority policies. From vigorously developing advanced productive forces in ethnic areas to meeting the growing cultural and educational needs of the people in ethnic areas, we will comprehensively promote the construction of a well-off society in ethnic areas. It can be seen from this that the attitudes of the Chinese government and people towards their ethnic minorities are all understanding, support and help.

Reflected in the academic circles of our country, scholars generally believe that the task of national education in our country is to train a large number of qualified talents at all levels and various types to serve the economic and cultural prosperity of our national regions. Ethnic education as a policy means, not a goal to fill and explain our country's ethnic education theory, its essence lies in "policy", which constitutes and dominates the action path of our country's ethnic education from top to bottom.

The theory and practice of multiculturalism is the product of the progress of the times, and its appearance has broadened people's horizons. Looking back on the development of education and culture in the past, we can face up to our problems in practice without avoiding mistakes, re-examine the opportunities and challenges that multicultural education brings us, and realize the leap from ideal to reality.

#### REFERENCES

- [1] Zhang Shiya: "Multicultural and Ethnic Education Value Orientation", in "Journal of Northwest Normal University" (Social Science Edition), 2005 (11).
- [2] Huang Ji, Wang Cesan: "Modern Education Theory", 32 pages, Beijing, People's Education Press, 1995
- [3] UNESCO. Education-where wealth is stored[M]. Beijing: Educational Science Press, 1996.12.

# The Influence of Singing on People's Cognition and Emotion from the Perspective of Socialization

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Abstract: The influence of singing on individual cognition and emotion is understood as the influence of singing on its socialization. Including: Individuals have mastered the skills of singing, understood the ethics of singing love songs against each other, learned the rules of gender communication, learned the skills of gender communication and group values, realized the meaning and value of youth, and formed the behavioral style expected by society. At the same time, through these cognitions and emotions, socialization promotes individual singing practice.

**Keywords:** Team Teaching Method; Clinical Teaching; Department of Respiratory Medicine.

### 1. THE PROCESS OF HUMAN SOCIALIZATION IS DETERMINED BY SOCIETY AND CULTURE

Zhuang Kongshao explained socialization in his "Introduction to Anthropology" as follows: "Socialization refers to the process by which members of society integrate with society through learning social culture, playing social roles, and participating in social activities." [1] Life He came to be a product of society. His words and deeds, etiquette education, and psychological character were all cultivated in the social environment and were deeply influenced by culture. Socialization is "the inheritance of culture", which is to enable society to play the role of maintenance and inheritance. The realization of individual socialization is mediated by the culture accumulated over a long period of time by human beings. The strict meaning of "socialization" is "culturalization". Only through "culturalization" can folks become customs and the people's characteristics can be transformed. [2]

Social and cultural factors are the most important factors affecting the process of human socialization. Mainly refers to the entire social and cultural environment in which people live, including culture, school, family, peer groups, etc. The social-cultural influence on people and people's adaptation to the existing social structure are being carried out through educational interaction. Educational practice and all forms of social interaction that cultivate individuals to adapt to society are determined by society-culture. Therefore, the entire personality structure of a person is regarded as a result of socialization.

There are many contents in the cultures of different societies that are universal. For example: music, dance, games, rituals, religion, and similar ethics. The function of this different form of cultural content is shown in: ①Understanding the life experience of the predecessors through cultural inheritance; ② Transmitting the behavioral value of the group or nation to the individual; ③ Enables the individual to successfully establish a society with others and the group contact. Socialization means that individuals not only adapt to society and its culture, but this process of adaptation itself is also influenced by society and culture.

## 2. THE LOGICAL RELATIONSHIP BETWEEN COGNITION AND EMOTION

Cognition and emotion are two aspects that constitute behavior. Cognition structure action, while emotion is an important driving force of action. The two complement each other and are inseparable. On the one hand, cognition affects emotion. Without cognition, there will be no emotion. Emotion is born on the basis of cognition. In the behavioral model, only the participation of perception and understanding can there be emotion; moreover, the development of emotion depends on the development of cognitive structure; on the other hand, emotion also affects cognition. Without emotion, cognition cannot proceed smoothly.

The effect of emotion on cognition is manifested in three aspects: One is to guide individual judgment and decision-making. Without emotions, individuals cannot make rational judgments and decisions smoothly; second, emotions can regulate individual cognition, prompt individuals to make commitments to social values and goals, and promote individuals to act in accordance with the framework of social regulations; third, emotions have The function of symbols can provide information for individuals' perception and speculation of others and their behavior.

Cognition is a process of information processing, and socialization is the main source of information. The content and nature of information have been selected for socialization, because people are socialized by their social status. The impact of cognition on socialization is only one side of the problem, and the other side is the impact of socialization on cognition. Cognition, whether as a process or a behavior, is not innate, but occurs and develops in the individual's practice.

Socialization is also an emotional process. Emotion is the driving force of individual socialization. Without emotion, socialization cannot proceed. At the same time, emotion is the result of socialization. The formation of emotion is a socialization process.

#### 3. COGNITION AND EMOTION IN SINGING

There are many forms of expression in social culture that present diverse expressions of cultural emotions. The nature of human beings is more manifested in its social nature. The form of music can be understood as a kind of spiritual enjoyment unique to human beings, manifested as a pleasant pursuit of the senses, emotions, psychology and spirit.

Musical language reflects emotions through the movement of sounds, and melody, rhythm, harmony and mode are all its means of expression. People communicate with the world through them, and dialogue between hearts and hearts. This kind of art not only stops at expressing affection, but also satisfies people's aesthetic desires at a higher level. Beautiful melody and harmonious rhythm can purify people anyway. Heart. Music has a great influence on human social life in terms of spiritual shaping, psychological cognition and adjustment, social norms and maintenance, and physical and mental entertainment. The social function of music originates from the musical work itself. The reason why music has a social function is because music is symbolic. The symbolism of music, as a medium of individual or collective emotions and values, makes music not only reflect social reality but also symbolize social ideals. Music works convey the narrative and symbolic information contained in them to listeners through symbolic form and content, and have an impact on the socialization of listeners; however, the viewpoints of aesthetic functionalists are not uniform. One view is that music mainly exerts its social function by influencing the audience's cognition. This view usually compares music with language and believes that music, like language symbols, can directly express the ideas, attitudes and emotions of creators, performers, or musical works. Music influences the cognition of listeners through musical language.

Music, like language symbols, can directly express the ideas, attitudes and emotions of creators, performers, or musical works. Music influences the cognition of listeners through musical language. Music stimulates the listener's sense of hearing, causes the listener to produce synesthesia and associations, evokes the listener's experience memory and emotional experience, and the cognitive component of the emotion, so that the listener gains the experience of themselves as well as the emotional experience. Understanding of the value of music. The social function of music is realized through the emotional function of music.

- 4. THE IMPACT OF SINGING ON MODERN SOCIAL LIFE
- 4.1 Shaping the behavioral and psychological patterns of individuals or groups.

Throughout the ages, singing has always been a manifestation of the people's true feelings of "feeling in sadness and happiness, and sent by events". It is like a mirror, which comprehensively and profoundly reflects the people's social life, historical changes,

customs and habits, as well as the spiritual outlook and ethics from all ages and angles, and expresses people's thoughts, feelings and aesthetic psychology. It is the epitome of the production, life and political activities of the people of the past dynasties. It shapes people's psychological cognition and behavior in a subtle and silent way. It relies on its own regulations to establish a cultural atmosphere, and naturally affects the people living in it, shaping individuals or The behavioral and psychological patterns of the group.

4.2 Adjust the rhythm of production and life.

Singing generally takes people's life and ideals as the main content, and is expressed in a vivid form that people like to hear and see. It is a social and cultural model with good and true connotations based on joyful emotions. In today's era, the life of every nation contains a wealth of emotions for the pursuit of a better life and the infinite and powerful vitality shown by getting along with nature. Various cultural activities contain rich cognition, emotion and aesthetic elements. In a cheerful song, in the colorful art form, the people's life aspirations and beautiful hopes are unobstructed. It plays an important role in regulating the rhythm of production and life, purging social order and spiritual construction.

4.3 Get educated in social practice activities.

Socialization stems from the interaction between individuals and society. Only in actual participation can people form the initial cognition of singing, experience the emotions contained in the singing, and internalize the various values, social norms, role knowledge, behavior patterns and emotional norms in it.

People participate in various cultural activities in their leisure time, first of all to eliminate fatigue, adjust their spirits, and obtain pleasant enjoyment, which reflects the most authentic pursuit of beauty. When the masses participate in square opera and national singing activities, on the one hand, they can recognize and understand the heroes and treacherous villains in the history of our country by learning various chants, and see the good qualities possessed by the heroes, thereby influencing themselves On the other hand, mass culture reflects the ability of the objective masses to judge the truth, goodness, beauty, falsehood, evil and ugliness of things, and their preferences for various forms and forms of beauty. Human beings create beauty in practice and carry out aesthetic appreciation and pleasure, and at the same time receive education in social practice activities.

#### TO SUM UP

Singing has a multifaceted cognition and emotional impact on people's social values, social relationships, ethics and social customs, involving people's basic life knowledge, ethics, gender roles, interpersonal communication, labor attitudes, and life Views, values, and other aspects. This article explores the impact of singing on people's socialization from two levels of cognition and emotion, and through singing, people can understand the various concepts, values, norms, behaviors and social customs of the society, and

experience and experience the various aspects related to singing. Kind of emotion. These socializations obtained through cognition and emotion, and through cognition and emotion, provide guidance and motivation for people to participate in singing practice activities.

#### REFERENCES:

- [1] Zhuang Kongshao: "An Introduction to Cultural Anthropology", Beijing: Renmin University of China Press, 2006.
- [2] Chen Yuanhui: "On Ruhua", "Social Psychology Research", Issue 1, 1990.

# On the Construction of the Teaching Staff of Innovation and Entrepreneurship Education of National Economic Management Major under the New Economic Management Strategy

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Abstract: With the development of innovation and entrepreneurship education in Colleges and universities, the number of innovation and entrepreneurship education teachers is insufficient, the overall level is not high, and the structure is unreasonable, which has become an important factor restricting the development of innovation and entrepreneurship education. Therefore, this paper analyzes the current situation of the teaching staff of innovation and education in national entrepreneurship management specialty, and puts forward some suggestions on the construction of the teaching staff of innovation and entrepreneurship education. Firstly, all staff should be screened and a sufficient number of teachers should be set up; Secondly, build a training system to improve the overall level of teachers; Thirdly, strengthen the cooperation between school and enterprise, improve the comprehensive practical ability of teachers; Fourthly, improve the structure of teaching staff and set up diversified teaching staff.

**Keywords:** New economic management; National economic management; Innovation and entrepreneurship education; Teaching staff

#### 1. INTRODUCTION

Innovation and entrepreneurship education is an important measure of China's current higher education reform. In 1947, Myles Mace opened the "new enterprise" management course at Harvard Business School, marking the beginning of innovation and entrepreneurship education in American universities, and then spread to many countries. At the end of 1989, UNESCO held the "International Symposium on education for the 21st century" in Beijing and formally put forward the concept of "entrepreneurship education". In December 1998, the Ministry of education formulated the "action plan for the revitalization of education in the 21st century", which first proposed "entrepreneurship education" from the policy level. In May 2010, the Ministry of Education issued "opinions on vigorously promoting innovation and entrepreneurship education in Colleges and universities and college students' independent entrepreneurship work", officially renamed Innovation "entrepreneurship education". entrepreneurship education is the transcendence and integration of innovation education and entrepreneurship education. It is a new development based on the integration of the two connotations [1].

The first Tsinghua University Entrepreneurship plan competition was held in Tsinghua University in 1998, which made Tsinghua University the first university to introduce the undergraduate entrepreneurship plan competition into Asia; In 2002, the Ministry of Education designated nine universities including Tsinghua University and Renmin University of China as pilot universities to carry out entrepreneurship education. Over the past 20 years, innovation and entrepreneurship education has gradually attracted the attention of colleges and universities, and has carried out beneficial exploration and practice under the active guidance of relevant national departments and local governments. By the end of 2020, the Ministry of education has built 200 demonstration schools to deepen the reform of innovation and entrepreneurship education, established 3400 online open courses of innovation and entrepreneurship education, more than 6500 characteristic demonstration courses of "integration of specialty and innovation", and the number of students choosing courses has reached 34 million.

In order to adapt to the new situation of China's higher education reform and development, and cultivate high-level applied talents with strong foundation, strong ability, high quality, market demand and social recognition, Anhui University of Finance and economics held a seminar on "embracing the new era and building a" new economic management "of safe Finance in February 2018. President Z. M. Ding pointed out at the meeting that building new financial management and financial services is a need for the Ministry of education to set up the new engineering discipline. It is the need to conform to the new situation of the new generation of information technology, including the Internet plus, cloud computing, big data, artificial intelligence and economic society, education and teaching, and to embrace the new era, fulfill the new mission and seize new opportunities.

The existing literatures on the construction of innovation and entrepreneurship education teachers are mainly divided into two levels: macro colleges and micro majors. At the macro university level, S. Dong, et al. (2020) analyzed the current dilemma of insufficient quantity, low quality and insufficient strength in the construction of teaching staff, and put forward that universities, enterprises and the government should work together to support the construction of innovation and entrepreneurship education

teaching staff [2]. X. Y. Xing (2019) thinks that the quality and quantity of innovation and entrepreneurship teachers in Colleges and universities need to be improved, and discusses from the aspects of team formation, selection and access, training and learning, exchange and sharing, evaluation and incentive, school enterprise cooperation, etc., so as to build a team of innovation and entrepreneurship education teachers with excellent business, full-time and part-time balance, orderly flow and sustainable development [3]. J. C. Wang and T. Li (2018) pointed out that the specialization of innovation and entrepreneurship education teachers is low, and there is a serious lack of full-time teachers. It is necessary to clarify the subject ownership of innovation and entrepreneurship education, and improve the knowledge system and teaching system of innovation and Entrepreneurship Education [4]. K. He, et al. (2017) put forward relevant construction paths in view of the current situation and existing problems of innovation and entrepreneurship education teaching staff of marketing specialty, so as to improve the comprehensive quality of innovation and entrepreneurship talents. X. P. Tian, et al. (2016) believe that we should learn from the excellent innovation and entrepreneurship education experience at home and abroad, and strive to cultivate and create a multi-level integration of innovation and entrepreneurship education teachers [6]. Throughout the existing literatures, the research on the construction of innovation and entrepreneurship education teachers in Colleges and universities is becoming more and more mature, while the research on the construction of innovation and entrepreneurship education teachers in Colleges and universities is relatively less, and the points are connected into a line and the lines are connected into a plane. Therefore, based on the existing research, this paper construction of analyzes the innovation entrepreneurship education teachers in national economic management specialty.

## 2. THE NECESSITY OF THE CONSTRUCTION OF THE TEACHING STAFF IN THE MAJOR OF NATIONAL ECONOMIC MANAGEMENT

## 2.1. THE TEACHING STAFF IS THE GUARANTEE FOR THE SMOOTH IMPLEMENTATION

Innovation and entrepreneurship education is a systematic project with wide coverage, high complexity and strong operability. In order to implement innovation and entrepreneurship education smoothly, develop it to a deeper level, and cultivate high-level innovation entrepreneurship talents, teachers are the key and guarantee. The implementation opinions of the general office of the State Council on deepening the reform of innovation and entrepreneurship education in Colleges and universities issued in 2015 pointed out that the reform of innovation and entrepreneurship education in Colleges and universities should be comprehensively deepened from 2015, and important progress should be made and innovation and entrepreneurship education should be popularized by 2017. By 2020, classroom teaching, independent learning, combining with practice, guiding and helping should be established and improved University Innovation and entrepreneurship education system integrated with cultural

guidance [7]. The construction of curriculum system of innovation and entrepreneurship education, the practice of teaching activities, the research of educational theory and the guidance of students' practical activities of national economic management major are inseparable from teachers. The teaching staff is a strategic resource for the innovation and entrepreneurship education of national economic management. Therefore, we must pay attention to the construction of the teaching staff of innovation and entrepreneurship education, and provide guarantee for the implementation of innovation and entrepreneurship education of national economic management major.

## 2.2. THE KEY TO IMPROVE THE QUALITY OF LIES IN THE CONSTRUCTION OF TEACHING STAFF

The quality of education and teaching is the lifeline of a school and the driving force of its development. Teachers are the key to improve the quality of education and teaching. As a new education concept and talent training system, the key to improve the quality of innovation and entrepreneurship education is teachers. Teachers in improving the quality of innovation and entrepreneurship education is mainly reflected in the following aspects: first, the development of innovation and entrepreneurship education in China is still in the initial stage, the research and construction of innovation and entrepreneurship education curriculum is still in the exploratory stage, and the teaching staff is the main body of innovation and entrepreneurship education curriculum research and construction. Secondly, teachers can rely on their own teaching experience to promote the organic combination of professional education and innovation entrepreneurship education, excavate and enrich the innovation and entrepreneurship education resources of various professional courses, and strengthen innovation and entrepreneurship education in the process of imparting professional knowledge, so as to organize the whole teaching activities to produce high-quality and efficient output and cultivate students' innovation entrepreneurship ability. Thirdly, any practical activities need the guidance of scientific theory, so the theoretical knowledge of innovation and entrepreneurship education practice is particularly important. Teachers can enrich the theory of innovation and entrepreneurship education through continuous research and exploration, and test the scientific nature of the theory through innovation and entrepreneurship education practice, and constantly improve the rationality of innovation and entrepreneurship education theory [8]. Fourth, the teaching staff can establish close ties with enterprises outside the school, lead students to carry out practical activities, and strengthen the practice of innovation and entrepreneurship education. All of the above are the call of high-quality innovation and entrepreneurship education for teachers with rich knowledge, high skills and high comprehensive quality. Therefore, the national economic management major must build an excellent innovation and entrepreneurship education teaching staff, in order to improve the highquality output of innovation and entrepreneurship education.

3.THE CURRENT SITUATION OF THE

## CONSTRUCTION OF THE TEACHING STAFF OF INNOVATION AND ENTREPRENEURSHIP EDUCATION IN THE MAJOR OF NATIONAL ECONOMIC MANAGEMENT

Due to the late start of innovation and entrepreneurship education in Colleges and universities in China, it is still in the exploratory stage in terms of content and form, and national economic management is no exception. There are still many problems in the number, quality and structure of innovation and entrepreneurship education teachers, which also restricts the development of innovation and entrepreneurship education in national economic management major to a great extent.

## 3.1. THE NUMBER OF TEACHERS WITH COMPREHENSIVE ABILITY IS STILL IN SHORT SUPPLY

The development of a subject or course needs a sufficient number of teachers to teach the subject or course. In 2015, the opinions of the general office of the State Council on the implementation of deepening the reform of innovation and entrepreneurship education in Colleges and universities proposed that colleges and universities should develop and open compulsory and elective courses in research methods, discipline frontier, entrepreneurship foundation, and entrepreneurship guidance for all students according to the orientation of talent cultivation and the requirements of innovation and entrepreneurship education objectives. In this context, there are few teachers specialized in innovation and entrepreneurship teaching and scientific research in China's colleges and universities, few teachers with high teaching level, and the teachers of innovation and entrepreneurship education in national management are also very scarce [9]. At present, the assessment system of teachers in Colleges and universities and the conditions of evaluating professional titles have high requirements on Teachers' scientific research level, which leads to most teachers' time and energy to focus on scientific research projects and thesis writing and publishing, and little time to improve their innovation and entrepreneurship ability. Even if there are a few teachers specialized in innovation and entrepreneurship education, their daily teaching tasks are heavy, which limits the investment in improving the comprehensive ability of innovation and entrepreneurship education. All these reasons lead to the slower development of innovation and entrepreneurship education of national management major, and then slow down the process of cultivating high-quality and high-capacity innovation and entrepreneurship talents.

## 3.2. THE OVERALL LEVEL OF TEACHERS IS NOT HIGH, AND LACK OF ENTREPRENEURIAL PRACTICE EXPERIENCE

At present, the number of teachers engaged in innovation and entrepreneurship education in national economic management major is not only in short supply, but also the quality is worrying. The overall level of innovation and entrepreneurship education teachers determines the results of innovation and Entrepreneurship Education: whether students can learn real innovation and entrepreneurship knowledge and experience. In recent years, in order to adapt

to the development of higher education, colleges and universities have introduced and supplemented a large number of young teachers. However, there is a relative lack of high-level subject leaders and backbone teachers, the scientific research echelon is broken, and the scientific research strength is weak as a whole, which affects the improvement of the overall level of innovation and entrepreneurship education teachers. In addition, most of the teachers engaged in innovation and entrepreneurship education are "half-way monks" and "self-taught", lacking practical experience in innovation and entrepreneurship. These teachers are only familiar with the theoretical knowledge in books, do not understand the business operation and investment situation, and have no entrepreneurial experience. In the process of innovation and entrepreneurship teaching, they are just "talking on paper", and it is difficult to connect theory with practice. Although some colleges and universities will employ off campus entrepreneurs as part-time professors of innovation and entrepreneurship education, they are lack of pedagogy related knowledge, and it is difficult to teach students the relevant experience and examples to the theoretical level. The low level of teaching staff has seriously hindered the development of innovation and entrepreneurship education. 3.3. THE STRUCTURE OF THE TEACHING STAFF IS UNREASONABLE

Most of the teachers of innovation and entrepreneurship education of national economic management major come from the personnel or counselors of student employment management department. Because of their own knowledge limitations, it is difficult for these teachers to give professional guidance to college students. From the perspective of educational background, professional title and age structure, the main teachers of innovation and entrepreneurship education are management personnel or counselors. The proportion of postgraduates is in the majority, and the educational background is generally low. The number of teachers with deputy senior and above professional title is very small, and the number of leaders and key figures is even less. In the innovation and entrepreneurship education team, the proportion of young teachers is large, but the practice is insufficient. The unreasonable structure of teaching staff leads to the failure to form an excellent teaching staff of innovation and entrepreneurship education, which will ultimately affect the deep development of innovation and entrepreneurship education.

## 4. THE COUNTERMEASURES FOR THE CONSTRUCTION OF THE TEACHING STAFF OF INNOVATION AND ENTREPRENEURSHIP EDUCATION

In order to promote the development of innovation and entrepreneurship education, realize the goal of innovation and entrepreneurship education of national economic management major, and cultivate high skilled and high-level innovation and entrepreneurship talents, we must build a teaching team with rich innovation and entrepreneurship practical experience, scientific innovation and entrepreneurship theoretical knowledge, sufficient quantity and reasonable structure through various ways.

### 4.1. ESTABLISH A SUFFICIENT NUMBER OF TEACHERS

The national economic management major can select the staff who have the spirit of adventure and are willing to become entrepreneurial tutors or have entrepreneurial experience in the whole school, and carry out centralized training with the help of school enterprise cooperation resources, so as to build them into a member of the teaching team of innovation and entrepreneurship education. We should encourage young teachers to "go out" and make full use of the resources of the Ministry of education to send outstanding young teachers to study in famous universities at home and abroad. We should insist on inviting experts and scholars out of school, actively carry out academic exchanges and scientific research cooperation, and promote the growth of teachers. Through the combination of "going out" and "inviting in", we can cultivate a number of innovation and entrepreneurship teachers.

## 4.2. BUILD A SYSTEMATIC TRAINING SYSTEM TO IMPROVE THE TEACHING LEVEL

At present, the concept of innovation and entrepreneurship education of national economic management professional teachers is backward, the ability to carry out innovation and entrepreneurship education curriculum is insufficient and out of touch with reality, and it is unable to integrate professional education and innovation and entrepreneurship education. Therefore, colleges universities should actively build a systematic training system for teachers and strengthen the training of teachers. Firstly, we should invite well-known experts to give lectures, so that teachers undertaking innovation and entrepreneurship education of national management can understand the international cutting-edge innovation and entrepreneurship education concepts through training, and improve the theoretical level of teachers. Secondly, we should invite off campus entrepreneurs or successful entrepreneurs to give lectures to train teachers in entrepreneurship practice, so as to improve teachers' practical ability. Thirdly, we should invite government officials to explain the supporting policies related to entrepreneurship for teachers, and encourage teachers to engage in innovation and entrepreneurship education. Fourthly, relying on the in school incubation base and out of school entrepreneurship Park, it provides teachers with innovation and entrepreneurship experience platform, so as to provide practical conditions for teachers to carry out teaching and research.

## 4.3. STRENGTHEN SCHOOL ENTERPRISE COOPERATION

Innovation and entrepreneurship education is a practical subject, which not only needs a solid theoretical foundation, but also has high requirements for practical ability and entrepreneurial background. However, at present, most of the teachers engaged in innovation and entrepreneurship education have no entrepreneurial experience or working experience in enterprises, which greatly affects the practical guidance ability of teachers in the teaching process. Therefore, it is necessary to strengthen the cooperation between schools and enterprises to enhance the comprehensive practical ability of innovation and

entrepreneurship education teachers of national economic management major. The school will send professional teachers to the enterprise for training, be familiar with the operation and management of the enterprise, and enrich the practical activities, which will help teachers to transform practical experience into theoretical knowledge and impart it to students in the teaching process.

4.4. ESTABLISH A DIVERSIFIED TEACHING STAFF Innovation and entrepreneurship education is a multi-level, all-round work, is the integration of multi-disciplinary education, teachers need to have a variety of disciplinary knowledge reserves, and have a certain degree of innovation and entrepreneurship experience. Therefore, in the construction of innovation and entrepreneurship education teachers, we should pay attention to the complementary disciplines, full-time and part-time combination, ability and experience. To improve the teaching staff of innovation and entrepreneurship education in the major of national economic management, it is necessary to establish a diversified teaching staff with the trinity of "subject leader - professional teachers - part-time teachers". Discipline leaders are the "leaders" in the teaching and research of innovation and entrepreneurship education. They can lead the teaching staff of innovation and entrepreneurship education to continuously explore, study and grow. Such teachers can be screened and among the excellent innovation cultivated entrepreneurship teachers in the school. Professional teachers are full-time teachers who are willing to carry out innovation and entrepreneurship teaching and have strong teaching ability and teaching experience. Professional teachers have a comprehensive understanding of students' professional knowledge, and can guide students' innovation and entrepreneurship learning and cultivate students' innovation and entrepreneurship consciousness from a professional perspective. Part time teachers, that is, counselors who teach innovation and entrepreneurship courses part-time, as well as outstanding entrepreneurs and successful alumni outside the school, spend more time with students and know more about all aspects of students' learning and life.

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#### REFERENCE

- [1] Li Shi, Jizhen Li. Innovation and entrepreneurship education in Colleges and Universities: connotation, Dilemma and path optimization [J]. Heilongjiang Higher Education Research, 2021, 39 (02): 100-104.
- [2] Sheng Dong, Xuecun Zhuang. Teaching staff construction of College Students' innovation and Entrepreneurship Education: significance, Dilemma and path [J]. Journal of Chongqing University of science and Technology (SOCIAL SCIENCE EDITION), 2020 (06): 113-116.
- [3] Xiaoyang Xing. On the construction of teaching staff for innovation and entrepreneurship education in Colleges and universities [J]. Journal of Anyang Normal University,

2019 (03): 148-152.

- [4] Junchao Wang, Tao Li. The dilemma and breakthrough path of the construction of innovation and entrepreneurship education teachers in Colleges and universities [J]. Journal of Hebei Agricultural University (agriculture and Forestry Education Edition), 2018, 20 (06): 116-119.
- [5] Kui He, Xiaomei Li, Lingling Zhan. Research on the construction of teaching staff of innovation and entrepreneurship education in marketing specialty [J]. Contemporary education practice and teaching research, 2017 (12): 137-138.
- [6] Xiping Tian, Weijun Chen. Research on the construction of innovation and Entrepreneurship Education Faculty of software engineering specialty taking Software College of Anyang Normal University as an example [J]. Journal of

Anyang Normal University, 2016 (05): 146-148.

- [7] General Office of the State Council. Opinions of the general office of the State Council on deepening the reform of innovation and entrepreneurship education in Colleges and universities [J]. Bulletin of the State Council of the people's Republic of China, 2015 (15): 51-54.
- [8] Ziyu Zhao, Ling Zhou. Faculty construction in Colleges and Universities Based on the concept of innovation and Entrepreneurship Education [J]. Journal of Hubei second normal university, 2016, 33 (05): 90-93.
- [9] Li Xie. Research on the construction of the teaching staff of school innovation and entrepreneurship education in the new era [J]. Journal of Shandong Vocational and Technical College of Commerce, 2020, 20 (01): 104-107.

## Research and Practice on the Talent Cultivation Model of Private Colleges and Universities Based on the National College Student Mathematics Competition

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Abstract: Private colleges focus on cultivating applied undergraduate talents, and mathematics competitions play an active role in cultivating applied talents. Mathematics competition can promote college students' interest in learning mathematics and improve students' application ability. This paper analyzes the connotation and characteristics of mathematics competitions and the current situation of private colleges participating in mathematics competitions, and explores the research and practice of the talent training model of private colleges based on college students' math competitions. Mathematics **Keywords:** Private Colleges; Competitions; Talent Training; Advanced Mathematics; **Innovative Talents** 

#### 0. INSTRUCTION

Advanced mathematics competition is a kind of mathematics competition, which can cultivate students' innovative thinking and improve students' ability to use mathematical knowledge to solve problems. It is suitable for the majority of students who have studied advanced mathematics as a basic course in undergraduate colleges. The number of participating students is wide. Private colleges cultivate innovative talents. From the perspective of mathematics competitions, it can send mathematics talents to the society, and help students who intend to take postgraduate entrance examinations. Mathematics competitions can improve students' ability to use mathematical knowledge to analyze and solve problems. Let students absorb more nutrients from math competitions to improve their overall quality and lay a solid foundation for better service to the society in the future.

## 1. THE CONNOTATION AND CHARACTERISTICS OF MATHEMATICES COMPETITION

The National Undergraduate Mathematics Contest started in 2009. It is divided into two stages: the preliminaries and the finals. It is sponsored by the Chinese Mathematical Society and is aimed at college students across the country. The National Undergraduate Mathematics Contest is divided into mathematics professional competition questions and non-mathematics professional competition questions. Among them, the content of the mathematics

professional competition is the teaching content of the basic courses of the undergraduate mathematics major. Mathematical analysis accounts for 50%, advanced algebra accounts for 35%, and analytic geometry accounts for 15%; the non-mathematics major competition content is the university undergraduate science and engineering majors advanced mathematics The teaching content includes functions, limits, continuity, calculus, vector algebra, space analytic geometry, infinite series, etc. However, starting from the fifth competition, the finals will increase the content of linear algebra by 15%-20%. The National College Student Mathematics Competition has been valued by colleges and universities across the country and has become one of the most influential college student subject competitions in the country with the largest number of participants.

## 2. BASIC STATUS OF MATH COMPETIONS IN PRIVATE COLLEGES

At present, most of the students in private colleges take admission to university as their intermediate goal. After entering the university, they have no motivation to study and cannot find their own life goals. Most of their time is spent on time-consuming projects such as playing mobile phones, shopping, and socializing. Mathematics is all about taking credits for exams. There are also some students that have disadvantages on some subjects in private colleges. These students lack the enthusiasm for learning mathematics, feel boring, have no enthusiasm for learning mathematics and learn in a passive manner, and have insufficient understanding of mathematics competitions. Their low level of participation results in a low rate of awards. Many students want to pass the postgraduate entrance examination, but because of their failure in mathematics, many people miss the postgraduate level. This kind of learning state and learning atmosphere is not conducive to the development of students' innovative ability. It is necessary to start from the students' mathematical foundation, use a variety of problem-solving ideas to increase students' interest in mathematics, increase the propaganda of mathematics competitions, and make more many students like mathematics and benefit from it.

The philosophy of private colleges is to cultivate highquality applied talents to meet the actual needs of employers. They focus on applied disciplines in the professional setting. There is no special mathematics college, but only the public basic teaching department. Both mathematics teacher investment and mathematics funding investment are relatively limited. Because some professional courses increase class hours or students go to off-campus companies for "3+1" practice, the total class hours are not enough, and only the hours of basic courses such as advanced mathematics can be reduced. It is very unfavorable for cultivating high-quality applied talents.

## 3. TALENT TRAINING METHODS BASED ON COLLEGES STUDENTS' MATHEMATICS COMPETITIONS

## 3.1. IMPROVE COLLEGE STUDENTS' AWARENESS OF MATHEMATICS COMPETITIONS

Integrating mathematics competitions with daily teaching work closely can strengthen the publicity of mathematics competitions. Starting with freshmen, it can help students understand the role of mathematics competitions and mathematics. Students actively participate in the competition, so that they can gain honors in the mathematics competition to prove their abilities and allow students to study with a goal. The purpose of the competition is to guide students to learn more with interest, not to compete for the sake of competition. At the same time, it helps students who intend to take the postgraduate entrance examination to seize the opportunity and stage to improve their math performance. It is necessary to improve students' awareness of mathematics competitions. First of all, they must be conscious so that they can be trained and improved in mathematics competitions in order to cultivate more outstanding talents.

## 3.2. LAY A SOLID FOUNDATION IN MATHEMATICS

If students want to achieve good results in mathematics competitions, they must have a solid foundation in mathematics. Mathematics classroom teaching is basic way for students to acquire basic knowledge. Mastering the basic knowledge of mathematics can cultivate students' good cognitive structure of mathematics, including mathematical concepts, mathematical formulas, mathematical laws and mathematical theorems, which are the source of problem-solving in mathematical competitions. Therefore, effective competition training should be returned to the basic mathematics classroom to effectively cultivate the students' problem-solving ability and mathematical literacy.

Encourage students to read extracurricular readings of mathematics, learn fine mathematics knowledge from extracurricular readings of mathematics, understand the major achievements and applications of mathematics development, and understand the relationship between mathematics and other subjects, which can optimize the structure of students' mathematical knowledge.

#### 3.3 OPEN MATH IMPROVEMENT CLASSES

#### AND MATH COMPETITION CLUBS

The focus of the work of mathematics teachers is to combine the characteristics of the students to implement personalized and level-based teaching. Level-based teaching refers to dividing students into groups based on individual differences in students' mathematics foundation, setting different teaching goals, and adapting them to different levels. The learning needs of students at different levels. For students who like mathematics and want to participate in mathematics competitions, we offer advanced mathematics interest-enhancing classes. Teachers in charge use simple competition questions and basic postgraduate entrance examination questions to inspire students to explore and pursue knowledge. It can stimulate students' desire for mathematics learning. While improving mathematics ability, we should guide interested students to actively participate in competitions and postgraduate entrance examinations. In order to ensure the echelon construction of the competition student team, it should establish a mathematics competition club to attract more students interested in mathematics. The mathematics competition club conducts regular publicity, selects outstanding students from the freshman and sophomore students to join the team. They can take the lead and play the role of leading in the upper grades, which helps to summarize and pass on the competition experience and lessons. At the same time, experienced teachers from other colleges and universities are invited to join the club, guiding students and holding lectures, etc. It can mobilize students' enthusiasm for participation.

### 3.4. IMPROVE THE CONSTRUCTION OF MATHEMATICS TEACHERS

If private colleges want to make better results from mathematics competitions, they must improve the teaching level and quality of basic mathematics courses. At present, the faculty of private colleges is relatively young. For the sustainable development of mathematics competitions in the future, it is necessary to stabilize and train young teachers, actively carrying out teaching and scientific research exchange activities, and promoting teaching and scientific research results within the department. Therefore, the team of teachers has grown rapidly, serving as the mainstay of math competitions. Young teachers have achieved excellent results in guiding students in competitions, and teachers' enthusiasm for teaching will be greatly stimulated, summing up experiences in practice and forming their own teaching insights. With the improvement of the teaching level of young teachers, students will achieve better results in competitions, and further promote the construction of the teaching staff, truly achieving the teaching purpose of "promoting teaching by competition".

IV. BENEFITS OF MATHEMATICS COMPETITIONS IN CULTIVATING INNOVATIVE TALENTS
4.1. HELP IMPROVE STUDENTS' ABILITY TO ANALYZE PROBLEMS

Mastering mathematics means being good at problem-solving. It does not depend solely on the amount of problem-solving, but also it is on the analysis, exploration and careful consideration after problem-solving. Therefore it can absorb problem-solving methods and ideas from problem-solving, and exercise one's thinking. Mathematics competitions can enhance students' ability to analyze problems and improve their ability to solve problems. It will also enable students to have strong analytical skills and problem-solving abilities in other subjects, so that students can have a rational way of thinking

## 4.2. HELPS TO IMPROVE STUDENTS' INNOVATIVE THINGKING AND OVERALL QUALITY

Innovation ability is the ability to continuously provide new ideas, new theories, new methods and new inventions with economic value, social value, and ecological value in the fields of technology and various practical activities. The various problem-solving ideas in college students' mathematics competitions are to exercise students' innovative thinking. It can try to find as many problem-solving methods as possible for one problem, analyze the problem from an innovative perspective, develop innovative potential in the problem-solving process. It can promote continuous improvement of innovative mind. In the process of mathematics competitions, students systematically train their knowledge and problem-solving skills, and have an in-depth arrangement and application of basic mathematics knowledge. On this basis, students' mathematical thinking is formed. Therefore, mathematics competitions is beneficial for college students' innovative ability and the improvement of overall quality

## 4.3 CONTRIBUTE TO IMPROVEING THE POSTGRADUATE ENTRANCE EXAMINATION RATE OF STUDENTS IN PRIVATE COLLEGES

Students in private colleges do not have high grades. The postgraduate entrance examination is more difficult for them, and the success rate is also relatively low. Many of them are due to low mathematics scores, leading to failures in the postgraduate entrance examination. Mathematics competition topics are more flexible and can stimulate students' divergent thinking. Students who have participated in mathematics competitions later participate in the postgraduate entrance examination, and it is easier to deal with the mathematics questions for the postgraduate entrance examination. Mathematics competitions are of great help to students of private colleges in the later postgraduate entrance examinations. Engineering students have a larger proportion of mathematics for postgraduate entrance examinations. Through mathematics competitions, students' learning depth in mathematics has been improved, laying the foundation for the initial postgraduate entrance examinations. And having a mathematics contest award certificate can add points to the re-examination of the postgraduate entrance examination. Therefore, the promotion of mathematics competitions by private colleges and universities will help increase the success rate of students' postgraduate entrance examinations.

## 4.4. LEAD THE FORMATION OF STUDENTS' SCIENTIFIC SPIRIT, INHERIT AND SPREAD MATHEMATICS CULTURE

College students are an important force for the country's future development and an important foundation for our country's strategy of making a strong country through science and technology. Mathematics competitions play an important role in the cultivation of the scientific spirit of college students and the spread of mathematical knowledge. Mathematics competition is an important form of integrating practical education inside and outside the classroom. It is also an effective carrier for cultivating the scientific spirit of college students. Through the mathematics competition, the students' abstract thinking, logical thinking and creative thinking abilities have been significantly improved. Because students are interested in mathematics, they will study mathematics extracurricular readings. These books will introduce the discovery of mathematics, the relationship between mathematics and nature or other subjects in simple and simple terms, which can increase students' knowledge and optimize the structure of mathematics knowledge. It can also inherit and spread mathematics culture.

## V. PRACTICAL EFFECTS OF MATHEMATICS COMPETITIONS

In recent years, the college's mathematics competitions have achieved remarkable results in promoting the construction of courses and improving students' mathematics ability. The number of participating students has increased year by year, from 26 to the current 104; the award rate of the competition has greatly increased. It has increased from the original 36% award rate to the current 53% award rate. The mathematics competition has stimulated enthusiasm of students to learn mathematics, and a special mathematics exchange group has been formed with nearly two thousand people. In the course of advanced mathematics classes, students often rush to occupy seats in advance. The flexibility and skill of mathematics competitions allow students to use their imagination and creativity, arouse their interest in learning, and get a great sense of satisfaction in winning awards during the competition. At the same time, they can also influence and drive other students' mathematics interest, thereby forming an excellent style of study in mathematics, which is conducive to the development and expansion of mathematics competitions.

#### VI. CONCLUSION

The subject of mathematics competition can not only stimulate students' interest in learning, but also exercise students' ability to observe, concentrate, analyze and solve problems. At the same time, it creates a good learning atmosphere. Private colleges are very suitable for promoting mathematics competitions. This is a way for students from private colleges who have

failed the college entrance examination to show themselves, which is very conducive to future personal development. The mathematics competition teaches students to find ideas for solving problems through extensive thinking, detailed analysis and multi-angle exploration, cultivate rational scientific spirit and innovative quality. It improves students' research ability, and allows students to continuously contact and integrates with mathematics culture in a subtle way.

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#### REFERENCES

- [1]Jin Yuzi, Yu Meng. Personalized development of mathematics ability of college students and preliminary exploration of the value of mathematics competition[J]. Public Standardization, 2019(16): 192-193.
- [2] Liu Yan, Yan Huizhen. Teaching research and practice based on mathematics competition [J]. Education Modernization, 2018, 5(32):261-262.
- [3] Wang Liangcheng, Yuan Nanqiao, Ma Xiufen. Research and Practice on Promoting Curriculum Reform of Mathematics and Applied Mathematics by Subject Competition[J]. Journal of Sichuan University of Arts and Science, 2015, 25(02): 62-65.

- [4] Yang Ran, Zhou Shengwu. Using mathematical modeling competition as a starting point to cultivate students' practical innovation ability[J]. Experimental Technology and Management, 2021, 38(03): 188-191. [5]Fu Yiping. On the significance and role of mathematics competitions in the reform of higher mathematics teaching [J]. Contemporary Educational Practice and Teaching Research, 2020(08): 61-62.
- [6]Fu Yiping. Analysis of the effect of mathematics competition on students' mathematical thinking ability[J]. Journal of Hubei Open Vocational College, 2020, 33(05): 119-120.
- [7] Zhang Peijun, Wang Zhen, Li Yongxin, Hui Xiaojian, Wang Pingan. Exploration of competition-oriented mathematical modeling teaching reform[J]. Education Teaching Forum, 2019(36): 120-121.
- [8]Wu Yudong, Zhou Qingxin, Gao Chuntao, Zhang Jingxin, Miao Xiufeng. Research on college mathematics teaching reform and innovative talent cultivation based on mathematics competition[J]. Curriculum Education Research, 2020(14):234.
- [9]Sun Yuhu. Exploration and practice of colleges and universities participating in higher mathematics competitions based on the training of applied talents[J]. Contemporary Educational Practice and Teaching Research, 2020(02):209-210.
- [10]Liang Jingjing. The opening and thinking of the training courses of the National College Student Mathematics Competition--Take Guangdong University of Technology as an example[J]. Journal of Ezhou University, 2019, 26(03): 93-95.
- [11]Sun Lu, Xie Mingfeng, Zhu Minghai, Jin Xue, Yang Zhenpeng. Mathematical modeling competition training model based on the cultivation of innovative talents[J].

# Thoughts of Probability Theory and Mathematical Statistics Course Ideology and Politics

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Abstract: This paper combines the curriculum characteristics of probability theory and mathematical statistics. From the teachers' awareness and ability of ideological and political construction, it discusses and excavates ideological and political elements in probability theory and mathematical statistics, ideological and political education of case teaching methods in probability theory and mathematical The teaching statistics. evaluation, mid-term symposium, and the integration of education measures in the course of homework correction were explored in order to promote the all-round development of students and implement the goal of ideological, political and moral cultivation of the curriculum.

Keywords: Probability Theory and Mathematical Statistics; Consciousness of Ideological and Political Construction; Ideological and Political Elements

## 1. TEACHERS SHOULD ENHANCE THEIR AWARENESS AND ABILITY OF CURRICULUM IDEOLOGICAL AND POLITICAL CONSTRUCTION

The "Guiding Outline for the Ideological and Political Construction of Curriculum in Higher Education Institutions" mentions who to train, how to train, and for whom are the fundamental issues of education. It is necessary to guide students to establish a correct outlook on the world, life values and life through knowledge transfer and ability training. At the same time, it is mentioned that teachers should improve their awareness and ability to carry out curriculum ideological and political construction, and implement the fundamental task of educating people.

Curriculum ideological and political education is a systematic project. The core, most critical and most difficult part is the ideological and political education of "professional courses"[1]. There are also many people who have conducted research and discussion on the ideological and political aspects of professional courses[2-9].

Probability Theory and Mathematical Statistics is a mathematics subject that studies the statistical regularity of random phenomena, and is an important basic theoretical course required for engineering majors in undergraduate colleges. Through the teaching of this course, students will master the basic concepts, basic principles and basic methods of probability theory and mathematical statistics, cultivate students' mathematical concepts, mathematical

thinking, mathematical language, mathematical methods and mathematical qualities. Besides, it also cultivates students' problem-solving ability.

It cultivates students' ability to analyze and solve problems comprehensively using probability theory and mathematical statistics, and it can be able to verify and explain some probability and statistics problems. It can cultivate students' ability to analyze and solve practical problems using probability and statistics methods, and lay a good mathematical foundation for students' follow-up professional courses.

In the ideological and political teaching practice of probability theory and mathematical statistics, through theoretical study and case analysis, students are cultivated in the scientific spirit of seeking truth from facts, having the courage to explore, and pursuing truth. Besides, it can help students establish values and sense of responsibility for serving the society.

Teachers are the organizers and guides of the classroom, and their words and deeds will have a significant impact on students. Therefore, if teachers want to enhance the ideological and political charm of probability theory and mathematical statistics courses during the teaching. If it can achieve the effect of morality and cultivation, teachers themselves must have excellent skills, must keep pace with the times, actively learn and understand the party's advanced thinking, relevant education policies and policies, and a correct understanding of the core values of socialism. Besides, it should pay attention to current affairs hotspots, understand the frontiers of disciplines, actively participate in teaching reforms and discipline construction reports. Teachers should also be good at observing the ideological and political elements around them in their daily work and life. For example, when observing other teachers in class, teachers can pay attention to how the teacher combines the teaching content and introduces ideological and political elements. Combining with the characteristics of the classes and subjects, teachers should conduct appropriate moral education and observe the results obtained.

Teachers have good ethics and style, and positive and optimistic personality charm has a positive impact on students. They must be a good example of morality. Every student has his own shining point, which requires teachers to explore and experience carefully.

2. GROUP DISCUSSION TO ERPLORE THE IDEOLOGICAL AND POLITICAL ELEMENTS IN

#### PROBABILITY THEORY AND MATHEMATICAL **STATISTICS**

Group discussions are necessary before the formal class begins. Through team discussions, it can have an overall grasp of the probability theory and mathematical statistics textbooks, and it can make breakthroughs more effectively on the important and difficult points of knowledge. In order to better achieve the effect of teaching and educating people, everyone has brainstormed and worked hard to explore the ideological and political elements in probability theory and mathematical statistics. For example, in the first class of probability theory and mathematical statistics, teachers can introduce the life and achievements of Chinese mathematician and statistician Mr. Xu Baoquan, so that students can feel that mathematicians are serious, rigorous and hard-working in scientific research during the hard years. The spirit of dedication to the country makes students understand that our happy life today is hard-won, and we must always be grateful and patriotic. Since Mr. Xu Baoquan was influenced by his cousin in middle school, he was very interested in mathematics. After entering the university, he decided to transfer to mathematics. It also allows students to understand that the people they make can sometimes have a lot of influence on them, so they should be good at making friends who are positive and love learning.

Due to the characteristics of the course of probability theory and mathematical statistics, many knowledge points are taught through specific cases. It is also necessary for teachers to discuss the choice of cases collectively. It is suitable to combine students' professional characteristics, choose what kind of case. It can not only achieve the goal of knowledge and ability, but also can incorporate appropriate ideological and political elements. Achieving the effect of education requires everyone to discuss together.

#### 3. IDEOLOGICAL AND POLITICAL EDUCATION OF CASE TEACHING METHOD IN PROBABILITY THEORY AND MATHEMATICAL STATISTICS

The traditional education model can no longer meet the requirements of comprehensive training of talents in the new era, which requires exploring new education models. Combining the course characteristics of probability theory and mathematical statistics, teachers can increase students' interest in learning through casebased teaching methods, allowing students to actively participate in the course, combining lectures and exercises. It can quickly and effectively absorb the knowledge points to be mastered, and at the same time it can get emotional experience.

3.1 CULTIVATE STUDENTS' **PERSEVERANCE EXPERIENCE PROCESS** AND THE OF **QUANTITATIVE CHANGE LEADING** TO QUALITATIVE CHANGE

When learning the content of frequency and probability, take the history of someone tossing an even coin and observing the positive situation as an example[10], as shown in Table 1.

Table 1. someone tossing an even coin and observing the positive situation

the positive situation			
Experiment	Total	Number of	Frequenc
er	number of	positive	У
	experimen	appearanc	
	ts	es	
De Morgan	2048	1061	0.5181
Pu Feng	4040	2048	0.5069
K. Pearson	12000	6019	0.5016
K. Pearson	24000	12012	0.5005

Through the table, students can conclude that when the total number of trials is getting larger and larger, the frequency of coin heads is close to 0.5. So that the teacher guides the students to obtain the statistical definition of probability, completes the knowledge transfer, and also cultivates the ability of the students to summarize and summarize. From this experience, the process of quantitative change causing qualitative change. At the same time, teachers can guide students to think about whether they give up in the middle of doing things in their usual study and life, so that students understand that they should learn the perseverance of scientists.

3.2 CULTIVATE STUDENTS' REVERSE THINKING AND LEARN TO THINK FROM THE PERSPECTIVE OF THE OTHER PERSON

When learning the nature of probabilistic opposing events, there is an exercise. There are 8 black balls and 10 white balls of the same size, shape, and weight in the bag. Students should find out if there is the probability at least one black ball among the 4 balls. Some students will solve it directly and get a longer formula:

$$\frac{C_8^1 C_{10}^3}{C_{18}^4} + \frac{C_8^2 C_{10}^2}{C_{18}^4} + \frac{C_8^3 C_{10}^1}{C_{18}^4} + \frac{C_8^4 C_{10}^0}{C_{18}^4} = \frac{95}{102}$$
Some students will solve the problem in reverse and get

a short formula:

$$1 - \frac{C_{10}^4}{C_{18}^4} = \frac{95}{102}$$

Through comparison, students will find that the directly and positively solved formulas are more lengthy. For liberal arts students, they are also prone to errors in calculations. Using the nature of probabilistic opposition events, it is much easier to solve the negative side, which cultivates students' reverse thinking. At this time, the teacher can guide the students to think, if there are more balls in the bag, the positive solution will be more complicated. So sometimes you can think about things from a different perspective. For example, for four years in university, there will inevitably be some friction between classmates or dormitory members. When friction occurs, everyone feels that they are most reasonable. If at this time, both parties are stubbornly insistent. If you have your own ideas, then the contradiction will be difficult to resolve, and it may even worsen. But if the two sides can change their angles and try to think about the problem from the other side's perspective, they may also be able to understand the cause of the contradiction, and they can find an appropriate way to solve the

3.3 CULTIVATE STUDENTS' DOWN-TO-EARTH, TRUTH-SEEKING AND **PRAGMATIC CHARACTER** 

There is an example in the study of the biathlon type: the lottery is opened once a week, and the winning rate is one in 100, 000. Someone bought it 520 times in ten years, and asked about the probability of never winning the lottery. Through analysis, it can be known that the topic is in line with the Bernoulli test, and the probability of this person not winning the prize is calculated:

$$P = C_{520}^0 (10^{-5})^0 (1 - 10^{-5})^{520} \approx 0.9948$$

Through this sample, students can understand that the probability of failing to win a prize in the past ten years is so high. In this way, the teacher guides students to do things down-to-earth, seeks the truth and be pragmatic. At any time, they should do not worry about doing anything, and they must go step by step to improve yourself.

Through the learning of small probability events, students can understand that an event that it is almost impossible to occur in an experiment, as long as the number of trials is sufficient, it will almost certainly happen later. "If you don't accumulate silicon steps, you can't reach thousands of miles; if you don't accumulate small streams, you can't make rivers and oceans." "How can there be no wet shoes" and "water droplets through stone" illustrate the importance of small probability events. In the usual study and life, one effort may not be able to succeed, but just to find the right method and stick to it. The results will be achieved in a long time. Of course, don't be arrogant and complacent when you get good results. There are ups and downs in your life. Don't be disappointed. Adjust your mentality and start again. At the same time, students are reminded to pay attention to the formation of good habits, not to ignore the effects of bad habits, and not to touch the law with luck. The legal red line must not be touched. Otherwise it will be severely punished. Students can also be guided to understand that this epidemic cannot be overcome with the power of one person alone. Only if the whole country is united and everyone contributes, can we overcome the new crown epidemic. Let the students applaud their contributions, which not only affirmed the students' efforts, but also stimulated their patriotic enthusiasm. 3.4 CULTIVATE STUDENTS' TEAMWORK AND

#### THE CHARACTER OF WORKING TOGETHER IN **HARMONY**

When learning Poisson's theorem, there is an example: there are 80 devices of the same type, each of which works independently of each other, the probability of failure is 0.01, and the failure of one device can be handled by one person. Consider two methods of arranging maintenance workers. The first method is to maintain 4 people, each responsible for 20 units, and the second method is to maintain 80 units by 3 people. Try to compare the probability that these two methods cannot be repaired in time when the equipment fails. Through analysis, it can be known that the topic design conforms to Bernoulli test.

In the first method, the probability that the equipment cannot be repaired in time when the equipment fails is calculated as follows:

 $P_1 = 1 - C_{20}^0 (0.01)^0 (1 - 0.01)^{20} - C_{20}^1 (0.01)^1 (1 - 0.01)^{19} \approx 0.0175$ In the second method, the probability that the equipment cannot be repaired in time when the equipment fails is calculated as follows:

$$P_2 = 1 - C_{80}^0 (0.01)^0 (1 - 0.01)^{80} - C_{80}^1 (0.01)^1 (1 - 0.01)^{79} - C_{80}^2 (0.01)^2 (1 - 0.01)^{78} - C_{80}^3 (0.01)^3 (1 - 0.01)^{77}$$

It is known that although the second method is more important, the work efficiency is improved. Therefore, no matter how strong a person is, his strength is limited, and the power of teamwork should be emphasized in his work. Including in the usual class activities, the strength of the class committee is limited. Every student needs to participate and actively cooperate to complete the task quickly and with high quality. It also allows everyone to feel the cohesion of the team and create a warm and harmonious atmosphere. .

3.5 INTEGRATE EDUCATION MEASURES FROM TEACHING EVALUATION, **MID-TERM** SEMINARS, AND HOMEWORK CORRECTIONS Teaching evaluation and mid-term seminars for each semester of probability theory and mathematical statistics courses are two beneficial ways for teachers' teaching and students' learning to feed back each other. Through student's online teaching evaluation and offline seminars, teachers can reflect on the teaching process. Some problems that appear in the system should be corrected and improved in time. It is also possible to understand some of the students' abilities and emotional needs, which is conducive to moral education in offline teaching.

The correction of homework can reflect the students' mastery of the knowledge points in the teaching. Especially for students with relatively weak mathematical foundations, they have a natural sense of fear or distance towards mathematics, and lack the enthusiasm for learning mathematics and the confidence to learn mathematics well. At this time, teachers need more encouragement and concern. Taking advantage of the opportunity of correcting homework, they can find relevant students for knowledge guidance and provide learning methods and suggestions suitable for students. And tell the students that difficulties are not terrible, we need the courage and confidence to overcome them.

#### 4. CONCLUSION

The ideological and political elements in the courses of probability theory and mathematical statistics need to be actively explored by teachers of each subject, which requires teachers to think more in teaching design. Appropriately add moral education while imparting knowledge. Effective education can not only stimulate students' enthusiasm for learning, improve teaching quality, but also enable students to feel the beauty of mathematics and learn to think about problems with mathematical thinking, which is conducive to cultivating students to be positive and optimistic. It is also the way to establish a correct outlook on the world, life, and values, and promote the all-round development of students.

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#### REFERENCES

- [1] Lu Daokun. Several core issues and solutions in the implementation of curriculum ideological and political education--based on the discussion of professional curriculum ideological and political. Ideological and Theoretical Education, 2018, 00(3):64-69.
- [2] Ding Liming, Zhao Dong. Thoughts on the ideological and political concepts of the teaching practice of probability theory and mathematical statistics. Journal of Nantong Vocational College, 2020, 34(1): 42-45.
- [3] Chen Xiaokun, Song Chaohong. Practice and Thoughts on the Ideological and Political Teaching Reform of University Mathematics Course Based on the Concept of "Sanquan" Education--Taking the Course of "Probability Theory and Mathematical Statistics" as an Example. Journal of Hubei University of Economics (Humanities and Social Sciences) Edition), 2020, 17(9):148-150.

- [4] Wang Sailan. Exploration of Teaching Optimization of the Course "Probability Theory and Mathematical Statistics" in Colleges and Universities. Computer Knowledge and Technology, 2020, 16(32):163-164.
- [5] Wu Hongyan, Wu Meihua. Exploration of the Road to Practice "Curriculum Ideology and Politics" in Science and Engineering Courses--Taking Probability Theory and Mathematical Statistics as Examples . Education Modernization, 2019, 6(66):105-107.
- [6] Yuan Qianqian, Lu Zhenguo. Research on the integration of the concept of "curriculum ideological and political" into the teaching of higher mathematics. Chi Zi, 2020, 00(2):104-106.
- [7] Kong Fanliang, Xing Ximin, Zhang Long, etc. Teaching research and practice of integrating ideological and political elements into advanced mathematics courses. Science and Technology Vision, 2020, 00(10): 22-24.
- [8] Liu Fanghong, Cao Xiujuan, Wang Yanying. "Research on Ideological and Political Education in the Course of "Linear Algebra". Public Relations World, 2020, 487(20):154-155.
- [9] Hou Liying, Min Jianzhong, Zhou Yanli. Approaches and mechanism construction for the reform of ideological and political teaching of college mathematics. Health Vocational Education, 2020, 38(3):17-18.
- [10] Deng Guangming, He Baozhu, Liu Xiaoping, Jia Zhen. Probability Theory and Mathematical Statistics (First Edition) . Shanghai Jiaotong University Press, 2020.

## The Role of Psychological Factors in Singing

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Abstract: The generation of human's various external behaviors and activities is controlled and regulated by the internal psychology. In order to understand the rules of psychological activities more deeply, psychology has come into being. The development of psychology makes human understand the formation and rules of white body psychological activities. In the field of psychology, all human behavior and activities are subject to psychological activities. As the externalization of the singer's psychological activities, singing should also follow the rules and effects of various factors in singing psychology.

Key words: psychological factors; singing; role

#### 1 DEFINITION OF SINGING PSYCHOLOGY

The occurrence and development of singing behavior is always under the guidance and control of the singer's internal psychology. Singers themselves if they do not know and understand the laws of vocal music psychology, only by feeling and imagination to sing, mechanical control of their own physiological functions, will consume a lot of time to ask about energy, sometimes can not sing physiological movement and singing psychological combination, even singing physiological problems and psychological problems. Therefore, the singer cognizance singing psychological factors of the role and the law of movement, take the initiative to follow it, with singing psychology to dominate the body physiological function of movement, while constantly deepening the memory of psychological elements and physiological function of the body, in order to create a touching beautiful music.

Singing psychology is one of the branches of vocal music psychology, mainly refers to the singer in the study and singing in the singing of various psychological activities and the singer's individual psychological characteristics. The psychological activities involved in singing are mainly composed of singing perception, thinking, attention, memory, imagination, emotion and other factors. And the singer's personality psychological characteristics mainly refers to the singer's temperament, character, will, motivation and need. To understand and follow the singer's own psychological characteristics and laws can make the singer's psychology and body physiology coordinated and unified, to avoid singing into mistakes or regress.

The singing psychology is the same as the singing physiology, which produces internal or external behavior under the leadership and command of the nervous system. The structure and state of each physiological system in the singer's voice are all in the singer's internal body, so they cannot sing directly, but

can only rely on the singer's heart to play indirectly. Therefore, the operation of each physiological system of singing is inseparable from the domination of singing psychology. In addition, singing art, as one of the ways of human internal emotion expression, mainly uses singing to infect the audience, so that their hearts and the inner feelings expressed by the singer are consistent, the audience will support and love the singer's artistic behavior. Singing activities are the organic combination of the singer's psychology and physiology. Under the participation of various factors in the singer's heart, a good song can be produced.

Thus, singer right dominate the singers singing psychology behavior, grasp the role of singing psychology, cultivate correct singing psychology in vocal music teaching application, with the right physiological produce correct singers sang lead singing psychology behavior, avoid blindly vocal music study and the low efficiency of vocal music training.

## 2 THE APPLICATION OF VARIOUS FACTORS OF SINGING PSYCHOLOGY

As the product of human spiritual civilization, singing art is the result of human inner psychological activity. In the teaching of singing, vocal music teachers teach according to the theory and experience of white body vocal music, and regulate the psychology of themselves and the students in class, guide the students' internal psychology to be in a positive state of movement, so that they can help the students to adjust the physiological sound of the body; In the vocal music singing, the singer according to the needs of the work to sing, constantly adjust and transform the inner activities, so that the style of the work, color and emotion, which can not be separated from the participation of the singer's psychological factors. The singing art activity is under the control of the singer's psychological factors, guiding the body singing physiology to carry out the effective movement sound.

#### 2.1 Perception of singing

Human perception ability, is the initial understanding of the external things, belongs to the perceptual cognitive stage. Only through perception can people be connected with other psychological activities, and have certain opinions, information and feelings about things, so as to recognize the essence of things again. And people's practical activities are the test standard of cognition of the essence of things. Marx's classical theory tells us: "Practice is the only criterion for testing truth." Perception, as the basis of practice, is also one of the standards to test the correctness and accuracy of practice.

Singing is the organic combination of the singer's feeling and perception, as well as the unity of the singer's subjective and objective. Thus, it is called the

sense and perception of singing, which is always accompanied by the behavior of singing. The singing behavior is perfected in the continuous development of practice and cognition. Perception, as the beginning of people's cognition of the outside world, is also the beginning of all psychological activities. Singing as a complex physical and psychological combined movement, the singer's cognition of its behavior is also from the beginning of perception.

In vocal music singing training, singer accept external stimulation, the resulting all sorts of feeling and perception, and feedback through hearing and the body feel singing voices, and made the corresponding adjustment, after repeated recognition, comparison, experience and memory, and gradually form the singing method of system science and the correct concept of singing. In vocal music, the application of singing sensation and perception is mainly reflected in the following aspects:

## 2.1.1 Singing is the combination of the body's physiological feeling and internal psychological perception

The perception of singing is the singer's cognition of the overall movement of singing. This cognitive process will form the sound of singing, the state of movement and the image of singing in the mind. The brain gives instructions through the receptors of various organs to control the physiological coordination of movement of the body. Because the physiology of the singing body is complex and changeable, it requires the singer to deepen the cognitive ability of singing, and coordinate the movement and sound of the body's various receptors. To improve the perceptual ability of singing, on the one hand, we can learn more about the basic knowledge of vocal music, such as the physiological structure of singing body, the movement rules of various psychological factors and the psychology of singing performance.

## 2.1.2 The regulation of the singing auditory system on the singer's perception

The singer's hearing is the specific performance of the singing perception ability, especially the acuity and accuracy of the singer's hearing, is an important perception factor in the process of learning and practice. Singers in vocal music through the rational participation of the heart, the formation of inner hearing, it affects and changes the singer's overall perception of singing, the singer's overall perception of singing is regulated by the auditory system. Before singing, the singer will have an internal image of the correct singing sound. Therefore, the singing physiological body and various nervous systems are combined with the singer's overall perception, and the singing behavior is tested whether it is correct through the feedback of the auditory system.

## 2.1.3 Vocal music art practice is the only standard to test whether singing perception is correct

The singer's cognition of singing starts from perception, and the development and change of perception make the singer's cognition of vocal music continuously enhanced. The ultimate goal of singing learning is practice, using the voice of the singer to convey the content of the work to the outside world. The perception of singing is constantly developing and changing in the course of practice. For a piece of work, there is an essential difference between the singer singing several or dozens of times and singing hundreds or even thousands of times. For example, people often say that "it takes one minute on stage, ten years of effort off stage", which reflects the relationship between the singer's perception accumulation and practice. The practice of singing is the reproduction of singing perception ability, which shows the importance of practice in singing performance.

In a word, the perception of singing is the foundation of vocal music learning, which is closely linked with the high-level cognitive process of thinking, memory, attention and emotion in singing, and jointly constitutes the cognitive process of singing. Singing art is a combination of various cognitive processes and body physiology, and the singer's perception runs through the singer's entire artistic career. For example, the song "I love you, China", no matter it is sung by female or male voice, no matter it is performed in the form of solo, chorus or ensemble, its basic melody, rhythm and style color are basically unchanged, which shows that our basic perception of it will not change. Through the performance of different singers and different time, place and the number of external factors such as the audience, the singer will adjust their singing behavior due to the change of external perception, so as to deduce different vocal music artistic image. Therefore, the perception of singing is the foundation of vocal music teaching and practice. Grasp the law of perception and cognition of singing is helpful to the application and promotion of singing level and other singing psychological ability of singers.

#### 2.2 The thinking of singing

Thinking is the means by which human beings understand the outside world, and it is the general and indirect reflection of human brains to objective things. It reflects the essence and internal laws of things. The general thinking process of human beings is expressed by means of the language system. And the thinking of singing is mainly attached to the basic attribute of the work - lyrics. Lyrics are the lyrics according to the melody, rhythm and style characteristics of the song, combined with their own inner thinking, and create smooth words and sentences, thus constitute a perfect work. Singers process and integrate their own mental thinking in their minds and express the essential attributes of the works through sound when they are singing. Therefore, the thinking of singing is the summary, integration and comparison of the singing process, reflected indirectly by the song, and then by the singer's auditory system feedback, identification and adjustment, so that the singer's thinking and the work expressed the emotion consistent.

The thinking of singing, which is based on the general thinking of the singer, is a special thinking formed by the specific generalization of the known singing cognition of the singer, and reflects the essential characteristics and development rules of the singing ability of the singer. In the learning and teaching of singing, singers master the attributes of thinking ability closely related to singing, such as positive thinking and creative thinking of singing, which are conducive to the stimulation of vocal music art activities and the improvement of other psychological abilities (such as perception, imagination and memory). Singing, singing the positive thinking to understand the singing of vocal music teachers' demands and to master the skills of singing. The creative thinking of singing "refers to the singer's creative thinking, that is, thinking can not only reveal the essence and inner connection of objective things, but also produce novel and unprecedented thinking results on this basis. It is the superior product of the singer's mind. The creative thinking of singing is the product of the combination of the imagination, association, feeling and other psychological activities of the singer on the basis of the accumulation of the theoretical knowledge and experience of the singer's vocal music, the training of the skills and the asiduous study. Research proves that the whole process of a creative activity is completed by multiple cycles from dispersed thinking to concentrated thinking, and then from concentrated thinking to dispersed thinking. It can be seen that the creative thinking of singing is a complex process, which requires the singer to summarize, reason, judge and integrate the process of singing behavior, establish the creative thinking ability from the general thinking, make the singing thinking ability change qualitatively, and assist other psychological activities to complete the "second creation" of the work.

#### 2.3 Pay attention to singing

Attention is an important factor in human cognitive activities and a result of people's choice of objective things. When people are doing something, such as study, work or entertainment, they will focus their attention on it. Through the participation of their own perception, thinking, memory, imagination and other psychological activities, their attention will have a

certain directivity, persistence, stability and concentration.

Singing as a kind of people's artistic activities, in the vocal singing of the singer to eliminate all the interference from the outside world, concentrated in the singing performance. As the Italian singer Luciano Pavarotti said, "Concentration is the most important. It drives everything out of your mind that has nothing to do with the performance. This is essential not only for stage performance, but also for learning to control yourself. Often, for long stretches of time, I forget that the audience exists." Concentration in singing is one of the attributes of attention, which enables the singer to concentrate highly on the act of singing. The attention of singing is the direction and concentration of the singing behavior by the singer's psychological activities, which has the characteristics of directivity, concentration, stability and persistence. These characteristics merge with each other and are linked with other psychological activities of singing.

#### **3 CONCLUSION**

In a word, the thinking of singing, as a singer's advanced cognitive process, is accompanied by all the behaviors and activities of singing, which is the response of the singer's internal psychological activities to external objective things. Through the combination of image thinking and abstract thinking, the characteristics, methods, styles and rules of singing can be reflected through singing thinking.

#### REFERENCES

- [1] Dong Yonggang. Several key issues of vocal music training [J]. Film Review, 2009 (02).
- [2] Hong Yan. On Stage Body Performance of Vocal Music Art [J]. Sound of Yellow River, 2008(12).
- [3] Wang Lue. On Aesthetic Thinking in Vocal Music Performance [J]. Music Research, 2006(03).
- [4] Fang Changyong. My View on Opera Stage Performing Art [J]. Music Life, 2006(04).
- [5] Li Chunyan. *Body performance in singing* [J]. Journal of Gansu Normal University, 2004(09).

## Research on the Application of Motion Capture Technology in Dance Posture Analysis and Teaching

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Abstract: This article briefly introduces the related content of motion capture technology, analyzes dance gesture motion capture technology, and discusses the effective application of motion capture technology in dance gesture teaching, in order to strengthen the research on motion capture technology and give full play to modern science and technology. The role of the traditional dance posture teaching mode, improve the level of dance teaching, master the actual learning situation of students, stimulate students' interest in learning, make it from passive learning state to active practice, so as to provide a reliable reference for dance teaching. Promote the sustainable development of dance teaching.

**Keywords:** motion capture technology; dance posture; teaching; effective application

## 1. RELATED CONTENT OF MOTION CAPTURE TECHNOLOGY

In recent years, with the vigorous development of my country's big data technology, human body motion simulation technology under the background of 5G has become increasingly mature and develops rapidly. It can obtain human body motion information through high-speed data transmission, and effectively track and monitor human body motion data. This has become an important research direction in the development of computer technology and must be highly valued and cannot be ignored. For now, my country's research on motion capture technology is still in its infancy. The research direction is in two aspects: one is the analysis of three-dimensional poses, and the other is the simulation of three-dimensional poses. In the process of dance posture teaching, the role of motion capture technology can be fully utilized. This technology can be used to effectively analyze dance posture, change the traditional teaching mode, and continuously improve the level of dance posture teaching, so as to maximize the benefit of dance teaching.

In 1915, the "Rotoscope" technology proposed by Polish-American Fischer was the original motion capture technology. With the continuous innovation of science and technology, the motion capture technology was also optimized. In the late 1970s, it was based on instruments. The motion capture technology is widely used in animation creation. The classic equipment of the motion capture system mainly includes the following types: One is the sensor. It is a key device in the motion capture system, which is mainly used to

track moving targets. The number of sensors needs to be selected according to the actual situation of the captured object; the second is the signal capture device. It mainly captures the position signal supplied by the sensor, and different motion capture systems have no difference in the application of signal capture equipment; the third is data transmission equipment. Its function is to transmit all the captured motion data to the computer system, and then conduct scientific analysis on it; the fourth is data processing equipment. Its function is to match the collected motion data with the three-dimensional model [1].

## 2. DANCE POSTURE MOTION CAPTURE TECHNOLOGY

(1) Universal motion capture system

According to the literature survey, there are mainly the following five types of motion capture systems currently used in the world: The first is a mechanical motion capture system. The advantage is that the cost is not high and the restriction is less, but the disadvantage is that the range of action is relatively limited, the operation is more complicated, and the data processing is not simple enough; the second is the optical motion capture system. It uses a high-precision camera to collect data on the joints. Its advantage is that the movement limit is relatively small, the cost is low, and it has good accuracy. The disadvantage is that the later data processing volume is relatively large and the signal requirements are relatively high; The three are electromagnetic motion capture systems, which mainly use electromagnetic transmitting equipment and receiving equipment to operate [2]. The advantage is that the cost is low, the response speed is relatively fast, and the disadvantage is that it is affected by environmental factors; the fourth is the video motion capture system. It requires the use of cameras and image processing devices. The advantage is that the requirements for the environment are low, and the disadvantage is that it is more difficult to implement the image algorithm in actual applications; the fifth is the acoustic motion capture system. The main equipment is an acoustic emission source and a receiving and processing device. The advantage is that the price is not high, the ability to adapt to the environment is strong, and the disadvantage is that it is easy to be interfered and the accuracy is not high.

This article mainly discusses the optical motion capture system. The first optical capture instrument in my country is DIMS9100. The main hardware devices in

the system are: one is a high-speed 3D data dynamic capture system; the other is an infrared sensor; the third is a DIMS controller; and the fourth is an optical marking point. The application of this technology in dance posture teaching is mainly to extract the skeleton movement route of the human body by capturing the movement data in the dance posture, and then analyze the data through vector matching to realize quantitative teaching. The operating route is as follows: first, a lot of dance gestures are taken, and then the action data is captured, the identification points are linked, and the skeleton model of the character is built through automatic tracking, the 3D data is saved, the 3D data is edited, the TRC file is output, and the binding is performed. Data and models [3].

(2) Specific application of optical motion capture system

In dancing posture teaching, when using an optical motion capture system, you should pay attention to the following points: First, it is necessary to collect dance movements in real time. It is necessary to install 21 data marking points on each part of the dance performer's body, and then stand within the space that has been set, and use the high-speed three-digit data motion capture system to guide the completion of the preset basic actions, and Data capture of these actions, matching the corresponding models, and importing the data collected from the 21 identification points into the system to complete the collection of individual action data; second, establish a database of dance pose models. After completing the model matching and inputting the posture data, you should make full use of the system software to analyze the characteristics of human movement from different observation angles, track the changes of human movements in real time, find the connection between the key points in the movement change process, and stabilize the dance Posture; Third, do a good job in matching the feature vector of dance posture. It means to quantify and compare the dance postures of performers based on the principle of feature vector matching, do a good job of analysis, and implement the following steps to find the differences in dance postures: First, store the collected dance data and use the three-dimensional The motion capture system is used to extract the skeleton data in the 21 joint identifications; secondly, the feature plane vector matching calculation method is fully utilized to carry out the scientific motion posture analysis work, which is simplified into seven motion planes, and the key motion parameters are found; and finally, It is necessary to carry out a differential analysis of the dance posture, compare the action posture of the performers and the model posture, to find the difference between the two, and continuously improve its accuracy [4].

## 3. THE EFFECTIVE APPLICATION OF MOTION CAPTURE TECHNOLOGY IN DANCE POSTURE TEACHING

(1) The necessity of applying motion capture technology in dance posture teaching

It is very necessary to apply motion capture technology in dance posture teaching. It is mainly reflected in the following aspects: First, it is conducive to transforming the traditional dance posture teaching mode and concretizing abstract theories. Dance is a relatively complex art form. It is not easy to learn. It not only requires years of study and training, but also requires scientific analysis of every movement. It is far from enough to rely on the teacher's "oral teaching", and the learning efficiency is also difficult to obtain. Promote. In this case, dance teaching through motion capture technology can break down dance movements into small segments and make them into animations, so that students can study carefully one by one, so as to grasp the whole dance and realize three-dimensional teaching. [5]. This method can help students understand and master the important and difficult parts of each dance, visualize abstract theories, and visually show them to students, with good innovation.

Second, it conforms to the development trend of the times. At this stage, the level of computer information technology is constantly improving, it is widely used in the field of education, teaching hardware equipment is gradually improved, and the auxiliary education model is vigorously developed. Compared with the traditional teaching mode, the teaching effect of the computerassisted teaching mode is much better, and the teaching content is also richer, which can improve the utilization rate of teaching resources and make up for the shortcomings of conventional teaching methods. It can break through the dull atmosphere of classroom teaching, create a good teaching environment for students, present teaching content to students vividly and vividly, deepen students' memory, and thus ensure the quality of teaching. In this situation, it is imperative to introduce motion capture technology in dance teaching, which can give full play to the role of human body motion simulation technology and virtual technology, and improve the efficiency of dance posture teaching.

The third is to reduce the difficulty of learning the dance posture of students. Dancing posture learning has a certain degree of difficulty, and it is affected by many factors, such as the differences of students' abilities and the psychological quality of students. After the application of motion capture technology for auxiliary teaching, dance movements can be tracked in real time, and three-dimensional motion data can be used to convert them into animation videos for detailed analysis. This greatly simplifies the difficulty of learning for students and breaks through the traditional dance posture teaching. Restrictions can achieve good teaching results.

(2) Digital dance teaching method based on optical capture system

When performing dance teaching, we should make full use of motion capture technology to assist teaching, which can improve the intelligence level of teaching, innovate teaching methods, improve the quality of dance teaching, and help speed up the progress of dance

teaching. Motion capture technology can record dance movement data, analyze and replay it. Teachers can explain and demonstrate to students repeatedly, without having to demonstrate in person again and again, which helps students thoroughly understand and master every movement. When carrying out digital dance teaching based on the optical capture system, the following two points should be achieved: First, it is necessary to combine motion capture technology with traditional dance teaching. Traditional dance teaching mainly involves teachers explaining theoretical knowledge to students, then demonstrating dance movements for students, composing the essentials of the movements, telling the students while demonstrating them, allowing the students to master the essentials of the movements in the classroom. Due to the difficulty of the dance movement, its speed and content, it is difficult for students to remember in a short time. The teacher cannot guarantee that the details of every movement will be presented to the students in a standardized way. The demonstration movement will be viewed by the students. The images of other factors are different, which will affect the students' movement learning. In order for the students to master the essentials of the movement, the teacher must repeatedly teach one movement, which greatly reduces the efficiency of dance teaching and easily triggers the students' boredom. Can not stimulate students' active thinking. In this case, on the basis of traditional teaching, combined with the assisted teaching of motion capture technology, students can master the actual situation according to their own movements, implement purposeful dance training, and use three-dimensional motion data to analyze the United States to make adjustments. And standardize your dance posture, which can not only improve the teaching efficiency of teachers, but also help students quickly master the dance moves [6].

The second is to give full play to the role of motion capture technology and apply it extensively in the actual teaching process. When performing conventional dance teaching content, motion capture technology can be used. First set the dancer's dance moves, divide the range of movement, and then use the 3D data to capture the movement data, build a 3D dance teaching model database, and then draw it into a 3D animation for use as a dance teaching resource. Motion capture technology can quickly obtain the

performer's three-dimensional data, combine it with the human body model, and use the computer to perform animation presentation. Students can compare the teacher's demonstration actions with the standard actions according to the motion capture system, and find the difference between them. The dance posture details are refined and adjusted. For example, when teaching aerobics, you can create a simulated character motion model based on the content of aerobics teaching, use advanced modeling software to edit the data, match the motion data, and then import it into the modeling software In, match with the existing mannequin performance to complete the creation of the character Then make aerobics movements into animations, and let students choose the corresponding movements to learn according to their own mastery. Teachers can also use motion capture technology to capture students' dance postures, find irregularities in their movements, and give corresponding guidance to make their movements more standardized.

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#### REFERENCES

- [1] Research on dance posture analysis and teaching methods based on motion capture technology [D]. Liaoning Normal University, 2016.
- [2] Cheng Jian. Research on the Application of Multimedia Technology in Dance Teaching [J]. Overseas Abstracts Academic, 2020:0077-0078.
- [3] Zhang Qiwang. Analysis of the role of multimedia technology in dance teaching [J]. Popular Literature and Art, 2016: 265.
- [4] Chen Weijiang. Practical research on motion capture technology in dance posture analysis and teaching [J]. Microcomputer Applications, 2020: 102-105.
- [5] Wang Luzhan, Han Li, Wang Yulong. Research on digital dance teaching methods based on motion capture technology [J]. China Information Technology Education, 2016: 71-74.
- [6] Rao Wenting. The role of dance movement analysis in the teaching of dance choreography[J]. Wen Cun Yue Magazine, 2018: 58.

## On the introduction of outward-bound model into College Physical Education

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Absrtact: outward bound is a new type of experiential learning mode, which realizes the organic combination of sports and entertainment, can stimulate students' potential and improve their team cooperation ability. The introduction of outward bound mode in college physical education teaching can be close to students apos; reality and deeply loved by students. Based on this, this paper expounds and analyzes the specific measures of introducing outward bound mode into college physical education.

Key words: college physical education; outward bound mode; thinking

## 1.THE SIGNIFICANCE OF INTRODUCING OUTWARD BOUND MODEL INTO PHYSICAL EDUCATION IN COLLEGES AND UNIVERSITIES

Outward bound has a long history, which has been more than 60 years. It was introduced into China in the 1990s. With the development of outward bound, the government attaches great importance to this training mode. At present, more and more enterprises and institutions introduce outward bound into it, and outward bound has become the focus of current academic research.Outward bound is an experiential learning mode, which is different from the traditional teaching mode. It enables students to learn relevant contents in a positive, cheerful and pleasant atmosphere, excavates students' potential through activities, improves their team cooperation ability and practical ability, and cultivates students' adaptability to life and environment.Outward bound is a new education mode, which is different from ordinary training and traditional physical education. It integrates traditional training, sports, tourism. entertainment and other contents. Contemporary college students, they are keen on fashion, like this kind of wonderful, challenging content, the introduction of outward bound mode into college physical education, can let students constantly challenge, beyond themselves, find solutions to problems in teamwork, improve students' ability to adapt to society and solve problems.

Outward bound is also often called experiential learning. Compared with the traditional physical education teaching mode, outward bound belongs to a new type of modern education mode. On the surface, outward bound is a combination of sports

and entertainment. In essence, outward bound relies on lively project activities. The pre planning of activities has a strong purpose, which aims to let students find problems in the process of outward boundIt can stimulate individual potential, improve team cooperation ability, and make participants' thinking more flexible.It is of great significance to introduce outward bound into physical education in Colleges and universities

1.1 Highlight the dominant position of students One of the important characteristics of outward bound course is to use experiential learning to carry out self-education. In the teaching process, it is significantly different from the traditional teaching mode. When preparing lessons, teachers need to clarify the content, purpose and precautions of outward bound, and convey them to students before teaching. After the beginning of the course, the above contents will not be repeated. At the end of the course, students are required to share the training, participate in the discussion spontaneously, and summarize their feelings in outward bound, which fully reflects the dominant position of students and plays a positive role in stimulating their potential.

1.2 Improving students' psychological quality

The goal of project planning in outward bound course is to let students show their true selves, overcome their inner uneasiness and fear by defeating themselves and opponents, adjust themselves in time, learn to fight against pressure correctly, and maintain a calm and calm attitude. Outward bound greatly exerts students & apos; psychological endurance, helps to optimize their psychological quality and help students better understand themselves, which is the sublimation of modern education concept.

1.3 Improving students' social adaptability The university stage is an important transitional stage before students enter the society. For a long time, students are in the protection of the campus and family. After entering the society, they often encounter difficulties because of their weak social adaptability. For colleges and universities, they have the responsibility and obligation to establish ties and bridges for students, and use higher education to improve their comprehensive ability, so as to lay the foundation for their subsequent entry into the societyFoundation.The outward bound course is an important link, which can help

students overcome all kinds of resistance, let them surpass themselves in the process of challenging difficulties, experience the joy of success, and accept failure. In the outward bound training, we can temper the students' will, let them know themselves objectively, and use flexible ways of experience to help them see the world dialectically.

2.ON THE INTRODUCTION OF OUTWARD

## 2.ON THE INTRODUCTION OF OUTWARD BOUND MODE INTO COLLEGE PHYSICAL EDUCATION

2.1 Grasp the teaching idea and strengthen the curriculum reform

In order to make outward bound into college physical education, we should first follow the people-oriented education concept, treat physical education based on the people-oriented idea, respect the teaching method of students, and fully tap the potential of every student.In physical education teaching, teachers should put quality education in the first place, exploit students' advantages in a scientific way, cultivate their hands-on ability and innovation ability, and students' comprehensive quality. Colleges and universities should also provide teachers with enough opportunities for professional development, so that they can keep pace with the times and establish the educational concept. With the permission of venues, teachers and other conditions, they should carry out outward bound courses step by step, gradually increase capital investment and build outward bound bases, so as to lay a foundation for the smooth development of outward bound. In the construction of Outward Bound training base, we should also attach great importance to it. Outward bound training project has strong timeliness and is also a very popular project. However, with the passage of time, students may gradually dislike it. Therefore, PE teachers should constantly observe in their daily teaching, eliminate invalid projects in time, and keep pace with the times in the selection of projects and the layout of props and venuesAll in all, in line with the characteristics of the new era, constantly changing, so that students get the most valuable experience.

2.2 Break the original teaching mode of Physical Education

Outward bound makes the physical education classroom separate from the original teaching mode and expand from some traditional projects to nature and society, which is the sublimation of traditional physical education curriculum. At present, the development of physical education curriculum in most schools is mainly based on skills and technical training, ignoring the students' spiritual education, while outward bound pays attention to the comprehensive development of students' psychology and social adaptability. At present, the forms of physical education content in Colleges and

universities are very diverse, including physical education elective courses, health care physical education courses, club physical education courses, etc., which stimulate students' enthusiasm for exerciseIt has a certain effect, but it is still lack of novelty. We need to make full use of resources to reform the content of Outward Bound training. We should take students as the main body, teachers as the leading role, make flexible design, keep pace with the times, and constantly reform the traditional physical education mode. And the use of the corresponding natural regions and facilities, for students to carry out challenging sports, including field projects, water projects, school projects and so on, so that students can acquire knowledge through reflection, improve the comprehensive quality, team cooperation ability. At the same time, in order to achieve the purpose of adjusting the balance of body and mind, the content and methods of outward bound need to be changed appropriately to cultivate students' interest. Outward bound teaching generally needs to be carried out in three stages: the first stage, introducing the relevant content of outward bound for students, the second stage, basic quality training, the third stage, comprehensive quality trainingEach stage has corresponding knowledge points, which is not mechanically copied.For example, introducing the origin and related content of outward bound to students, we can use small stories and games to make students feel the interest of outward bound and lay the foundation for subsequent teaching.

2.3 Introducing hierarchical education model

From the perspective of teaching suitability and teaching students in accordance with their aptitude, hierarchical teaching mechanism should also be applied in outward bound training, aiming at students' stratification, understanding the actual situation of students at different levels in advance, and adjusting and improving around teaching activities.Different students different interests, physical fitness and sports foundation for outward bound training. Only by understanding the students' situation can the idea of teaching students in accordance with their aptitude be put into practice. Teachers should ensure that the overall level of students at each level is roughly the same. This grouping method can enable students to actively cooperate and communicate in outward bound training, so as to avoid problems of non cooperation.

2.4 Create a good atmosphere for Outward Bound Training

In outward bound, good atmosphere is very important. Good atmosphere construction can make the interaction and communication between teachers and students better, and also make students keep a steady stream of enthusiasm for

outward bound. In the actual teaching, teachers should use positive emotions to provide guidance for students, so that they can form a higher learning enthusiasm. Before each teaching activity, they can bring questions to let students think positively and try boldly, inspire students' enthusiasm, improve the quality of Outward Bound training, keep students interested in outward bound training, and realize the improvement of comprehensive ability.

#### 3.CONCLUSION

At present, outward bound has been highly valued by the society. It is necessary and feasible to introduce outward bound into college physical education, which can enrich the content of college physical education curriculum and improve the quality of teaching. In the specific teaching mode, we need to make ideological improvement according to the requirements of the teaching reform of college physical education, improve the curriculum construction, increase the investment

of manpower, material resources and funds, and give full play to the role and value of outward bound in college physical education.

#### REFERENCE

- [1] Wang Li. Problems and Countermeasures of College Physical Education Reform [J]. Contemporary sports science and technology. 2016, (19), 65, 67.
- [2] Cheng Jun. analysis of the problems and Countermeasures of College Physical Education Reform [J]. Contemporary sports science and technology. 2014, (10). 104-105.
- [3] Li Li. Discussion on the integration path of quality development training and College Physical Education in the new era [J]. Contemporary sports science and technology. 2018, (1). 88, 90.
- [4] Yang Hanxue. Thoughts on introducing outward bound into College Physical Education [J]. Contemporary sports science and technology. 2019, (34). 80-80, 82.

## Nationality of Piano Work "Autumn Moon in Pinghu"

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Abstract: The creation of China's piano works is mainly based on the development of the adaptation of ancient Chinese famous songs and traditional Chinese folk music. This paper takes Chen Peixun's "Autumn Moon in Pinghu" as an example, starting from the creation background of this piano work, to understand the artistic conception beauty of the composer and this Cantonese dudo. In combination with the musical form structure foundation of Autumn Moon over a Plain Lake and the piano playing skills, this work is to analyze and summarize the national characteristics presented by this work

**Key words:** Autumn Moon in Pinghu; Chinese piano works; nationality

### 1 CREATION BACKGROUND OF "AUTUMN MOON IN PINGHU"

Piano is one of the most important western Musical Instruments, known as "the king of Musical Instruments". As different historians have different historical materials, their opinions about when the piano was introduced into China are also different. In the book "the Formation and Development of Chinese Piano Culture" written by Mr. Bian Meng, there are many differences about the age of the introduction of the clavichord into China. According to the original text of Matteo Ricci's diary, most of the literature records mostly refer to the General Review of Continuant Documents, which believes that Matteo Ricci, an Italian Jesuit priest, gave the piano as a gift to the Shenzhenist Church in 1601, which is a sign that the piano was introduced into China. Autumn Moon over a Plain Lake is a melody with beautiful melody and unique charm. Its success lies in that the composer not only retains the national characteristics of the original melody, but also gives full play to the advantages of multi-part piano, which makes this traditional music one of the fine works of Chinese piano composition.

"Autumn Moon in Pinghu" is a popular ditty in Guangdong. Its melodious and graceful melody, mainly depicts the Jiangnan water and the natural beauty of the sky. In its poetic night, weaves the author's boundless love for the beauty of nature. The composer of Autumn Moon over a Plain Lake is Chen Peixun, a famous musician in China. Born in Hong Kong, he studied piano and form composition at an early age. Later, due to various reasons of the Anti-Japanese War, he lived in various places in China and learned various composition techniques from Tan Xiaolin. After the establishment of the Republic of China, he has been working at the Central Conservatory of Music for a long

time. During his lifetime, he created numerous musical works. The main works are "selling sundry goods", "miss spring", or the creation of the symphonic poem "heart waves rising", the symphony "my motherland", "Qingming Festival" and so on. While the pinghu harvest moon "this piece of work is in the 1970s, the main description is the piano more voices of this advantage, be rich accompaniment texture, making the work became more has the melody makes it become one of the high-quality goods of national piano music.

#### 2 NATIONALIZATION OF CREATION

In a work, melody is the basic idea of the work. The expressive force of the performer is the soul of the music. In order to accurately express the characteristics of each work, it is necessary to have certain musical endowing ability. "Autumn Moon in Pinghu" is also known as "Drunk Taiping", which integrates the water and light of West Lake as an accompaniment texture. The pond shimmered and the night sky was set off by a bright moon which was particularly beautiful. The pavilions and pavilions along the lake have become extraordinarily quiet. The whole West Lake seems to be an uninhabited world. Poetic general music meaning, sustains the author yearns for a comfortable and happy life. Describing the lake and moonlight in the water towns of China, and the pleasant scenery in poetic and pictorial style, to reflect the author's love. On the basis of the original tune, Chen Peixun added the multi-voice advantage of the piano, which made this folk dudes more full of Chinese national characteristics, and also made the music more widely spread.

#### 2.1 Use of pentatonic scale

Autumn Moon over Pinghu Lake was originally a song of Gu Zheng. Its melody was composed with readymade folk tones as material and pentatonic scale as the backbone. It is a traditional pentatonic scale tune with strong national characteristics. The tonal characteristic of this tune is the shift from feather mode to characteristic mode. At the same time, the conversion of mode is the same palace system, in which the yu mode alternately appears, then the main stressed gong note or stressed symbol note of each section of music starts and ends above the yu tone, and the ascending fifth note is transferred to the mode connection and conversion made by the gong tone. So down, the melody line of the sound gets stretched, the sound line becomes soft, naturally feel elegant as chrysanthemum. As shown in Example 1, in the first section of the music, the layout of the mode is that the palace tone changes to the characteristic tone, and then the characteristic tone changes to the yu tone. Such a cycle leads to the

alternation of the mode, which makes the melodic lines more graceful and deepens the beauty of the melodic form.

## 2.2 Integration of writing and performance 2.2.1 In the music "Qi" (bars 1-9)

In the long string of tones of the left hand, attention should be paid to the sound control, which must be the running on the key. In terms of the use of pedals, the sound should be clear and granular. In its empty fifth above, must pay attention to the sound of the ups and downs, so as to depict the scene of the night falling in the evening. In the aspect of the latter section, there are a large number of thirty-two notes, which imitates the breeze of the guqin. It is also like the swinging strings of the guzheng or the sweeping strings of the pipa. Voice control above, there must be ups and downs, quiet as the virgin move such as rabbit.

#### 2.2.2 The music piece "Cheng" (10-13 bars)

Begins to have great changes in musicality, from forte to mellow. Make the ups and downs of the breath extend, when breathing, we might as well slow down the speed of the lower key for it, so that the melody line is elongated. The profound charm of the spirit, the connotation has become particularly rich since then. In the right hand accompaniment texture above, we should pay attention to the control of sound, to be light, rather than silent. On the hearing, presents a unique hazy sense of the nation, the volume gradually stronger and weaker ups and downs, smart and have a rich sense of beauty.

#### 2.2.3 The "turn" (14-22 bars)

In the middle is mainly to push the softness of the music to a climax, strengthen the rhythm of the music, and also to depict the musical image of the work. In this section of music description above, we try to pay attention to the sound above the continuity, in its rich singing melody, we must make a color layout for it. Make it artistic. In the climax of music, we should be more devoted to achieve the work of the combination of sound, the beautiful music and its moving scenery into one, for the perfect presentation. In the emotional weaving above, we should do with a distinct voice transmission, the formation of a wave higher than a wave of emotional waves. After its climax, it can also accurately return to calm, in its performance, we must be able to do it freely, so as to present it perfectly.

#### 2.2.4 The final "and" (bar 23-25)

Originally the final state, makes the melody of this part begin to go far away. The trills of the right hand are like the melodious singing of the flute player. During the performance, we must imagine Xiao's voice, so as to imitate it on the piano. It is with such exclamatory tones that the author plays the lingering breath at the end. With the magic of the pedal, the music of the work becomes more ethereal. In Autumn Moon over a Plain Lake, Mr. Chen Peixun, the composer, not only inherited the Chinese national characteristics, but also added the multi-direction development of the musical form of the work. As a performer, we must think more to understand what the author wants to express, so as to show the work beautifully and accurately.

### 3 NATIONALIZATION OF PERFORMANCE 3.1 Processing of melody timbre

Guzheng playing techniques there are many, such as stroke, touch, push, pull, pick, hook, point, songs, etc., and each kind of sound effects are brought by the playing skill is different, we can through the different method to produce different sound effects and piano playing method, looking for the same technique for a second creation of the Chinese piano music. For example, in the middle part of the imitation of guzheng scraping, the speed and consistency should be maintained in a cheerful atmosphere, and the volume should not be too high. When playing the guzheng, you can use your wrist to drive your fingers when you touch the keys. When you touch the keys, you make circular movement with the direction of the tone, so as to show a soft and hazy tone. The bass with appoggiatura is the response to the treble part. When playing, we should pay attention to the firm key drop. In this way, a landscape picture with strong Oriental romanticism will be shown in front of us.

#### 3.2 Performance of performance techniques

From the perspective of melody mode, Autumn Moon over the Plain Lake is the most typical folk music work. Its main melody line is written with pentatonic scale of national factors, and the basic melody line is from the second to the ninth bar. The whole length of music is transformed according to these few sections. We divide the whole piece into four parts.

#### 3.2.1 From the perspective of "starting"

A long string of arpeggios should be used to describe and replace the theme. First of all, we should control the strength of the fingertips and pay attention to the gentlness of the timbole. Although it is 32 quavers, we should also show the timbole, the evenness of the sound and the promotion of the power to bring out the main line of music. When playing the second bar, pay attention to the main melody line from the right hand to the left hand, with the indication of the right hand line. When the left and right hands alternate the melody lines, pay attention to the conversion and control of the strength of the fingertips. At this point, the left hand accompaniment texture becomes long and dense, and not so put down the tip of the finger, before you disappeared into the suspension of the artistic conception, must control the left hand accompaniment texture, make its melody lines corresponding to the emphasis on the right hand of harmonic on the top note, followed, right hand texture also some changes have taken place, from or to the double sound department, melody lines or still on 16 points above the note, or even below parts into 32 points and notes of the melody line, and contrasts with the melody voice. At this time, our individual left hand should change according to the change of the melody line, according to the need to emphasize the control of the force, remember, the melody line can not be connected to the end. Among them, the left part has a sound, we are keeping at the same time, also want to stress out, it is like a small melody, in addition we also notice that the right hand of the last shot mainly in imitate string of glide, in the process of the play, also lies in the interval of rising gradually gradually strong, to the tonic pushes it to a climax.

#### 3.2.2 "Cheng" from bars 10 to 13

The melodic lines begin to shift to the middle and low notes of the left hand, while the right hand accompaniment texture begins to increase from 32 to 64. Left hand long melody line, make breath long, especially when the play note and the correct breath, clauses and phrases more passages, although have in the attachment, but do play in its processing, using the fingers from the key for its attachment, breathing and breath and key points in arm waving, ensure that is an integral part of the saturated. At this time, the left hand part of the melody can be used to raise the way of the finger, to produce the granularity of the sound, can also use its arm to push the melody, with soft sound processing. In the right hand intensive arpeggios, fingers can touch the keys for them and exert force in a uniform direction to make the feeling like flowing clouds and water played by guzheng. The right hand touches the key on the whole request, the sound is light and soft, the flexible fingertip action is indispensable. Remember, the hierarchy of left and right hand must be clear. The left hand is the melody and the right hand is the accompaniment.

#### 3.2.3 "Zang" starts from the first note of bars 14-23

A long series of triplets, followed by the appearance of irregular shapes such as seventh, ninth and tenth, which gives people a sense of emotional tension and a strong sense of instability, corresponding to the rising climax in music. Melody development is then enhanced by the simultaneous movement of the left and right hands, and the simultaneous fifteenth intervals begin to produce a distinctive sound on the piano that seems to mimic a percussionlike timbreline. From the 16th bar, there appears a melody of octave grace note, which makes people sound as if it is imitating the plucking overtones on the guqin.

#### 3.2.4 "Healing" consists of 23 sections to the end

This part is basically the conclusion of the whole piece, the end of the whole piece. The left-handed accompaniment reintroduces the 32 quaver in the prelude, and the playing requirements are the same as at the beginning. And the right hand appeared four consecutive dot 8 notes of the trill, the sound line is more and more distant, as if when the farewell, the back of a friend is gradually far away. This is difficult to master, the continuous second interval is not easy to master, and it is a long string, in the strength, to do from near to far, from strong to weak. To connect the rear of the sound column jointly compiled a Chinese characteristics, like the beauty of the beautiful mood.

#### **4 CONCLUSION**

In the art works, the national style is always in the continuous innovation, continuous absorption of good nutrients, strong growth accompanied by the growth, showing a novel and unique artistic style. "Autumn Moon over the Plain Lake", no matter from the analysis of its musical form, or from the analysis of its ethnic characteristics, can be very intuitive to see its own cultural heritage and musical nature. In Chinese piano works, its status is definitely a milestone. Its appearance has made the development of Chinese folk music culture further and further, and inspired more and more composers to follow and fall in love with the creation of folk music. We should have a deeper understanding of piano works that carry out folk music and promote the development of Chinese folk music.

#### REFERENCES

- [1] Deng Huo. On the National Factors of Chinese Piano Music Culture [J]. Selected Radio Songs, 2010, (7):36-38.
- [2] Yi Heng. *The Causes and Countermeasures of Singular Singing Style in Ethnic Vocal Music* [J]. Music Time and Space, 2016, (7):67-69.
- [3] Li Ping. Reflections on the Diversity Development of National Vocal Music [J]. People's Music, 2006, (9):28-29
- [4] Yin Ping. Discussion on the Inheritance and Development of Ethnic Vocal Music [J]. Journal of Guangxi University for Nationalities, 2005, (4):52-53.

## Opportunities and Challenges of College English Education in MOOCs Era

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**Abstract:** With the development of digital education, MOOCs has come into being. In order to have a deeper understanding about MOOCs, the writer analyzes its advantages and finds that MOOCs not only brings opportunities but also challenges to the development of College English education, which promotes the reform process of English course. This new model provides a new idea for the reform direction of College English education in China under the background of MOOCs, promotes the development of English teaching.

**Key words:** MOOCs; College English education; opportunity; Challenge

### 1. THE GENERATION AND ADVANTAGES OF MOOCS

For current College English education, teaching based on MOOCs is a new teaching reform in modern society, more and more experts and teachers share their relevant teaching experience and researching achievements.

MOOCs is the abbreviation of "Massive Open Online Courses". United States firstly proposed this concept in the year 2010. Until 2012, it showed explosive growth. More and more colleges have introduced this teaching mode successively, and the global education has also begun to show MOOCs explosive growth. In this case, some famous universities in China began to introduce this teaching mode in 2013, such as Peking University, Tsinghua University, Fudan University, Nankai University, etc., and not limited to higher education institutions. From then on, many colleges and universities began to follow the teaching model. Our university also introduces this teaching mode and is in the trial operation stage. For our college, mixed teaching mode is a new trial under the background of MOOCs era, it is also in line with the current situation of reform and development. With the application of digital devices in the class, during the process of combining MOOCs, English teaching activities will be highly digitalized, and it is very convenient for information acquisition, as a result, the needs of MOOCs is fully expanded in teaching system. Compared with the traditional curriculum mode, MOOCs teaching model has many incomparable and typical advantages, such as scale, network, openness, innovation, etc., in addition, there are many other characteristics.

In the process of continuously improving efficient of College English teaching mode, the introduction of MOOCs will continue to enhance students' interests in learning, attract students' attention, and promote the reform process of our college's English education. However, in the actual operation process, it may be hindered by relevant teaching concepts, teaching means and teaching methods, And this model is also a subversion of traditional teaching concept, which will inevitably be hindered by various factors, but it is inevitable on the road of development. Therefore, in the process of constructing the teaching mode of College English education, we need to make clear the development direction of education, take the right ways and adhere to the correct development. And we need the English educators in our college to carry out the reform of education and carry out the specific reform according to the specific

## 2. OPPORTUNITIES AND CHALLENGES IN THE REFORM OF COLLEGE ENGLISH EDUCATION UNDER THE BACKGROUND OF MOOCS

2.1 The influence of MOOCs on the reform of Colleges English education

Compared with the traditional teaching mode, MOOCs has many influences on English teachers' teaching methods, students' learning methods and other aspects. Moreover, MOOCs pays more attention to the enthusiasm of students in the classroom. In the whole process, students have been in the central position, this teaching concept focuses on improving the enthusiasm of students' in the classroom. Moreover, holding examinations on line can break the traditional time and space constraints, facilitate information acquisition, and enable students to learn during fragmented time, make good use of time, and improve learning efficiency while completing homework. At the same time, with the application of MOOCs, the relevant English knowledge will be explored with the wide range of resources, and with the openness of information, students can also obtain relevant knowledge more conveniently. For students, they invest less time but achieve higher efficiency in English learning. For teachers, the burden of preparing for teaching is greatly reduced, which helps teachers save more time to carry out academic researches and conduct personal development. With the application of this model,

the relationships between teachers and students, students and students are greatly promoted. Students can also be more interested in their own learning, and also promote the development of the fairness, popularization and liberalization of College English teaching. For teachers and students, the reform of MOOCs teaching model is both opportunities and challenges. In my view, it is a good time for our college to seize this opportunity to carry out reform and develop a new path of English learning.

2.2 The challenges of MOOCs to College English education

Firstly, MOOCs challenges the leading position of English teachers in Colleges. In the traditional English classrooms, teachers are generally in the main position of teaching. Teachers control the contents and procedures of this class. Students have been in a passive position, they are forced to accept all kinds of content that teachers presented in the class. Teachers hold the position of instilling knowledge into students. In class, the interaction between students and teachers is relatively boring, but after the introduction of new models, students' learning autonomy has been greatly improved, they can explore and learn related knowledge through the network, which can greatly reduce the students' reliance on teachers and improve their learning enthusiasm. The results of teaching reform show that MOOCs teaching model enriches the students' English knowledge standard and opens up the horizon of students.

Secondly, MOOCs challenges students' selfdiscipline, self-control ability and self-learning ability with the use of digital devices. Although MOOCs model improves students' learning initiative and changes students' way of thinking, there will be some other problems. Many students sustain low self-control ability and low learning efficiency, they cannot manage their time and learning behaviors automatically. In this case, online learning cannot improve students' learning efficiency, further may destroy a young student. Besides the problems came from students themselves, digital equipments and online materials are another serious problems. If the quality of course videos provided by MOOCs courses are not so good, the quality of learning resources will greatly influent students' learning. the fuzzy teaching videos may result in empty and boring teaching content, which directly reduce students' interest in learning English. In combination with English teaching, if the curriculum videos are presented in an improper way, students cannot connect the materials to the relevant knowledge well, and their learning efficiency will be reduced. Thus, it will depart from the original targets and violate the original intention of the teaching reform.

## 3. THOUGHTS ON THE REFORM OF COLLEGE ENGLISH EDUCATION UNDER THE BACKGROUND OF MOOCS ERA

3.1 Adhere to the core of "student-oriented", highlight the main position of students in MOOCs teaching mode

With the application of MOOCs teaching model, students can learn through various videos and audios independently. By learning online supplemented resources before and after class, students not only can extend their knowledge, but also cultivate autonomous learning ability. In the application of this mode, English teachers need to make a detail teaching plan for online learning and classroom teaching, which make their work content more specific, thus the teaching objectives become more accurate. On one hand, teachers need to make relevant curriculum materials for the English class, which is shown to students in the form of micro videos. On the other hand, more time in class can be saved to summarize and find out the problems according to the students' performance, then help them to solve the questions. What's more, teachers can also do the questioning and answering activities. We should constantly strengthen students' understanding of the content, strengthen memory and understanding ability, adhere to the subject status and improve their enthusiasm for English study.

3.2 Innovate teaching methods, combine online and offline learning to improve teaching effectiveness.

MOOCs teaching model is greatly different from the traditional teaching mode. There are many advantages that to attract students. In-class teaching can attract students' interest in learning. This new teaching model is not limited by time and space, so students can learn more easily in the learning process, acquire various knowledge freely and conveniently, The methods are also more flexible and diverse, which brings higher efficiency. Online discussion can be conducted, which is more convenient and free from the limitation of time and space. Students can also conduct self-examination online. Online test helps students master their own learning situation well through its fast assessment and big data analysis, which is very convenient for both teachers and students. This is the reason why online examination system is very popular and widely used in colleges. After the application of this mixed teaching mode under MOOCs background, teachers are no longer spend much time talking about teaching material, instead, assigning more time to students to explore other extended knowledge in order to cultivate critical thinking. The constant innovation of teaching methods and the participation of students deeply stimulate classroom cooperation, firmly improve the teaching and learning quality.

#### 4. CONCLUDING REMARKS

In the process of adapting the mixed teaching model online and offline under MOOCs era, we should also combine diverse teaching concepts and methods together. The learning assignments can be designed online and offline, in class or after class, the aim is to lead students to explore more, think more, and practice more. We hope that the application of mixed teaching model in the MOOCs ear promotes students' deeper understanding of English learning, improves their intercultural communication competence and enhance understanding of English language.

#### REFERENCE

- [1] Chen Xiaogeng, Wang Dingming. Analysis of the Development Process and Main Characteristics of MOOCs [J]. Modern Education Technology, 2013(11).
- [2] Yan Beibei. MOOCs in the Teaching of Ideological and Political Theory in Colleges and Universities [J]. Party Building and Ideological Education, 2014(7).
- [3] Lin Jiayang. An Analysis of the Feasibility of MOOCs in French Teaching in Colleges and Universities [J]. Science and Technology Information, 2018(36).

# Strategies for cultivating intercultural communication competence of students in application-oriented universities

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Abstract: In order to enhance college students' ability to use English in multi-cultural environment, this study illustrates the importance of cultivating intercultural communication competence of students in application-oriented universities, analyzes the factors that impede the improvement of intercultural communication competence and proposes some strategies to improve the competence, including cultivating students' intercultural sensitivity, enhancing knowledge and skills, and providing more opportunities of intercultural communication.

**Key words:** application-oriented universities; intercultural communication competence; college English

#### 1. INTRODUCTION

As globalization continues to move on, intercultural communication becomes increasingly frequent and there are more opportunities for people indifferent countries to communicate with each other. According to Michael Byram (2014), intercultural communication is not just the transition of information, but also an interpersonal interaction which links the cultural system of a person with the culture system of the target language. In intercultural communication, people should try to retain their cultural identity, presenting cultural features of their own while getting to know the other culture for better communication. For college students in the globalizing era, intercultural communication competence is a necessity.

As an application-oriented university, Nanning University aims to cultivate application-oriented talents who have both the ability to apply what they learn in university to work and the competence to communicate in a multi-cultural environment. With the campaign of "the Belt and Road", graduates in Nanning University have more opportunities to work in a multi-cultural environment and communicate with people from different cultures. However, as much research has been done to improve college students' language competence, the competence of intercultural communication is to some extent neglected. People tend to believe as long as students master the linguistic knowledge, e.g. vocabulary, grammar, listening and speaking skills, they will be able to communicate without obstacles with people from another culture. In fact, "cultural mistakes", instead of language mistakes, are more likely to cause misunderstandings or displeasure experience in intercultural communication (Hu, 1994:127). Therefore,

more attention should be put on the intercultural communication competence in college education and strategies and measures should be taken to improve their competence.

## 2. FACTORS IMPEDING THE IMPROVEMENT OF INTERCULTURAL COMMUNICATION COMPETENCE

College English is a very important course in universities. And as is stated in the *College English Teaching Guidelines*, college English teaching should be practice-oriented, focusing on cultivating the students' application ability. However, many factors are hampering the improvement of intercultural communication competence.

### 2.1 More emphasis on exams than on communication

Students have been learning English for at least six years before they enter university, and for those years their experience in learning English are mostly examination-oriented. And when they start learning English in college, they tend to continue to adopt the learning strategy they are accustomed to in middle schools. Many college students learn English for the purpose of getting high scores in CET 4 or CET 6. In order to achieve that goal, they spend a lot of time on learning the linguistic knowledge of the English language, but neglect its function of communication. In this situation, even if they get high scores in the exams, it does not mean they can communicate smoothly with people from another culture. They have learned a lot of knowledge about the language, but still couldn't speak the language fluently. Their examination-oriented awareness in English learning has impeded the improvement in the intercultural communication

Apart from students' awareness and learning strategies, some teachers carter to the students' needs of getting high scores in CET 4 and CET 6, putting more emphasis on the language than on communication. Their lectures are often teacher-centered, lacking practice on communication with the language. Their teaching methods also impede the improvement of students' competence in intercultural communication.

#### 2.2 Lack of emphasis on culture

Language is the important carrier of the culture. In fact, language and culture are interdependent and closely interrelated. People have to achieve the language competence so as to learn the culture, and thus can better use the language. Therefore, while learning the

English language, people should learn the knowledge on culture. However, affected by students' awareness and the traditional teaching methods which put emphabitating full use of online resources the language, students lack the knowledge of cultural differences.

As for the teaching materials, existing authoritative textbooks are often chosen for the course of College English, and teaching activities are usually designed on the basis of the content of the textbooks. Each unit deals with a particular topic; cultures are sometimes involved but not always. When the culturally relevant points are concerned, they are often fragmentized, which lack of order or organization. This is not helpful to enhancing students' cultural knowledge.

On the other hand, teachers pay more attention to the language competence, i.e., they spend much most time in class explaining and practicing on vocabulary, sentence patterns and texts in textbooks while cultural contents are neglected. Sometimes the western culture is involved in class for it is mentioned in the textbook. However, Chinese culture is seldom mentioned; students cannot accumulate enough knowledge on Chinese culture to achieve successful cultural communication.

Inadequate opportunities for application in real scenery In the teaching program, the language competence is often illustrated in five aspects, i.e., the listening, speaking, reading, writing and translating skills. And teachers design each lecture on the basis of the objectives in each of the five skills. One the one hand, however, without the applicable scenery, students cannot see the necessity to learn the specific skills and their motivation cannot be aroused. On the other hand, even if students have commanded the essential skills. they do not have adequate opportunities to put them into practice. They become doubtful about learning English. The thought that it is not necessary to learn English well will prevents them from improving both their language intercultural competence and communication competence.

#### STRATEGIES TO IMPROVE THE COMPETENCE OF INTERCULTURAL COMMUNICATION

How to improve students' competence of intercultural communication is one of the important issues in College English studies. According to Bryam (2014), the intercultural communication competence can be described in four dimensions, i.e., attitudes, knowledge, skills and critical cultural awareness. And he also students' proposes cultivate intercultural to communication competence on the basis of the four factors.

Cultivating students' intercultural sensitivity

Intercultural sensitivity refers to the ability to notice the differences of behaviors and cultural modes in different cultures (Chen, 2009). By enhancing students' intercultural sensitivity, they will better understand the phenomena, modes and features of a different culture. While teaching college English, teachers should pay more attention to the background information of western cultures and customs, adopting appropriate teaching methods to facilitate students' learning of

Though many college students have the opportunities to travel abroad, most of them have limited such opportunities. Generally speaking, students in Nanning University lack experience of different cultures. To understand a culture by just reading is not efficient enough. Therefore, as the information technology develops, when designing teaching activities, teachers in Nanning University provide online resources about Chinese culture and western culture related to a certain topic. Students are required to do before-class, in-class and after-class tasks based on these resources. Then they will get a better understanding on both the Chinese culture and western culture, laying a good foundation for intercultural communication.

Adopting multiple teaching methods in language teaching

To arouse students' interests and enhance their involvement in classroom activities, teachers in Nanning University adopt diverse teaching methods. For example, they can ask students to make contrasts and comparisons between Chinese and western musical instrument, eating patterns, weddings, festivals, etc. to enhance their cultural awareness. They also use rolepaly method to arouse students' interests and help students realize it is important to conduct intercultural communication in a proper way. In this way, both their language competence and cultural sensitivity can be improved.

Enhancing knowledge and skills

Making full use of College English course

College English is a kind of general English which aims to help students lay a good foundation for mastering the language. It focuses on the command of knowledge on the language, and at the same time expanding students' horizon on a variety of fields such as the society, economy, science and culture. In the teaching practice, the language is the focus. However, as is stipulated in the latest Guidelines for College English Teaching (2020), it should also pay attention to the improvement of students' intercultural communication competence. When designing the teaching activities, teachers could provide more materials on cultures and integrate communication strategies when practicing listening, speaking, reading and translating skills. They can also employ diverse teaching methods to help students internalize what have been discussed in class.

Setting up courses on intercultural communication

It is stipulated in the latest Guidelines for College English Teaching that the main content of college English involves three major parts, i.e. the General English, English for Special Purposes and Intercultural Communication. Universities can set up English related curricula bases on their own needs (He, 2020). Nanning University is an application-oriented university which aims to cultivate high-level application-oriented talents. Based on the talents training objectives, besides the general English, more courses on Chinese culture and

western culture should be set up to provide more knowledge on different cultures and expand students' horizon.

Providing more opportunities of intercultural communication

In fact, the best way to master English is to study in the United States, the UK or other English speaking countries. No matter how well the English curriculum is carried out in the university and how advanced the teaching methods or contents are, a Chinese based environment is not a pure English one, so it is difficult to match Chinese students' language competence to compare with that of foreigners. In addition, the limited class hours make it even more difficult for teachers to realize the deep training of students' intercultural communication ability. In order to make up for the problem of insufficient class hours, College English teachers can make full use of extracurricular activities like English corner activities regularly, creating an environment for students to speak English and understand western culture; Or the university can invite some foreign students or friends to communicate with students so that students can acquire skills and experience from practice. Meanwhile, teachers can also give recommendations on books about different cultures, for reading can also help students understand western culture and improve their intercultural communication competence. The universities can also encourage students to establish organizations of English learning, e.g. English Association, which can help students learn English in their spare time. In addition, English speech contests, English dubbing contests and English debate contest can be held, and corresponding bonus will be set up to encourage students to participate in the competition actively. English lectures can be held regularly, and English experts can be invited to teach methods of learning English or introduce some foreign cultural knowledge. All these methods can help students improve their intercultural communication competence. Enhance the integration of native language culture in cross-cultural teaching

In the process of College English education, English teachers should not only limit their English cultural knowledge to students in class, but should use teaching methods flexibly to help students improve their intercultural communication competence and improve the quality of teaching. In the process of teaching, English teachers should also pay attention to the integration of their native language culture knowledge and foreign language culture knowledge, so as to help students better understand the native language culture from different perspectives, and realize the purpose of introducing Chinese culture to foreigners. He (2020) pointed out that the input materials are very important to students in that they can have great impact on students' values. Teachers should help students build cultural confidence in college English teaching. For example, vocabulary referring to Chinese culture should be introduced; when introducing the western culture, the similar Chinese culture should also be introduced to enhance students' intercultural awareness. In this way, students can understand that native language culture has been gradually infiltrated in English or cross-cultural contexts. And they will be aware of the charm of their own culture while learning English, and thus improve their intercultural communication competence.

#### 3. CONCLUSION

The cultivation of intercultural communication ability is of great significance in College English education, and it is an important part of language communication ability. However, it is not so simple to cultivate students' intercultural communication ability, so teachers should be patient enough to make corresponding adjustments according to the students' learning situation. In the process of training, we need to step by step, and we should not worry too fast. We should gradually enhance the students' cross-cultural awareness, make students have good habits of independent learning, so as to improve the level of students' intercultural communication ability.

#### REFERENCES

- [1] Byram, Michael.Teaching and Assessing Intercultural Communicative Competence [M]. Shanghai: Shanghai Foreign Language Education Press, 2014.
- [2] Chen Guoming. Foundations of Intercultural Communication [M]. Shanghai: East China Normal University Press, 2009.
- [3] Cui Haiying, Wang Jing. On Constructing Multidimensional Training Mode of Intercultural Communicative Competence in Application-oriented Colleges. Hebei Normal University of Science and Technology (Social Sciences) [J], 2018(03): 79-85.
- [4] He Lianzhen, New Requirements on College English Teaching in the New Era: Foundations and Highlights of the College English Teaching Guidelines [J], Foreign Language World, 2020(04):13-18.
- [5] Hu Wenzhong, The Revelation of a Cross-cultural Survey [J], Journal of Foreign Languages, 1994(01):19-25.

## Research on Model Analysis Method Of Sports Action Characteristics

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Abstract: The level of sports in China is also improving with the improvement comprehensive national strength. improvement of sports level is not only related to the improvement of sports equipment, but also to sports athletes' scientific training methods and action planning. Therefore, many scholars have devoted themselves to the research of quantitative and modal analysis of sports action and have achieved certain results. In order to quantify and analyze the characteristics of sports movements more quickly and accurately, in this paper, the RANSAC algorithm is used to calculate and establish the quantitative and model analysis model of the characteristics of sports action. Through computer analysis, the applicability of RANSAC algorithm is proved by the test in this

**Keywords:** RANSAC algorithm; quantifying the characteristics of sports action; pattern analysis

#### 1. INTRODUCTION

At present, with the improvement of China's comprehensive national strength, investment in sports construction has gradually increased. Therefore, many experts and scholars are devoted to sports research and analysis. Not only will all kinds of sports equipment be continuously improved, but also the research on the movements of various sports training will be gradually scientific. The research on the quantification and mode analysis of sports action is deepening (Pan Het al2017) [1]. However, the quantitative analysis and mode analysis of sports action are limited to manpower analysis at present, and computer computing is fast and accurate. Therefore, the research in this paper is based on RANSAC algorithm. The method of quantitative analysis and mode analysis of sports action is analyzed by establishing a computer computing model, and the research method is perfected (Thu T Tet al2017) [2].

First, in this paper, a model of human physical movement characteristic is established. Through the establishment of this model, the objective and the calculation direction of the study are clarified to provide the theoretical basis for the calculation of the calculation formula below (Chen Qet al2016) [3]. After determining the direction and purpose of the calculation, the calculation model is established for the RANSAC

algorithm.According calculation requirement of this paper, the calculation procedure and formula of the algorithm are optimized and analyzed, and then a computer computing model based on RANSAC algorithm is established (Kim H Het al2016) [4]. At the end of the paper, the RANSAC algorithm is tested appropriately. The practicability and reliability of RANSAC algorithm is proved by testing. The computational research in this paper not only extends the computational range of the RANSAC algorithm, but also puts forward our own views on the quantification and mode analysis of sports action in China (Dusmez Set al2017) [5].

#### 2. STATE OF THE ART

The study of the characteristics of sports movements began early in foreign countries, and the sports undertakings in foreign countries are relatively early in China, so many research and analysis are more than in China. Foreign scholars and experts have studied many methods of quantitative characteristics, and have made some achievements (Urbančič Tet al2016) [6].In addition, since the research of the RANSAC algorithm in the middle of the last century is mature gradually, after the analysis of the action image has a specialized computer algorithm, the quantitative research on the characteristics of sports action has a computer algorithm which accords with its own calculation, which provides a new way for the research of the characteristic of sports action (Eslami Het al2016) [7]. Moreover, the computation of RANSAC algorithm covers many aspects of video and pictures, and has made great contributions in many other fields.

The development of sports in China started late. Relatively speaking, the quantitative research on sports movement characteristics abroad is relatively weak, and the depth of research is relatively shallow (ŁukaszSzubaet al2016) [8]. However, by learning foreign advanced technology, China's quantitative research on the characteristics of sports movements is rising gradually. Especially since our country has studied the large-scale calculation of RANSAC algorithm, it is more handy to use RANSAC algorithm to quantify the characteristics of sports action and our country has achieved a definite achievement (StryjewsjaDet al2017) [9].In our country, the application of RANSAC algorithm is first applied to image processing. After that, the research on the RANSAC algorithm has been extended to many new fields, and the quantitative research on the characteristics of sports action is a very important aspect (Gao Fet al2017) [10].

### 3. METHODOLOGY

## 3.1The establishment of a quantitative model for the characteristics of sports action

The importance of sports action is self-evident. Standardized movements can help athletes achieve better results and achieve better training results. Sports action is so important that the standardization of sports action is more important.Only standardized movements can make sports actions more perfect. In fact, before the study, many scholars have established a standardized research model of sports action.Although this model can only use the camera to capture the action nodes of the human body, the movement error and inaccuracy in the large direction can be analyzed and analyzed, and the coach can point out the athletes, but for the fine research, the traditional model is difficult to achieve a good calculation effect.But the calculation model based on RANSAC algorithm is different.The computation model based on RANSAC algorithm can capture the movements of athletes and compare them with the standard movements that we input into the computer ahead of time. Moreover, the action model in computer is three-dimensional model. The calculations established in this article are used. The capture of the model is taken with a number of groups of cameras, and a number of azimuth photos are assembled into a stereoscopic action map of a human body, and then compared with the standard mode, which will not only show more accurately and clearly the places where the sports action is not standardized, but also carry out the detailed calculation research. This is the difference between the quantitative research model of sports action characteristics and the traditional model established in this paper. The movement of the human body is the result of the common action of many systems, and the coordination of many systems may not be very perfect, which leads to a lot of sports movements that are difficult to meet the requirements of standardization. The motion of human body can be simulated by computer in three dimensions. The stereoscopic image is shown in Figure 1 below.

Limb is different from other limbs, which has two movement modes of displacement and rotation, while other limbs can only rotate at the joint point as axis. In human motion, the relationship between the moving limbs can be represented by tree hierarchy. The movement of the upper limbs will drive the lower limbs and lower limbs to do the same exercises.

The model has the following characteristics: (1) The model can quickly and truly difficult new and

standard sports action, with three degrees of space and time. (2) The model has motion track and action snapshot and can control movements freely and quickly, which is more intuitive and scientific in analyzing and researching actions. (3) The model is written and phonetic to facilitate teachers' teaching. (4) This model has the background rhythm music playing, which plays a benign stimulation to the perceived muscle strength, and also enhances the interest of learning. (5) The model has video and video sequence analysis, and video motion and animation action contrast analysis, making the comparison between right and wrong at a glance. (6) Through man-machine interaction, teachers and students are more likely to make quick and effective feedback.

The quantitative model of sports action characteristics established in this paper has four applications. The design of this article is designed around these four aspects. First of all, the first role is to give athletes anticipation of movement before some kind of movement, and give athletes the opportunity to think independently, which is more conducive to the proficiency of sports. When the coach explains, the explanation is carried through this model, and the homework is arranged in advance and so on. This three-dimensional and repeatable action model can quickly make athletes proficient movement points. Second or so is the design of movement, and every sport has the possibility of improvement. Athletes or coaches can put forward their own opinions when observing movements. The optimization of the action can be optimized on the model, so that all of the people who use the model can quickly understand the new movements and help the development of sports. The third is action learning. The 3D model of the model can give athletes more accurate action instances. The last is the analysis of the action.Students' movements can be captured by cameras, and then be compared with the standard movements in the model, analyzing the gap and pointing out, which helps athletes to be more flexible in mastering the irregularities of their movements. The information processing form of the computer analysis model established in this paper is shown in Figure 2 below.

## 3.2Research on the establishment and optimization of RANSAC algorithm calculation model

In today's image processing problems, RANSAC algorithm is a very convenient and fast way of image processing. Under normal circumstances, when we calculate the RANSAC algorithm, the data we face mainly consist of three kinds of data. The first is the correct data, which describes the stereoscopic model of the image we have established. It is correct, and can describe the data that we have established. The second is the abnormal data. This kind of data is obviously

wrong, which will not only benefit the model we have established, but also cause some errors, which leads to the failure of the model. The third is noise data, which is different from the correct data and abnormal data, but tends to the right data. These data are expressed in the form of probability, which is the form of normal distribution.

The basic idea of the RANSAC algorithm is described as follows:

- ① For a data set of m sample set P, the minimum sample set size of n model, m is larger than n. A set of S is randomly selected from the sample set P, which covers n sample data, and an initialization model M is calculated.
- ② A certain algorithm model is used to carry out adaptability test of the data in the residual set P-S and the sample set of the residual set data for the model M is less than a set threshold of k.These samples are called the interior points of S and form a set S\* together with S, which is a consistent set of S (Consensus Set).
- ③ If length(S \*)>\_N, it is supposed that the correct model parameters are obtained.Set S\* is used to re-estimate the new model M\* by some algorithm.
- The new S is extracted randomly, and the above process is repeated. After the number of repeated samples reaches a certain amount, the algorithm fails if no consistent set is found. Otherwise, the internal and external points of a consistent set should be judged according to the maximum value of length(S). Finally, the algorithm ends.

In this paper, the calculation model and main idea of RANSAC algorithm are introduced and studied.Next, the calculation formula of magic is calculated.

Before carrying out the calculation and analysis of the calculation formula, we need to first design the calculated model coordinate system, and then establish the calculation matrix, which is supported by both of them. We can do the calculation and study. Figure 3 below is the coordinate system diagram of the calculation model established in this paper.

Since the calculation of this paper is done in the form of matrix, the first step is to establish a computing matrix.

$$F = \begin{bmatrix} x_{11}, x_{12}, x_{13}, \cdots x_{1n} \\ x_{21}, x_{22}, x_{23}, \cdots x_{2n} \\ x_{31}, x_{32}, x_{33}, \cdots x_{3n} \end{bmatrix}$$
(1)

**Table.1 Test Calculation Data Table** 

Numbering  $\mathbf{Z}$ β X Y α 1 1 1 1.999695 1.017451 1.017452 1.052636 3 1.998477 1.017428 1 3 5 1.996043 1.017568 1.078451 1 1.992395 1.046697 1.125368

First, the formula for calculating K calculation process is established:

$$1 - (1 - C_m^n C_{m-1}^{n-1} C_{m-2}^{n-2})^k = \Phi_{(2)}$$

The m in the upper form is the total number of points in the point cloud, and n is the characteristic point number in the point cloud. Since m and n values are very much approximated, it can be gotten that:

$$1 - (1 - (1 - \tau)^4)^k = \Phi_{(3)}$$

Then

$$K = \frac{\log(1-\Phi)}{\log(1-(1-\tau)^4)}$$
 (4)

For the distance between two points, the formula is used to calculate:

$$d = \frac{m^{T} F m}{(F m)_{1}^{2} + (F m)_{2}^{2} + (F^{T} m)_{1}^{2} + (F^{T} m)_{2}^{2}}$$
(5)

As for the optimization of RANSAC algorithm, the optimization of algorithm is derived from the following:

$$T = M(TC + TE) + M(n \times TT) \times Pf + M(nf \times TT) \times (1 - Pf)$$
(6)

In this paper, the calculation formula and computation optimization problem of the RANSAC algorithm are completed. According to the above calculation process, the quantitative model of sports action characteristics has been completed. The establishment of this model has greatly accelerated the learning and promotion speed of sports action. With this open model, the analysis of the national sports action features can form a unique circle, so that the athletes and coaches can communicate in time.

## 4. RESULT ANALYSIS AND DISCUSSION

In the last part, a quantitative model of sports characteristics based on RANSAC algorithm has been set up, but a certain test—is still need for the information processing ability of the model and the efficiency of calculation and analysis. The results of the test prove the effectiveness of the algorithm and the information processing ability of the model. Before testing, the data points used in the test need to be designed. The test calculation in this paper involves 720 points, and then sets up the data table.

5	1	9	1.987538	1.017468	1.156324
6	1	11	1.981478	1.017268	1.119564
7	1	13	1.974222	1.017431	1.222357

Through the data preparation above, three groups of experiments can be carried out. The calculation of these three groups of experiments is done by four different computer algorithms respectively, and then the test data are analyzed and studied. The three sets of experimental results are displayed in the form of three tables below.

Table.2 720-point simulation model parameter values and different methods extract results

Calculation method	a	b	С	r	Points/noise points	Extraction points
Setting parameters	1	1	1	1	/	/
Least Squares	1.00	1.00	1.00	1.00	720/0	720
Hough Transform	0.98	0.98	0.98	1.00	720/0	720
RANSAC	1.00	1.00	1.00	1.00	720/0	720

Table.3 720: 100 point simulation model parameter value and different method extraction results

Calculation method	a	b	c	r	Points/noise points	Extraction
						points
Setting parameters	1	1	1	1	/	/
Least Squares	0.97	0.95	0.95	1.05	720/100	660
Hough Transform	0.98	0.98	0.98	1.00	720/100	720
RANSAC	1.00	1.00	1.00	1.00	720/100	725

Table.4 720:360 point simulation model parameter value and different method extraction results

Calculation method	a	b	С	r	Points/noise points	Extraction points
Setting parameters	1	1	1	1	/	/
Least Squares	1.01	0.99	0.99	1.07	720/360	851
Hough Transform	0.99	0.92	0.98	1.00	720/360	730
RANSAC	0.98	1.00	0.99	1.02	720/360	729

Through the analysis of the data of the upper table 2/3/4, it can be seen that the three computer algorithms selected in this paper can extract the data points. This means that the three algorithms can establish the three-dimensional model needed, but the results of the three algorithms are not the same. The three algorithms have different emphasis on the calculation. With the increase of noise points, it can be seen that the least square method is the first to fail and to exit. It can be seen that the least square method is the first to be eliminated in the calculation of this paper.In addition, the anti noise effect of Hough transform algorithm is better, but the key point of this algorithm lies in the selection of the center point. However, the computation of the limb part needs to be further calculated, which will increase computation time and reduce computational efficiency.The RANSAC algorithm used in this paper not only has good anti noise ability, but also has high accuracy. Although the central point is not as good as the Hough transform algorithm, the RANSAC algorithm can accurately calculate the positions and movements of each limb, which is in line with the need for the calculation of this article. It can be seen that the RANSAC algorithm used in this paper has the best robustness and is the most suitable one in this paper.The human body motion analysis image conversion form implemented by the RANSAC algorithm used in this paper is shown in Figure 4 below.

In addition, a set of test experiments have been carried out in this paper. The computation time and accuracy of the algorithm are tested by adding the noise points calculated by the algorithm. The accuracy and computational efficiency of the three algorithms are shown in Figure 5 below. The test environment uses the test environment designed above, and four key points are selected for testing time. But for computing accuracy, the increase from 0 to 720 noise points is used to test in real time.

The above analysis shows that the RANSAC algorithm used in this paper is the best. The accuracy of the calculation is more than 90% and the accuracy of Hough transform algorithm is relatively low, but there are ups and downs in the middle. The least square method has the lowest calculation accuracy. In addition, it can be found that the calculation time of the RANSAC algorithm used in this paper is the shortest, which means that the computing efficiency of the RANSAC algorithm is the highest and the least square method has the lowest calculation efficiency. Thus, combined with the test results above, it can be confirmed that the RANSAC algorithm used in this paper has the best calculation effect and can meet the requirements of this paper.

#### 5. CONCLUSION

The discovery of sports can not be separated from economic and scientific progress. The progress of science and technology is also pushing the development of sports.In particular, the state is paying more and more attention to sports. The combination of sports and computers burst out into a dazzling light.In this paper, the RANSAC algorithm is used for computing research, and a model of sports action feature quantification and pattern analysis is established. The calculation research of this model increases the standardized teaching of sports action. In this paper, it can be seen that the RANSAC algorithm can complete the calculation results and the results are good.Compared with the two algorithms, the calculation results are the best. The accuracy of calculation can reach more than 90%, and the computation efficiency is the best among the three algorithms. The computation efficiency can reach two times of the least square method. Through the calculation and study of this paper, the analysis of the quantitative analysis of the characteristics of sports action is provided, and this method can achieve good results, which not only promotes the development of sports, but also deepens the research of RANSAC algorithm.

### REFERENCE

[1]Pan H, Li M, Shen Q, et al. Modelling and simulation: an improved RANSAC algorithm based on the relative angle information of samples[J]. International Journal of Modelling Identification & Control, 2020, 28(2):144.

[2]Thu T T, Hamamura J, Soejima R, et al. Comparative Evaluation of FPGA Implementation Alternatives for Real-Time Robust Ellipse Estimation based on RANSAC Algorithm[J]. Ieice Transactions on Fundamentals of Electronics

Communications & Computer Sciences, 2020, E100.A(7):1409-1417.

[3]Chen Q, Liang Z, Brand E, et al. Distributive and Quantitative Analysis of the Main Active Saponins in Panax notoginseng by UHPLC-QTOF/MS Combining with Fluorescence Microscopy and Laser Microdissection.[J]. Planta Medica, 2020, 82(03):263-272.

[4]Kim H H, Ko B C, Nam J Y. Predicting chlorophyll-using Landsat 8 OLI sensor data and the non-linear RANSAC method – a case study of Nakdong River, South Korea[J]. International Journal of Remote Sensing, 2020, 37(14):3255-3271.

[5]Dusmez S, Heydarzadeh M, Nourani M, et al. Remaining Useful Lifetime Estimation for Power MOSFETs Under Thermal Stress With RANSAC Outlier Removal[J]. IEEE Transactions on Industrial Informatics, 2020, PP(99):1-1.

[6]Urbančič T, Vrečko A, Kregar K. THE RELIABILITY OF RANSAC METHOD WHEN ESTIMATING THE PARAMETERS OF GEOMETRIC OBJECT - ZANESLJIVOST METODE RANSAC PRI OCENI PARAMETROV GEOMETRIJSKIH OBLIK[J]. Geodetski Vestnik, 2021, 60(1):69-97.

[7]Eslami H, Raie A A, Faez K. Precise Vehicle Speed Measurement Based on a Hierarchical Homographic Transform Estimation for Law Enforcement Applications[J]. Ieice Transactions on Information & Systems, 2020, 99(6):1635-1644.

[8] Łukasz Szuba, Markowska I, Czamara A, et al. Quantitative analysis of peak torque and power–velocity characteristics of shoulder rotator muscles after arthroscopic labral repair[J]. Journal of Science & Medicine in Sport, 2020, 19(10):805-809.

# The application of interactive teaching method in Higher Vocational English class

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**Abstract:** In the teaching of higher vocational courses, the purpose is to cultivate students' English application ability in their future work. In order to further improve the teaching effect on the existing basis, we need to be able to establish a new teaching mode with students as the main body. Among them, interactive teaching is a more effective teaching method. In this paper, the application of interactive teaching method in Higher Vocational English classroom will be studied.

**key word:** Interactive teaching method; Higher vocational English class; application

### 1 INTRODUCTION

Interactive teaching is a way which is often used in higher vocational education. Specifically, on the basis of student-centered, we should actively emphasize the communicative function of language, cultivate students & apos; communicative competence while doing a good job in the teaching of basic knowledge of the course, focus on specific tasks, and enable students to learn in a positive and active way through the creation of real environment. In Higher Vocational English teaching, we also need to be able to grasp and apply this teaching method to further improve the teaching effect.

## 2. CURRENT SITUATION OF ENGLISH TEACHING

In higher vocational colleges, the source of students is more complex, and the students are lack of knowledge. For many students, they are weak in English grammar and vocabulary basic skills, lack of writing ability, lack of interest in English learning, and lack of positive performance in class. At the same time, in higher vocational colleges, English has the characteristics of non professional courses, the class hours are relatively small, and there are also deficiencies in the degree of attention, which also affects the power of teachers' teaching innovation reform. In terms of teaching methods, the traditional mode of teaching is mainly used to explain the translation unit by unit. Students are in a passive position in teaching and often accept knowledge in a passive way. In this case, the innovation and application of teaching methods has become a key Higher Vocational in teaching. Among them, interactive teaching method can use language as a tool for learning and application, can reflect the teaching concept of learning for application, and can also make students participate in teaching in a more active way, which has good application value.

## 3. APPLICATION OF INTERACTIVE TEACHING

#### 3.1 Embody enforce ability

In the past, when the interactive teaching method is applied, teachers often have some concerns, because for higher vocational students, their English expression ability and foundation are relatively weak, they often dare not say it in learning, and there are also deficiencies in learning enthusiasm. At the same time, for the students, they have adapted to the traditional teaching methods and listen to the class in a passive way. If the teachers apply the new teaching methods, it is difficult for the students to cooperate, and the new classroom activities may lead to the cold situation. The existence of this part of concern, which makes many teachers in the face of classroom reform there is fear of difficulty. In fact, for higher vocational students, they have the characteristics of passion and pursuit of new things. If they still carry out teaching activities in the same traditional teaching method, they are likely to be tired. Through the application of relaxed classroom atmosphere and diversified activity teaching mode, the students will be tired, It can make students have a better performance in the sense of participation and acceptance ability. In the specific teaching, teachers need to be able to fully reflect the feasibility of this teaching method, divide the students in the class into a certain number of groups, write the corresponding tasks on the notes before class, and arrange the notes marked with different tasks to the student groups for drawing lots, so that they can draw lots according to the tasks, Research in a collective way to find the answer.If you can't solve the problem in the group, you can also walk freely in the class, seek help from the adjacent groups, and be able to compete and ask questions between groups, which effectively improves the classroom atmosphere. In this process, students can fully mobilize and use their stored language knowledge, and get better learning effect in the case of strengthening interaction.

## 3.2 Optimization activity method

In the case of maintaining students' enthusiasm, the task of teachers needs to take scientific and effective measures to stimulate students' enthusiasm, develop the interactive forms with diversified characteristics, and fully reflect the creativity of teaching. For group activities, it is a way often used in specific interactive teaching. It has a variety of characteristics in the content of specific activities, including debate games, information inquiry, and role-playing activities, so that students can make good use of language knowledge in the communication and

interaction. For higher vocational students, their basic skills are relatively weak, and their English expression ability is also insufficient. Therefore, teachers can teach students in accordance with their aptitude, fully explore the topics that students are interested in and can communicate with on the basis of teaching materials, and design the activity forms with good effects under the condition of giving full play to their imagination, and make arrangements and monitoring among them.

For example, after learning the "organization" course, the teacher can set the specific content of the corresponding activity tasks, arrange the students to create a company in the form of a group, in which to determine the main members of the company, determine the company name, design logo, innovate products, make posters and PDT, etc.At the same time, the audience also has a question session. In the activity, students can actively participate in the interaction, and design a variety of clips and posters.And logo design, can also be in the process of group comparison and discussion, so that students can fully understand the sense of achievement of learning, doing and learning, can effectively improve students' language expression ability.

For example, in the course of airport, teachers can play relevant video clips in advance, so that students can better understand the airport related knowledge in the video screen. After that, students can encourage students to list the airport related information, such as airport security check, flight class inquiry and common phrases, After the students have collected and sorted out the relevant phrases and sentences for a certain period of time, the teacher plays the corresponding dialogue recording and arranges the students to follow it, so that the students can further master the airport related vocabulary, and arrange the students to practice in groups after the dialogue. In the specific exercises, first arrange the students to imitate the dialogue in the reading materials, then arrange it according to the vocabulary and sentence patterns mastered by the students. After forming a complete dialogue passage, arrange the students to carry out the simulation exercises in the way of roles.

#### 3.3 Key issues

In the application of interactive teaching methods, teachers also need to be able to grasp the following contents: first, they should always adhere to step by step. At the beginning of the activities, they can mainly use the traditional teaching methods that students are familiar with, and properly insert the interactive classroom activities into them. In the case of effectively stimulating students' interest, they can form a good habit of speaking and self-study. After that, the number of group activities is gradually increased, and the form of innovation and transformation are done well, so that students can fully accept and participate in the activities, and avoid the situation that students are at a loss because they want to go one step at a time; Second, after the task is assigned, the teacher introduces the background knowledge of the activity to the students,

and can also give examples to demonstrate the solution of the problem, so as to ensure the smooth progress of the activity; Third, we should appropriately reduce the difficulty of activities. In the specific activities, teachers should grasp the questioning skills and simplify the sentence structure and vocabulary appropriately. The purpose is to ensure that students can successfully complete the activities through appropriate efforts.Among them, teachers need to design ladder activities that are easy to achieve and have good feasibility, and match the difficult and easy contents, such as simple information search, sentence making, summary or short dialogue, so that after the division of labor, the team can ensure that students of different levels and abilities can have projects that can be completed, Everyone has a task to do and play in the activities. In this way, we can also provide students with sentence structure and key words to deepen their memory in the case of easy understanding; Fourth, in specific activities, teachers should not only exist as bystanders, but also play their leading role, actively participate in various activities and guide students.In addition, we should also control the relationship between language accuracy and fluency. In the interactive teaching method, we should emphasize more on the fluency of language than simultaneous interpreting. If there are errors in grammar, we can not correct them immediately, avoid interrupting the students' thinking and enthusiasm, and make proper corrections and summaries after the completion of the activities.

## **4 CONCLUSION**

English as a key course in higher vocational colleges, it is a key to improve students' learning enthusiasm and learning effect. In this regard, we need to combine the actual application of interactive teaching methods, in order to create a new learning atmosphere for students, and further improve the students' English learning effect.

#### REFERENCE

- [1] Cheng Xinxin. Research on content-based interactive teaching mode of senior high school English [D]. Shandong Normal University, 2019.
- [2] Lu Shuangfeng. Research on the application of interactive teaching mode in Secondary Vocational English class [D]. Suzhou University, 2013.1-55.
- [3] Tang Ning. Analysis on the promotion of micro curriculum to interactive English Teaching in Higher Vocational Colleges [J]. Journal of Liaoning higher vocational college. 2016, (2). 34-36.
- [4] Yao Yan. Application of interactive teaching mode in College English Translation Teaching [J]. Knowledge economy. 2018, (4). 165-166.

# On the construction of financial management ability evaluation system of small and medium sized enterprises

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**Abstract:** Nowadays, with the progress of society and the development of science and technology, the competition among enterprises is becoming more and more fierce, especially the small and medium-sized enterprises, which are facing more and more pressure. If enterprises want to win a place in the market competition, they must strive to enhance their own management ability and core competitiveness, which is conducive to the realization of business objectives.By comparing the evaluation system of financial management ability of small and medium-sized enterprises in modern society, this paper analyzes the structure of financial management ability of small and medium-sized enterprises, and concludes that the financial management ability of enterprises is composed of financial performance management ability, information management ability, budget management ability, etc, In order to be able to put forward useful strategies and specific measures for the construction of small and medium-sized enterprise financial management ability evaluation system.

**key word:** Financial management; Evaluation system; ability

## 1. ANALYSIS ON THE DEVELOPMENT OF FINANCIAL MANAGEMENT ABILITY EVALUATION SYSTEM OF SMALL AND MEDIUM SIZED ENTERPRISES

Small and medium-sized enterprises are an important part of the national economy. In the increasingly complex market environment, if small and medium-sized enterprises want to maintain long-term effective development in the fierce market competition, they must constantly test their own development status, and form a set of evaluation and analysis system of financial management ability to meet their own development and social needs, so as to provide useful information support, The overall objective evaluation and analysis of the enterprise's performance results can provide important objective information for the enterprise's next step, and point out the future development direction and investment trend.

The existence of financial evaluation arises at the historic moment to meet the needs of enterprise management. According to the financial accounting information and data sorted out by enterprise financial

personnel, comparative analysis of data is applied to the existing model to evaluate the enterprise's financial operation in the past or at present, so as to plan development trend of enterprise overall finance. Financial evaluation is not only to meet the needs of business management, but also the needs of stakeholders at all levels and departments. The financial evaluation system includes the subject and object of the evaluation, the objectives and indicators of the financial evaluation, the evaluation standards and the methods used, etc. the formation of the financial evaluation system is a relatively complete system and method, which provides a reliable theoretical method basis for the enterprise operators to judge the specific business activities of the enterprise.

At present, there are some problems in the evaluation of the financial management ability of small and medium-sized enterprises. First of all, on the whole, most enterprises attach importance to the operation effect of enterprises and ignore the evaluation of the financial management ability of enterprises. Although there is an evaluation system of the financial management ability, the system is not perfect, and the role of financial supervision is only a form limitation rather than a substantive role, Most of the analysis content is limited to the surface without in-depth exploration, there is no complete index for the interaction and correlation between the business data, and there is no obvious impact on the financial evaluation of enterprises. Secondly, from perspective of the current financial evaluation methods, the current financial management ability evaluation of small and medium-sized enterprises mainly includes the ratio analysis method of correlation among various indicators, the comparative analysis method of comparative analysis of enterprise production and operation data indicators, the trend analysis method of the change direction and range of financial indicators in the near future or in a continuous period of timeFactor analysis method of the influence degree of multiple interrelated factors on comprehensive financial indicators. Thirdly, enterprises pay too much attention to accounting standards and ignore the financial analysis itself, and pay less attention to the evaluation of financial management ability, which indirectly leads to the high-level enterprises only rely

on the existing judgment for enterprise financial information analysis; There is no advanced financial analysis method, too much emphasis on the content of financial information, can not be from the overall planning of enterprise development prospects;Some enterprise managers and relevant analysis departments do not pay enough attention to the analysis of cash flow and capital structure, but focus on the analysis of assets and profits; Lack of professional financial personnel to analyze financial management and arrange financial statements, and lack of understanding of financial analysis lead to no clear direction of analysis results; Although there are financial management ability evaluators in some enterprises, the timeliness is poor, and the time conflict leads to the decrease or lack of financial management ability evaluation; Modern science and technology update quickly, most enterprises do not combine financial management and information technology management.

2\ THE OVERALL DIRECTION AND DEVELOPMENT STRATEGY OF CONSTRUCTING THE FINANCIAL MANAGEMENT ABILITY EVALUATION SYSTEM OF SMALL AND MEDIUM-SIZED ENTERPRISES

In the face of the fierce competition of market economy and the rapid development of information technology, enterprises should recognize the development situation and strive to build the evaluation system of enterprise financial management ability to adapt to the changeable competition situation

- (1) We should establish a management mechanism for all levels of enterprises to participate in and strengthen financial performance management. In order to build the evaluation system of enterprise financial management ability, we must first recognize that financial management ability is composed of strong learning ability, efficient information processing ability, operable financial control ability and harmonious financial relationship ability. To sum up and classify the indicators, we should not only have sufficient theoretical basis, but also make practical planning for the selection of evaluation scope.
- (2) Reasonable planning of financial management, powerful evaluation index, follow the market rules and relevant principles. First of all, we should understand the degree of the financial management ability of the enterprise, the practical and feasible operational principle of constructing the financial management ability evaluation system, the dynamic principle of reflecting the financial management ability in real time, the principle of ensuring the vertical and horizontal comparability of the financial management ability, the systematic principle of ensuring the complete and comprehensive evaluation of the enterpriseThe scientific principle to ensure the rationality of the construction of financial management ability of enterprises, the importance principle to ensure the pertinence of the selected indicators in the financial management ability of enterprises, etc.

- (3) Carefully analyze the various indicators of the evaluation system to ensure the effective role of each indicator.It has a clear standard definition for the level of enterprise financial management informatization and the ability of relevant financial staff, deepens the level of enterprise informatization management, and trains the personnel specialized in modern management methods and advanced information technology; Through the comprehensive and practical evaluation index, it reflects the effect of enterprise financial management and highlights the importance of financial profitability, operation ability and growth ability; Pay attention to the financial indicators of cost, profit, sales, net assets and so on, strictly control the financial risk management and control ability, and score the effectiveness by setting indicators at all levels for efficient control; Combining the industrial sector with the financial sector to save the operating cost;Through improving the level of budget management to improve the enterprise operation ability, through the comprehensive examination and reasonable examination of the test budget, targeted evaluation of the enterprise budget content.
- (4) Formulate and improve the enterprise asset management system, and control the direction of enterprise capital flow. If an enterprise wants to develop effectively for a long time, it needs a complete set of rules and regulations to restrict the effective operation of the enterprise and prevent the emergence of illegal acts. The managers of various departments cooperate with each other and supervise each other to reduce the financial risk of the enterprise. Strengthen the information management, update business, change the inherent business management concept, update business management ideas, strengthen the training of financial management talents, ensure the timely and accurate financial information, and formulate effective solutions to solve problems in the shortest time.

## 3\ SUMMARY

At present, small and medium-sized enterprises lack of understanding of financial management ability, which leads to the phenomenon that small and medium-sized enterprises do not fully plan and allocate their financial resources. Unreasonable planning of enterprise finance causes unnecessary waste, greatly reduces the survival ability of enterprises, and can not compete with other enterprises with strong financial management ability in the fierce market competition environment, This kind of small and medium-sized enterprises can not survive in the market economy for a long time. For the construction of enterprise financial management ability evaluation system is increasingly becoming the construction goal of enterprises, which is conducive to the long-term development of enterprises, and also has inestimable significance to the market economy at home and abroad.

#### REFERENCES

- [1] Dong Lin. research on the construction of financial evaluation system of WZ magazine [D]. Anhui University. 2015.
- [2] Yang Lin. research on financial management ability evaluation system of Yushen energy company [D]. Xi'an University of science and technology. 2015.
- [3] Wen Deyi. Analysis on financial management ability system of small and medium sized enterprises [J]. Modern economic information. 2016.
- [4] Jin Xinru. Discussion on the construction of comprehensive performance evaluation system of small, medium and micro enterprises in Shanxi Province from the perspective of financial management [J]. Science and technology and innovation, 2015.
- [5] Ma Lin. research on Evaluation System of financial management ability of small and medium sized enterprises [J]. Chinese certified public accountant, 2015.

# High Quality Party Building to Promote the Fundamental Task of Moral Education

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Abstract: High quality party building is the guidance and guarantee for the high-quality development of colleges and universities. Colleges and universities should closely focus on moral education, with the party leading the development of colleges and universities. In this paper, through the construction of the Party branch, sum up experience summary, the characteristics of experience and practices are summarized from the Party branch learning methods. So as to give full play to the party's leading role in the development of the college.

**Key words**: party building; learning style; characteristic experience and practice

## 1. OPTIMIZE THE PARTY BRANCH LEARNING MODE BASED ON "FOUR INTEGRATION"

The six dimensions of the "double high plan" are the high quality of the party's construction, the high quality of moral cultivation, the high quality of technical training, the high quality of teaching staff, the high quality of scientific research and social service, and the high quality of international education<sup>[1-2]</sup>. On this basis, according to the construction requirements of "six standards and seven strengths", the Party branch construction should be standardized, institutionalized, branded and featured. Specifically, we should take the "Four Integration" as the main way, cast the soul with the "three complete, three entry, two integration", and ensure the navigation with the "two core, two grip" to form the "Three Gorges red" characteristic party building activities, and promote the fundamental task of building morality and cultivating people based on high-quality party building<sup>[3-4]</sup>.

The organic integration of "three meetings and one class" and teaching activities is carried out. Specifically, the implementation of "Four Integration" are the integration of the branch committee and the director meeting of the teaching and research section, the integration of the Party Congress and political learning, the integration of the Party group meeting and teaching and research activities, and the integration of the party class and teacher training respectively. The working mechanism of "Four Integration" not only highlights the leading role of the party organization,

but also gives full play to democracy and supervision. The content not only highlights the political nature of the learning content, but also reflects the effectiveness of business learning, which makes the focus of organizational life more solid, the direction of business learning more clear, and promotes the normalization of party spirit education.

## 2. CASTING THE SOUL WITH "THREE PERFECTS, THREE ENTERS AND TWO MELTS" TO PROMOTE THE SAME DIRECTION OF "MEDICAL" ROAD

Firstly, in accordance with the pattern of "threewide education", we should improve the quality of moral education in schools under the guidance of high-quality party construction, and promote the "medical" road in the same direction. The strength of excellent moral backbone and ideological and political teachers should be brought into full play. And continuing to do a good job in moral education in the aspects of the Taoism of saving and supporting the dead, loving benevolence in the heart, solid knowledge of learning, excellent technology and art of methods and methods, which can plant the seeds of truth, goodness and beauty for students, and guide students to button the first button in their life. Consequently, people's health guardians with noble medical ethics and exquisite medical skills are cultivated.

Secondly, XI Thought on Socialism with Chinese Characteristics for a New Era integrating into textbooks, classes and minds which is called "three-entry" project is promoted. The whole school students are widely mobilized to produce micro video, micro film, micro animation, etc, which can carry forward XI Thought on Socialism with Chinese Characteristics for a New Era.

Thirdly, medical education and Chinese excellent traditional culture should be integrated in Ideological and Political Teaching, which can realize the innovation of teaching content and teaching form. The overall quality of medical students is cultivated through "double integration". Activities such as "the most beautiful smile angel", "star of campus", "opera entering campus", "top ten singers competition" and "medicinal food sharing" were carried out. Performances of "never forget the original intention and keep in mind the mission" and "celebrating the 70th anniversary of the

founding of the people's Republic of China" are conducted, respectively. We have made full use of the summer vacation, combined with the activities of "three going to the countryside", and extensively carried out summer practice activities in the form of condolence performance and literature and art going to the countryside, which has expanded the platform of art practice. In addition, the "Life Science Museum", "Chinese medicine science and Technology Museum" and "Chinese Medicine Culture Museum" will be established. Broadcasting, network, billboards, classrooms, corridors, venues, squares, medicinal botanical gardens, etc. are fully utilized, which can create a campus cultural environment with elegant style, aesthetic feeling and full of vigor, which can let the socialist core values and Chinese excellent traditional culture gene infiltrate students' hearts through the campus cultural environment, which can guide students to find the beauty of nature, life and soul. We should explore and construct the education system according to local conditions, and embody the guidance of correct education.

Fourthly, much carefully crafting media platform for college students. In view of the new characteristics of young college students in the new era and the new changes in Ideological and Political Education, a media center for college students should be built, which can adapt to and meet the needs of students for more flexible and vivid ideological and political education. The platform for ideological and political education of online students, such as WeChat Public Number, should be vigorously developed, which can occupy the network position quickly and effectively. Strengthening and innovating the network content push and topic guidance, vigorously promoting the campus good personalities and good deeds, showing youth style, vigorously initiating the socialist theme and core values, accumulating network positive energy can strong campus positive atmosphere. The construction of "Qing Lang" network civilized volunteer service team and network monitoring public opinion are strengthened, which can firmly grasp the discourse power, leadership and right of management of the internet ideology.

## 3. "TWO CORES AND TWO HANDS" TO ENSURE NAVIGATION

## 3.1 strengthening the leadership core role of the Party committee and the political core role of Departmental Party Organization

Firstly, the integration of resources is strengthened, and the "integration" of party building work and college (department) development is realized. Similarly, the "Wisdom Party Building+" model is explored, and "Party branch rooted in the grassroots" is promoted, and the organic combination of Party building, social service and ideological education is realized.

Secondly, strengthening political guidance, laying a solid ideological foundation for Party members, Firming faith, and doing ideological work well can make the "red gene pass down from generation to generation".

Thirdly, system construction is strengthened, and multi-in-one management mode is constructed. Equally, "chain of responsibility" is practiced, and the responsibility system of Party construction is improved. The principle of "The Party exercises self-discipline and is strict with its members" is strictly enforced. The evaluation system of the responsibility system of the Party construction work which combines the practical problems and the satisfaction of teachers and students is established, which can play the overall function of the grass-roots party organization.

## 3.2 Strictly follow the construction policy of "grasping with both hands"

the construction of position, connotation, standardization, characteristic, foundation and high quality development should be attention to. Characterized by the Three Gorges red education brand, it adheres to the "Five Combination" education mode of combining theory and practice, online and offline, inside and outside the school, ideological and political elements and professional education. The fixed links among the Communist League, community, various organizations, party and government organs, enterprises and institutions are established and relied on, which can improve theoretical level, teaching ability, scientific research level and political accomplishment of teachers.

Finally, the teams of moral education and Ideological and Political Teachers who have a firm political position, deep feelings, innovative thinking, broad vision and upright personality are built.

4. BUILDING A BRAND OF "THREE GORGES RED" PARTY BUILDING ACTIVITIES WITH IDEOLOGICAL AND POLITICAL CHARACTERISTICS, SCHOOL CHARACTERISTICS AND REGIONAL CHARACTERISTICS

## 4.1 promoting the normalization of "1+4" modular political theory education and learning

"1+4" modular political theory learning system is and innovated. the normalization institutionalization of theme education is realized. "1" refers to the theme education and learning required by the Party committee of the school. "4" refers to the 4 parts of "XI's golden sentence, Party constitution, party history, the party's disciplines". The modular learning system includes "never forget the original intention and keep the mission in mind", "two learning and one doing", "four history" learning activities, "anti-four winds" and "eight rules", which can be focused on learning. On the one hand, it meets the learning requirements of institutionalization and normalization of Party members' learning and education activities, on the other hand, it can give full play to the professional advantages of Party members. At the same time, it can mobilize the enthusiasm and initiative of collective learning, and the organic integration of ideological and political education and teaching, political theory learning, political learning and collective lesson planning can be realized.

## 4.2 Building the "Three Gorges Red" practice base

Focusing on the development strategy of the "Yangtze River Economic Belt" and the "Chengdu-Chongqing Double City Economic Circle" and the "Healthy China Strategy", based on the central area of the Three Gorges Reservoir area, the social practice group of "Three Gorges Red" is established by excellent young teachers of Marxist college and excellent students of "Young Marxists Foster Project". The revolutionary traditional education bases of exhibition hall of Deng Xiaoping's former residence in Guang'an, Liu Bocheng Memorial in Kaixian County, Wanxian Ninth Five-Year Massacre Memorial Hall, Three Gorges Immigrants Memorial Hall were visited. The revolutionary history and red resources of the six revolutionaries, the three marshals, Jiang Jie, Peng Yongwu, Wang Weizhou, He Qifang and other revolutionary pioneers, the Eastern Sichuan Guerrillas, and the Eastern Sichuan Working Committee of the Communist Party of China in Wanzhou were excavated. Teachers and students, walking the red footmark again, tracing the red memory, interviewing with the red tasks, exploring the red stories, comprehending the red cultures, feel the red spiritual power of the party.

## 4.3 Constructing Party building book reading

Books can not only enrich students' knowledge, but also broaden their horizons. For teachers and students of the whole school, a sea of classic works within the party and Chinese and foreign classics that can develop thematic melody, and purify the mind are collected. Encouraging everyone to read one hour a day and one book a month, using excellent books to purify the mind, dispel doubts, their party spirit and theoretical research are comprehensively improved. Relying on the Party Building reading room, the "Party member book recommendation activity", "Three Gorges book fragrance branch", "Three Gorges book fragrance member", and "Party member knowledge contest" series of activities are organized, which set up corresponding awards to enhance the students' sense of accomplishment. Consequently, it can better guide the majority of Party members to read more books, read good books and love reading, so as to strengthen their faith and belief in learning.

## 4.4 Serving teachers and students, organizing and carrying out theory propaganda activities

## of "variety, argument and discrimination"

We must stand at the height of the Party, and highlight the party spirit when service teachers and students. Besides, the requirements of the party must be embodied, and the ideal and belief education be penetrated through education management. Party members should build a solid foundation of belief, and supplement the calcium of spirit, and hold the helm of ideals, and solve the "master switch" problem of world outlook, outlook on life and values by educational guidance. Innovating learning methods, integrating education and management resources for party members, elearning portfolio for party members is established. The function of National Party Building Website is developed. With the help of learning platforms, such as "Communist Party Members" education platform, 'Learning Power ' learning platform, changing the rigid education mode, new patterns of learning that highly integrated with theoretical learning and modern information technology is carry out. Stimulating interest in learning, so that party members can integrate into the party organization anytime and anywhere, and learn anytime and anywhere. The characteristics are highlighted, and the learning effect is improved constantly, which can improve the party spirit of Party members in the learning process.

For the general and specific policy of the party and major conference papers, maior international events and social news hotspots, the college promptly organizes teachers to carry out class preparation seminars and the preaching of theory, and it can provide the most timely guidance for students with the fastest speed, such as propaganda of the spirit of the Fifth Plenary Session of the 19th CPC Central Committee, great anti-epidemic spirit and great achievement of building a moderately prosperous society. It can help students who live in a changing world to distinguish right from wrong through dialogue and reflection, and value leading of students is realized. 4.5 giving play to the power of the "Three

## 4.5 giving play to the power of the "Three Gorges Red" and implement the "Red Points" system for party members

Based on the Three Gorges, the exemplary vanguard role of Party member is exerted. The standard image of party members and the bottom line frame were delineated by the means of establishment of party member points standard. In the way of checking list and Itemization, "Red points system" and "positive and negative ruler" were implemented. With the requirement of " one book for each person, monthly review", "Points Management Manual" and "Points Management Register" for each Party member were established. Scores are declared and approved by Branch records, individual applying, recommendations, Party member reviews, and organizational validations. The administrator who is assigned by party checks, registers and records the points. Through the red flag list of Party members' points, Party members can find gaps and add motivation in the comparison of scores. Due to the Party member scoring system is implemented, consciousness of accepting Party spirit training and service awareness of enhancement is strengthened.

## 4.6 Establishing a sound check-up and evaluation system

Taking XI's socialist ideology with China's characteristics in the new era as the main course in the check-up and evaluation system, and it is fully integrated into the teaching plan and layout. Party members are required to take XI's socialist ideology with China's characteristics in the new era as a compulsory course. We can really learn, understand, believe and use by reading the original works, learning the original text, and understanding the principles.

The Party branch directly under Marxism accord to the learning requirements, and combine political learning, organizing life meetings, democratic evaluation of Party members, online and offline learning records, organizing party members' Review. The "Five Combination" learning evaluation system is formed, which combines centralized learning with independent learning, theoretical learning and practical learning, offline assessment and online assessment, and combines teaching party members with youth party members. At the same time, the assessment results of

education and training of Party members are taken as the basis for excellent evaluation of party organizations and members.

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#### REFERENCES

- [1] YANG Li, FAN Jifu. On the construction of teaching staff's Party branch in learning universities in the new era[J]. school party building and ideological education, 2020(22):47-48.
- [2] TAN Yumin. Practical exploration of leading the all-round development of colleges and universities with high-quality party building[J]. school party building and ideological education, 2020(21):42-43+46.
- [3] ZHOU Fei. Student engagement, ability development and college identification: a study based on the data from "Double-High Plan" Vocational Colleges in Sichuan Province[J]. Journal of Nanjing Normal University (social science edition), 2020(05):36-48.
- [4] ZHANG Yanhong. The realistic demands and development path of the Informatization of Party building in Colleges and Universities [J]. Ideological and Theoretical Education, 2021(05): 81-85.

# On the Implementation of Tea Culture in College English Culture Teaching

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**Abstract:** Under the current background that the implementation process of English education in Colleges and universities is improving day by day, high-quality and good teaching organization and implementation plan, clear and clear teaching activity organization and guidance objectives, and systematic and complete teaching knowledge content system are needed, It is a key prerequisite for College English teaching activities to achieve good results. From the current stage of China's colleges and universities to promote the specific work flow of culture teaching, the tea culture related knowledge concept is introduced into the teaching process of English subject knowledge content in Colleges and universities, which is helpful to enrich the cultural knowledge cognitive structure of college students, To ensure that the students in Colleges and universities obtain and realize their best growth and development. This paper will focus on the implementation of tea culture in College English culture teaching and carry out a brief analysis.

**Key words:** tea culture; College English; Culture teaching; implementation; Discussion and analysis

## 1. THE EXISTING PROBLEMS IN THE PROCESS OF ENGLISH TEACHING ACTIVITIES IN COLLEGES AND UNIVERSITIES

At the present stage of historical development, under the background of the continuous enhancement of the importance of innovation in modern education and teaching system, English teaching activities in Colleges and universities, as an important teaching activity to carry out the dissemination of linguistic knowledge elements cultural ideological and conceptual knowledge elements, in the process of its specific organization and promotion, This comprehensively pays attention to the learning experience needs of English subject knowledge content proposed by college students, refers to the basic operation and development trend of English subject education and teaching activities in Colleges and universities, and selects and introduces cultural appropriate teaching knowledge elements and institutional teaching knowledge elements, which comprehensive influence that can ignored.In the process of concrete organization and promotion of education and teaching in Colleges and universities, if we can integrate the knowledge elements related to tea culture with the help of appropriate types of transformation intervention mechanisms and presentation forms into the process of interactive teaching of English in Colleges and universities, Then, on the basis of concrete and sufficient teaching knowledge content composition system, we can achieve the best effect of teaching practice activities of English subject education in Colleges and universities. The practical effectiveness of its support is not only reflected in the process of enriching the teaching content composition system, but also based on the cultivation and development of the learning habit composition system of college students to a large extent, Optimize the spiritual thinking quality of college students.

First, it is difficult to carry out English teaching activities in Colleges and universities. The main performance lies in the lack of high-quality and good cultural application background. English language is a typical form of foreign introduced language. In order to achieve good results in the process of teaching English knowledge content in Colleges and universities, we must strive to create and provide high-quality and good learning experience environment and basic environment atmosphere for college students. However, due to the influence of various subjective and objective factors, the vast majority of colleges and universities in China have not yet realized the proper and rational use of English cultural knowledge elements in the specific organization of English subject knowledge content teaching activities.

Second, under the background of current historical development, the degree of mutual integration between information science and technology and basic knowledge and cultural elements has surpassed and broken through the basic cognitive pattern of the people on a larger level. In this process of development and evolution, the comprehensive influence of cultural forms has been greatly enhanced, It has gone beyond the cognitive coverage of traditional values. The form of tea culture is a key component of the content system of modern culture in China. In the content system of tea culture with integrity characteristics, it involves not only a large number of cultural

knowledge elements, but also the transmission and presentation of spiritual character elements. The teaching and training intervention for college students is complex and diverse in terms of specific teaching contents. It needs not only the teaching link of cultural knowledge elements for college students, but also the teaching link of application skill knowledge elements for college students, And we should take measures to improve the mental concept cognitive performance of college students. In the current process of teaching and training for college students, teachers usually pay more attention to the teaching transfer of cultural knowledge concept elements and application skills elements, and fail to do a good job in the cultivation and promotion of spiritual quality for college students.

Thirdly, in the specific process of English teaching activities in Colleges and universities, the vast majority of English teachers and students only pay attention to the presentation of basic knowledge of English, but fail to pay attention to the cultivation and improvement of English thinking habits, which has caused serious adverse effects.

## 2. THE BASIC CONNOTATION OF TEA CULTURE SYSTEM

The basic spirit and ideas transmitted and presented in the form of tea culture are the key aspects that people from all walks of life in urban and rural areas need to pay attention to in the process of understanding the basic connotation of tea culture system.

For the traditional form of tea culture, in the long-term development and evolution and specific inheritance practice process, it deeply integrates and combines the diversified connotation elements contained in China's traditional cultural system, and highlights the comprehensive characteristics of basic language behavior habits, which objectively supports the full display of the diversity characteristics of tea culture system.

Under the current background of the mature development of diversified cultural forms, the historical development and evolution process of tea culture form is no longer limited to a specific country or region. The modern tea culture form based on the British tea culture form plays an important role in the development of English education and teaching activities in Colleges and universities.

## 3 THE INTRODUCTION AND PRESENTATION STRATEGIES OF TEA CULTURE IN COLLEGE ENGLISH CULTURE TEACHING

First, in order to ensure that the tea culture form can be successfully introduced into the English culture teaching activities in Colleges and universities, it is necessary to support the English teachers in Colleges and universities through the use of appropriate types of guidance and intervention, It can comprehensively, systematically and deeply understand the basic value and influence of tea culture form in the process of English teaching activities in Colleges and universities, and then actively introduce and present tea culture form in the process of participating in English teaching activities in Colleges and universities.

Secondly, in order to ensure that the tea culture form can be successfully introduced into the English culture teaching activities in Colleges and universities, it is necessary to guide and support the English teachers in Colleges and universities to comprehensively, systematically and deeply learn the basic knowledge and concepts related to the tea culture form, and then ensure the actual teaching links, Be able to have sufficient standardization and effectiveness.

Thirdly, in order to ensure the successful introduction of tea culture in English teaching activities in Colleges and universities, it is necessary to refer to the basic English learning level and learning needs of students of various majors in Colleges and universities, based on the background of the introduction of tea culture, The specific design forms the organization and implementation plan of English teaching activities in Colleges and universities. Through the design and implementation of classroom discussion teaching activities of English in Colleges and universities around the topic of tea culture related knowledge elements, the knowledge cognitive vision of students in Colleges and universities can be enriched and expanded, and the high-quality and good growth and development of students in Colleges and universities can be supported.

## 4.CONCLUSION

By combing the existing research results, we can know that in the current historical development stage, under the objective practice background of cultural concept identification and deep integration of resource elements, the basic development mechanism of tea culture form is showing a stable and full essential development and evolution trend. As for the English subject knowledge content teaching activities being carried out in Colleges and universities, organizing and promoting the English subject knowledge content teaching activities with the systematization characteristics of standardization will help to support the construction of high-quality and perfect English application skills language students. From a macro perspective, tea culture has the characteristics of connotation diversification. The introduction and application of the concept of tea culture knowledge in the process of reform and innovation of English teaching activities in Colleges and universities will help enrich the cultural knowledge cognitive vision of college students and help them grow up with high quality and stability.

#### REFERENCE

- [1] Zuo Xia. The importance of Chinese culture represented by tea culture in College English Teaching [J]. Fujian tea, 2020, 42 (11): 294-295.
- [2] Li Yan. The application of tea culture in College English culture teaching under the background of cultural confidence [J]. Fujian tea, 2020, 42 (06): 218-219.
- [3] Zhang Ruisi. Review on the application of traditional tea culture in College English Teaching [J]. Fujian tea, 2018, 40 (11): 224.

- [4] Zhang Yuhui, Shi Wanli. Application of output oriented approach in tea culture teaching of College English [J]. Fujian tea, 2018, 40 (11): 234-235
- [5] Xu min. The Application of Chinese and Western tea culture in College English Teaching [J]. Fujian tea, 2018, 40 (11): 218.
- [6] Pu Lijuan. The application of cultural differences between Chinese and Western tea in College English Teaching [J]. Fujian tea, 2018, 40 (09): 312.

# Research on the Psychological Promotion of Sports to Left Behind Children in Rural Areas

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**Abstract:** Abstract: the mental health status of left behind junior middle school students in Henan Province was investigated by using the mental health scale for middle school students. By analyzing the mental health status of left behind junior middle school students and their cognition of the regulation of different sports events, the ways and methods of psychological intervention in the mental health education of left behind junior middle school students in the new period were explored, The results show that different groups of left behind junior high school students have different cognitive status on the regulation of mental health of sports, so they should be treated differently when carrying out psychological intervention of sports.

**Key words:** left behind junior high school students; mental health; Mental health scale for middle school students

## 1. RESEARCH OBJECT AND METHOD

dual social structure of urban-rural segmentation and a large number of surplus labor force in rural areas make a large number of migrant workers enter the city. The development and construction of the city can not be separated from the migrant workers. As the vulnerable group in the city, although the problem of migrant workers is highly valued by the party and the government, the healthy growth and education of migrant workers' children are increasingly prominent. Left behind junior high school students are those who are left in the place of registered residence because of parents or one party, can not live together with their parents, and are supported by single parents or grandparents or other relatives. They are at the end of compulsory education stage, The relevant research shows that about 30% of the left behind children in middle school have various obvious mental health problems, and the left behind junior high school students have more potential risks in the development of physical and mental, that is, it more likely to produce various bad psychological behavior problems. Many studies have shown that sports can have a positive impact on mental health and can not be replaced in preventing and improving mental health. For example, the survey of the influence of sports dance on the mental health of participants written

by Xiong Wenjun, the influence of Taekwondo exercise on mental health of middle school students by mauricqiu, etc, Many research results provide a strong theoretical basis for us to study the effect of different sports on the mental health of rural left behind junior high school students. However, in the development of mental health education for rural left behind junior high school students, there are few relevant researches on how to intervene in the aspects of physical exercise in accordance with different psychological problems. Different sports items have different effects on the different psychological problems of rural left behind junior high school students, Therefore, it has become the key of this research.

Based on the investigation of the mental health of the left behind junior high school students in rural areas of our province by using the mental health scale, this paper analyzes the mental health status of the left behind junior high school students and the cognitive status of the left behind junior high school students' regulation of different sports items, and explores the regulating effect of different sports on the mental health of the left behind junior high school students in different groups, In order to make the best use of the existing resources of the school and use the sports with better effect to actively intervene in mental health education, and to give full play to the functions and values of sports events in the mental health education of middle school students in the new period, It provides a useful reference for the sustainable development of mental health education for middle school students in China.

### 1.1. research object

This study takes the left behind junior high school students from two rural middle schools randomly selected from Zhoukou, Sanmenxia, Nanyang, Xinxiang and Zhengzhou as the research object. The object of this study represents the level of rural left behind junior high school students in different regions of Henan Province, which can be said to be representative of the characteristics of the representative. In this study, 150 questionnaires were distributed in each school, of which 50 were distributed in each grade, 1500 were distributed in total, 1500 were recovered, the recovery rate was 100%, 42 invalid questionnaires were eliminated, 1458 valid questionnaires were recovered, and the

effective recovery rate of the questionnaire accounted for 97.20%.

#### 1.2. method

1.2.1. research tools: the middle school students' Mental Health Scale (MSSMHS) compiled by Professor wangjisheng, a famous psychologist in China, was used. The scale consists of 10 sub scales, which are compulsion, paranoia, hostility, interpersonal tension and sensitivity, depression, pressure, maladjustment, anxiety, learning emotional imbalance and psychological imbalance. There are 60 items in this scale, which are classified as 5-level scoring system, grade 1 is normal, and 2-5 is unhealthy. Professor Wang Jisheng has tested the scale with large samples, and the results show that the scale has good reliability and validity. The questionnaire content outside the mental health scale includes 35 questions. The reliability test adopts the method of retest, and the retest reliability is 0.91; The validity test adopts content validity test. Please evaluate the design content of the questionnaire by relevant experts. After adopting the expert opinions, modify the questionnaire to form the final questionnaire.

1.2.2. measurement method: the questionnaire method is adopted. Before the test, the researcher shall explain the purpose and content of the test, and give unified guidance in cooperation with the class teacher. The students shall answer the questions according to the questionnaire guidance, and then take back the test on the spot after the completion of the answer.

1.2.3. data processing: SPSS 11.5 statistical software is used to process and analyze the acquired data.

#### 2. RESULTS AND ANALYSIS

2.1. analysis of mental health of rural left behind junior high school students

Mental health, also known as mental health, refers to the fact that people can maintain normal psychological state in the internal or external environment change. It is a comprehensive combination of sound cognitive ability, moderate emotional response, strong will quality, interpersonal harmonious relationship, complete personality. Psychological problems are different from physiological diseases. It is a series of problems caused by the control system of the central nervous system of brain, which can indirectly change the personality, world outlook and emotion of human beings. The classification of mental problems can be divided into four grades: health state - bad state - mental disorder - mental

From the statistical results of mental health assessment of left behind junior high school students, 14.3% of students think they have bad state, 40.7% of them feel that they may have bad state in one aspect, in addition, The existence of mental health status of left behind junior high

school students can also be supported by the scores of factors in the rural left behind junior high school students' Mental Health Scale (see Table 2). From table 2, we can see that the scores of the mental health sub scales of rural left behind junior high school students are more than 2. In addition, through the investigation, 60.26% of the left behind middle school students have slight or more mental health problems, of which 45.32% of the students have mild mental health problems, 12.18% of them are moderate mental health problems, and 2.76% of the students with serious mental health problems. This shows that the mental health of the left behind junior high school students in rural areas in our province is not serious, but the mental health education should be paid great attention to these groups.

2.2.factor analysis of the cognitive status of left behind junior high school students on the psychological regulation of sports events

The results show that moderate exercise has a very positive effect on the control of anxiety, depression and prevention of mental diseases, especially the small and medium intensity aerobic activities, which has both short-term and long-term significance for mental health. The study confirmed that people who do not participate in sports are likely to have depression in the future. Not participating in exercise is an important factor leading to depression. The reason why moderate exercise is beneficial to mental health can make people happy and excited, and make people get good mood. Because exercise promotes the brain to secrete a kind of psychological "pleasant hormone" endorphin, which can regulate cardiovascular contraction and relaxation, make blood vessels elastic, and also act as a medium between psychology and immunity. It can be combined with central cells of cerebral circulation, It is the immune cells that obtain a special information due to psychological activities, and thus obtain greater immunity. At the same time, these immune cells can be gathered in some part of the body. Because exercise increases the central body temperature, changes the neurotransmitters in the brain (the changes of the ratio of adrenaline, dopamine and serotonin), the secretion of endorphin increases, which reduces muscle tension and improves mental and psychological state.

Because of the diversity of sports and the influence of various sports on the regional, teachers and economic conditions, this study only makes a survey and Analysis on the psychological adjustment of 16 sports that are easily accessible to middle school students in daily life based on literature analysis and expert interviews, The cognitive status of the psychological regulation of the left behind junior high school students in rural areas on different sports events was explored and studied by factor analysis.

Before factor analysis, kmo test and Bartlett ball test results show that kmo value is 0.770, which indicates that it is suitable for factor analysis. The probability of association given by Bartlett's ball test is 0.000, which is also considered suitable for factor analysis. From the factor analysis results table 3, we can see that the first five common factors can explain 82.649% of the original variables. It can be seen that after extracting the five common factors, they reflect most of the information of the original variables.

From the results table of factor load matrix, it can be seen that the meaning of each factor is also clear. The first factor mainly reflects the sports of the skill leading net separated antagonistic group, which mainly includes volleyball, badminton, table tennis, tennis, shuttlecock and other events, accounting for 26.15% of the largest proportion, which is the most important factor; The second factor reflects the sports items which belong to the endurance group of the physical strength leading category, mainly including the middle and long distance running, wheel skating and directional sports, which plays the second role in regulating the factors; The third factor mainly reflects the recognition of the adjustment of Taekwondo and Sanda among the rural left behind junior high school students, which should be the skill leading fighting antagonism group; The fourth factor reflects the sports events which are "physical dominant similar to the match competition items", mainly including basketball and football; The fifth factor mainly includes aerobics, martial arts routines and sports dance, which should be a skill leading group of performance difficult to beauty.

The reason why the skill leading network-based antagonistic project has become the most regulated project recognized by left behind junior high school students may be due to the fact that the athletes should have good spatiotemporal intuition, reflect speed and concentration ability, and have good sense of fighting and self-control. Besides, such sports are mainly aerobic metabolism The intensity of small and medium-sized sports which is easy to control, and has the characteristics of strong interest and organization, so the psychological regulation of these sports is the most recognized by students and finally become the most favorable sports for regulating mental health. 2.3.multivariate linear regression analysis of the scores of factors and the recognition of the regulatory role of sports items in the mental health scale of rural left behind junior high school

Through the multiple linear regression analysis of the 10 factors of compulsion, paranoia and hostility in the mental health scale of rural left behind junior high school students and the recognition of the regulatory effect of 16 sports events, it is found that only compulsion, interpersonal tension and

sensitivity, depression There is a significant linear correlation between anxiety and hostility and the recognition of regulatory effect of 16 sports events. It can establish multiple linear regression equation, and sample regression effect is good, and the fitting degree of regression equation is also high. The other five factors and the recognition of adjustment function of sports items are not suitable for multivariate linear regression analysis, and it is no longer described. All the methods used in the selection of independent variables are all introduced in linear regression analysis. The following is only explained by the establishment of regression model of forcing factors.

From the table of common statistics results of the fitting degree test of multiple linear regression equation of forcing factors, it can be seen that the regression coefficient is 0.818, the judgment coefficient is 0.668, and the adjusted coefficient is 0.667, which indicates that the sample regression effect is better. In addition, the variance analysis results of the regression equation significance test of forcing factors can also be seen that the F value is 396.086 and the associated probability value p < 0.000, which indicates that the fitting degree of regression equation is high, and there is linear regression relationship between multiple independent variables and dependent variables.

According to the regression coefficient analysis table, if the forcing factor is set to Y1, the recognition of the adjustment of 16 sports such as basketball, volleyball and orienteering is set to x1, X2, X3 and x16, we can establish a regression model for score of forcing factors, The multiple linear regression equation is: Y1 = 1.267 + 0.571x1 $+ 0.271x2... +0.373 \times 15-0.408x16$ . From the regression equation established, it can be seen that the main sports that play an important role in the regression model of forcing factors are basketball (x1) and wheel sliding (x15), The results show that the students with higher scores of compulsive factors in the mental health scale of rural left behind junior high school students think basketball and roller skating can play an important role in psychological regulation.

In addition, the scores of four factors, namely interpersonal sensitivity, depression, anxiety and hostility, and the recognition degree of 15 sports events were analyzed by multiple regression analysis. If the four factors of interpersonal tension and sensitivity, depression, anxiety and hostility were set as Y2, Y3, Y4 and Y5, the multiple linear regression equations between them and 15 sports events were respectively:

Y2=1.770+0.060x1-0.100x2...+0.341x8...0.296x15+0.082x16; Y3=0.865-0.070x1-0.344x2...+0.341x9...+0.285x16; Y4=1.323+0.099x1-0.263x2...+0.644x9...+0.289x15-0.044x16; Y5=-0.112 +0.267x1-0.231x2...+0.525x12...+0.211x16

From the regression equation, we can see that the sports items which play an important role in regulating interpersonal sensitivity factors are aerobics (x6) and wheel skating (x15); The sports that can play an important role in regulating depression factors are Taekwondo (x9) and directional sports (x16); The main sports that can regulate anxiety factors are Taekwondo (x9) and roller skating (x16); The sports events which can play an important role in regulating hostile factors are mainly sports dance (x4) and basketball (x1). Therefore, when making the intervention plan for the students with higher scores of related factors in the mental health scale, we must treat them differently, and try to choose the sports items that they are interested in and generally think that the effect of psychological adjustment is better for teaching and guidance, so as to overcome and alleviate the mental obstacles or bad psychological state caused by various reasons.

2.4. The logistic regression analysis between the mental health status of rural left behind junior middle school students and the regulatory role of different sports

As mentioned above, table 1 shows that 14.3% of the rural left behind junior high school students think that they are in a bad state, and 40.7% of the students feel that they may be in a bad state, In this study, the variables with factor score greater than or equal to 3 in the mental health scale of rural left behind junior middle school students are regarded as the variables with bad mental state, and the other variables are regarded as the variables of health state. Using the method of logical regression analysis, this paper analyzes and studies the relationship between the mental health status of rural left behind junior middle school students and the regulatory role of different sports. In the logistic regression analysis, the variable value of bad psychological state is set to 1, and the variable value of mental health state is set to 0.

The iterative history results show that all cases (n = 1458) were selected as regression analysis cases; The initial log likelihood is 3797.432; The constant term is also included in the model; The iteration ends at step 3, because the change of the parameter estimation and the previous step is less than 0.001. The results of the first iteration showed that for y = 0, the accuracy was 85.2%, for y = 1, the accuracy was 44.2%, and for all cases, the accuracy was 71.2%.

It can be seen from the Wald statistic value and its associated probability of each variable that the main factors with larger Wald statistic are: middle and long distance running, orienteering and roller skating, which are 144.750, 102.712 and 99.624 respectively, and the associated probability of the three variables is 0.000, which indicates that the

middle and long distance running, orienteering and roller skating are more important in the regression equation, The results show that the left behind middle school students who are in bad mental health state or obstacle state have a higher recognition of the psychological regulation of this kind of sports. According to the dominant factors that determine the competitive ability, this kind of sports should belong to the endurance event group dominated by physical ability, which can better cultivate students' psychological tolerance, Long term exercise can improve students' ability to endure physical and psychological extreme fatigue with super endurance, mobilize their potential ability to the maximum extent, and cultivate students' indomitable will quality. However, it is difficult to control the intensity of this kind of sports. When carrying out mental health education and formulating physical intervention measures for this kind of students, we must pay attention to guiding students to take more aerobic exercise with medium and small intensity, which is more conducive to mental health.

#### 3. CONCLUSION

- 3.1. The scores of each subscale of mental health of rural left behind junior middle school students are more than 2 points, and there are indeed more students with moderate and mild mental health problems in rural left behind junior middle school students in our province.
- 3.2. By analyzing the cognitive status of rural left behind junior middle school students on the psychological regulation of different sports, it is found that rural left behind junior middle school students generally believe that the mental health regulation of the sports which belong to the skill dominated antagonistic event group is the most important and effective.
- 3.3. The students with higher scores of compulsive factor in the mental health scale of rural left behind junior middle school students think that basketball can play the most important role in psychological adjustment; The students with higher scores of interpersonal sensitivity factor think that aerobics can play a better role in psychological adjustment; Students with higher scores of depression factor and anxiety factor think that regular participation in Taekwondo, orienteering and roller skating can play an important role in regulating their psychological pressure; The students with higher scores of hostility factor in the scale test results think that sports dance can play an important role in regulating their mental health.
- 3.4. The rural left behind junior middle school students who are in bad mental health state or obstacle state have higher recognition of the psychological regulation of middle and long distance running, orienteering and roller skating. They think that regular participation in these sports is very beneficial to their health and can play a

better role in psychological regulation, We should pay enough attention to the mental health education and the intervention of physical activities.

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#### REFERENCE

- [1] Joy, Xu Weiwei, Zhang Nan. A cross-sectional historical study on the change of mental health level of rural left behind children [J]. Psychological technology and application, 2021, 9 (05): 283-292. [2] Li Xiaolan, Li Jianxing. Practice and Exploration on the protection of the rights and interests of rural left behind children: a case study of Jintang County, Chengdu [J]. Decision consultation, 2021 (02): 93-96.
- [3] Zhang Ting, PI Mei, Shi Zhilei. Effect of parents' going out to work on mental health of rural left behind children [J / OL]. Northwest population: 1-13 [2021-05-19] http://kns.cnki.net/kcms/detail/62.1019.c.2021040 8.1018.001.html.
- [4] Zhao Jingjun, Wang Yanxin, Wang Tian, Wang Xin, Zhao Lu. Breakfast status and influencing factors of left behind children in rural compulsory education in Shaanxi Province [J]. Practical preventive medicine, 2021, 28 (04): 426-429.
- [5] Zhang Yin, Yin Xu. Problems and Countermeasures of autonomous learning ability of rural left behind children [J]. Industry and Technology Forum, 2021, 20 (07): 98-99.
- [6] Zhang Zimeng. On the education problems and Countermeasures of rural left behind children -- Taking y primary school in X city as an example [J]. Fortune times, 2021 (03): 94-95 + 98.

## Implementation of High Concurrency Performance Optimization of Physics Web Examination System Based on B/S Structure

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Abstract: In addition to meeting the functional requirements of users, the response performance of high concurrent requests and accessing large amounts of data is a problem that must be faced at present. This paper designs and implements the basic functions of the high concurrency physics examination system, and solves the performance problem of high concurrency query of a large number of physics examination data. This paper presents a convenient and high-performance distributed deployment scheme. Through Tomcat application cluster, nignx + LVS + kept realizes load balancing and relieves the pressure of system load. The database cluster is deployed through database middleware, and the data is divided into database and table, as well as read-write separation. In order to ensure the performance of the system, reduce the pressure of the database and speed up the response speed of the system, the cache mechanism is added. After the deployment, the performance of the system is tested, and the test results are analyzed and compared with the mainstream examination system in the market. The experimental data show that the deployment scheme designed in this paper improves the performance. This paper has a certain practical value for the scheme optimization of the physics examination system with large amount of

**Keywords**: Physics examination; management system; high concurrency; distributed deployment.

## I. INTRODUCTION

With the development of network technology, the research of network examination system based on computer technology has been improved [1]. Universities and IT enterprises have developed a lot of network examination systems, which are widely used in schools and many industries and departments, and have achieved high economic and social benefits [2-3].

Compared with the traditional examination method, computer network examination can break through the geographical restrictions, realize automatic control, automatic marking and other characteristics, greatly saving manpower, financial and material resources [4]. The B / S mode has the characteristics of no client configuration, high development efficiency, easy and maintenance. management The examination system based on B / S mode is gradually becoming the mainstream application. However, each client user's access will occupy certain resources of the server. Therefore, with the same complexity of hardware and software algorithms, each application server generally has a maximum number of concurrent users. Once the number of concurrent users exceeds this number, the system performance will decline sharply, and even there will be server denial of service such as unresponsive user access [5].

The network examination system needed by the Physics system of a province is mainly used for business skills competition. It needs to keep the content of each participant's test paper consistent, the test questions are randomly sorted, and the necessary attached documents are downloaded and uploaded. Generally, the number of people who take the examination at the same time is about 600, even up to thousands, and a large amount of data is often accessed and submitted concurrently [6-7]. The existing examination system in the market is difficult to solve the problem of high concurrent access and large amount of data storage caused by this business demand. Therefore, how to optimize the network examination system design strategy, improve the server performance, so that it can meet the application of high concurrency and large amount of data, is a problem that must be solved.

## II. CONCURRENT PERFORMANCE OPTIMIZATION STRATEGY OF NETWORK EXAMINATION SYSTEM

In the application of B / S mode network examination system, the server performance is most affected. There are three main reasons for slow response or even stop response [8]:

- 1) Random test paper or random sorting algorithm;
- 2) There are many users who request online examination at the same time;
- 3) The amount of data that users submit to the server is large.

For the above reasons, combined with the business needs of users. The following optimization strategies can be adopted in system design.

2.1 Using DBMS special function to realize fast random ranking of test questions

Because the content of the test paper is consistent and the test questions are randomly sorted, the random data generation function provided by DBMS can replace the random test paper generation or random sorting algorithm. Taking SQL Server2000 as an example, taking full advantage of the characteristics of NEWID () function, we can realize fast random sorting of test questions. That is, for each person who enters the exam page for the first time, use the statement "INSERT INTO the answer sheet (candidate information ..., test information ..., sequence number) SEIECT candidate

information ..., test information ..., NEWID() from test sheet WHERE..." to insert each test sheet record in the answer sheet. In the test sheet sorting field "sequence number", use newid () function to insert the unique value of random unique identifier type [9].

2.2 Using reasonable time difference to start examination in batches

Due to the particularity of the skills competition, the test papers need to be released before the competition. After entering the system, the participants can see the released test papers. If it is not time for the test, they cannot answer the questions. According to this demand, when the user queries the available test paper, the server adds a random delay on the remaining time (generally between 0-120 seconds). When it returns to the client, it is combined with JavaScript timer function. When all the remaining time values are reduced to 0, the user can answer the test paper in a reasonable time difference. Greatly reduce the peak of data flow, reduce the pressure of the server. The test shows that when 500 people enter the system at the same time to answer questions, there are nearly 80 requests waiting at the highest time in the queue without using the time-sharing strategy. After adopting the time-sharing strategy, the queue will not

### 2.3 Using server to generate test paper page

On the server side, JavaBean function is called to generate a string including HTML tags, including the content and layout of the test paper. This string is called in the JSP file to generate HTML pages. Because JavaBean and JSP files are compiled as sevedet and then called, javasript is interpreted and executed at the same time, so the efficiency of one-time generation of test paper pages by severlet on the server side is much higher than that by using javasript to call circular statements on the client side. The test shows that when about 500 people use a set of 150 test papers online at the same time, it takes nearly 2 minutes to generate and display the test papers in the client loop, while it takes 5-10 seconds to generate the HTML tag string of the test papers in the server and display it in the client.

2.4 Using client to reduce the amount of answer update data

The general answer updating algorithm mainly compares the answers submitted each time with the answers submitted before on the server side. If the answers already exist, they will be replaced. Otherwise, a new answer record will be inserted. Using this method of data comparison will increase the burden of server processing because of submitting a large number of unnecessary data. In the case of high concurrency, it will lead to server performance degradation, and even cause deadlock and data update failure because of long processing time. In order to avoid this problem, the client JavaScript script can be used to detect the update of the answers. Only the updated answers are sent to the server, and the answer record is directly updated or inserted in the server instead of circular comparison. On the client side, the user will not feel the time delay, but can reduce the amount of data to be processed by the server side, and reduce the possibility of a slightly longer time or a higher number of concurrent. In

addition, in the client with the use of timer, every 3-5 minutes to call the answer update detection, save data and other functions, not only ensure that the data will not be lost in time, but also reduce the data to be processed each time, so as to effectively improve the performance of the server.

The client JavaScript script processing algorithm mainly includes: 1) define the array according to the number of questions, and the initial value is empty. 2) Before storing the data each time, the answer data of each question is compared with the values of the corresponding elements of the array one by one. Only the question Id and the answer with the updated answer are selected to generate a string with separators, which can be divided into rows and columns (the format is "question no. | answer ~ question no. | answer ~... ~ question no. | answer") as the answer information, and the answer is assigned to the corresponding elements of the array. 3) Using iframe or Ajax technology, only part of the data of the test page is submitted, such as the identification information and answer information string such as test paper ID, examiner ID, start time of the test. The algorithm of server includes: 1) divide the answer information string into the answer array according to the separator; 2) The identification information and the answer array are processed circularly, and the generated SQL statement is added to the batch command; 3) Submit batch commands to the database to perform batch updates.

## III. DATA STORAGE SECURITY STRATEGY UNDER HIGH CONCURRENCY

In order to keep the data storage safe, the security strategies adopted in the aspect of data storage mainly include: storing the data regularly to ensure that the data is as up-to-date as possible; When the application server is unable to connect with the database server, the test ID and answer are saved to the application server in text file format. When the client cannot connect with the application server, the system can use the encrypted excel document to store the test ID, answer and file name of the uploaded attached data in the default folder of the client. After reconnection, the data recovered from the client can be transferred to the server.

#### 3.1 Practical effect

With the above optimization design, the examination system running on IBM X3850 (quad-core 2.13Ghz/4M/1066MHz, 4GB memory/windows 2003/WebLogic server 8/SQL server 2000) can support about 1, 500 people to take the examination online at the same time. However, there are still some aspects that need to be improved in this system. For example, when a certain number of users browse a listed document at the same time, the server will respond slowly because of I/O efficiency, which will be the next problem we will study and solve.

Web mining is a technology that applies data mining technology to the use of Web site resources and automatically discovers and extracts information and knowledge from Web documents and services. It uses data mining algorithms such as qualitative induction, classification learning, association rule mining, clustering analysis, etc., to extract interesting and useful ACADEMIC PUBLISHING HOUSE

patterns and other hidden information from related resources and users' browsing behaviors. According to different mining objects, Web data mining can be divided into three types: Web content mining, Web structure mining and Web usage mining [10] (fig. 1).

difference between traditional teaching environment and individualized teaching environment lies in the intermediate link, which can be clearly seen through the comparison between Figure 2 and Figure 3. In the personalized environment, the learning platform of the middle layer has been expanded. The individualized scheme can establish a personalized learning mode according to the characteristics of learners. The learning platform records the user's access, reorganizes the Web access transaction model, and obtains the Web access transaction library. The frequent itemsets are generated by mining Web access transaction database and stored in the knowledge base. After that, the personalized recommendation module extracts the current user's access sequence, matches the frequent patterns in the knowledge base, and then recommends the qualified teaching resources to the learners according to the association principle. Different learners will have different behaviors when using the resource database. Personalized service is to provide different services to users according to the characteristics of different users. The main work is to efficiently obtain useful information from massive data to meet the personalized needs of different users. The personalized network resource library provides each learner with learning resources that adapt to their needs and characteristics, and automatically adjusts the content of the resources, making learners feel that the whole teaching system is specially customized for them.

## V. CONCLUSION

As an important part of computer distance education, network examination system has been widely used with the development of network technology. With the continuous expansion of the application object and the scale of the examination, the high concurrency and large amount of data has become the bottleneck of improving the performance of the network examination system. Based on the design and application of the network

examination system of a physics examination system, this paper analyzes the bottleneck of the system under the condition of high concurrent application, and gives the solution of the system.

#### REFERENCES

[1] Zhu Xiujie, Wang Tongshun. Online Processing of Intransitive Verbs by Chinese Students. Foreign Language Teaching, 2018, V.39; No.189 (01): 55-59.

[2] Zhang Shanshan, Xu Jinfen. the Influence of Online Automatic Feedback on English Learners' Writing at Different Levels from the Perspective of Zpd. Foreign Language and Foreign Language Teaching, 2019, 1:19-24

[3] Xu Jiajin, Li Xiaochen. a Study on the Discourse Construction of Male and Female Family Based on Bnc Corpus Members: a Study Based on Bnc. Journal of Pla Foreign Language Institute, 2014, 037 (001): 10-17, 30. [4] Zhang Haisen, Dou Weilin, Huang Ronghuai. Research on Real-time Online Oral English Teaching Based on Qq Network Platform. Foreign Language Audio Visual Teaching, 2007 (06): 42-46.

[5] Chen Hongping, Ma Tiechuan. Exploration and Practice of Promoting English Learning Through Online Testing Course. Foreign Language Circles, 2005, 5: 67-71

[6] Luo Hongwei, Zhu Zhiting. Emotional Design Framework of Online English Teaching. Foreign Language Audio Visual Teaching, 2008, 1: 14-18.

[7] Li Hengping, Fan Weiwei. Application of Asp in English Teaching Website. Foreign Language Audio Visual Teaching, 2001, 4: 26-28.

[8] Tang Jinlan, Wu Yian. a Review of the Application of Online English Writing Assessment System. Foreign Language Teaching and Research, 2011 (02): 273-282. [9] Zheng Chunping, Wang Lili. Structural Relationship Between College English Learners' Technology Acceptance and Online Self Regulated Learning. Foreign Language Teaching, 2020, 041 (002): 64-70. [10] Luo Hongwei, Zhu Zhiting. Emotional Design

[10] Luo Hongwei, Zhu Zhiting. Emotional Design Framework of Online English Teaching. Foreign Language Audio Visual Teaching, 2008 (01): 15-19.

# Innovative Design and Practice Of "System Integration" Teaching Based On Ausubel Model

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Abstract: In this paper, a new teaching implementation plan for the current situation and problems of the project-based course "System Integration" is proposed based on the design and production of intelligent vehicles. The project tasks are reconstructed based on Ausubel teaching model. The teaching process is improved due to hierarchical capability criteria with a focus on teaching to students' needs. The innovative teaching design proposed in this paper can stimulate students' enthusiasm for learning and enable students of different ability levels to really learn and apply what they have learned within their own capacity.

Keywords: System Integration; course reform; Ausubel model; hierarchical capability criteria

#### 1. INTRODUCTION

In recent years, building specialized courses from competitions<sup>[1]</sup> is gradually becoming a hot spot for many higher education institutions in China to focus on when building their majors. Zhang <sup>[2]</sup> proposed to promote experimental teaching reform by intelligent vehicle competition. In 2011, School of Internet of Things, Wuxi Vocational College of Science and Technology("our college"). How to develop the syntheses training of specialized courses including "Fundamentals of Electrical and Electronics", "EDA Application Technology", "Sensor Principles and Applications", "Fundamentals of Embedded Technology", etc., becomes the primary problem we have to solve.

According to the work tasks and vocational ability requirements of IoT application technology, and considering the development trend of the industry, the school has opened a syntheses training of the specialized courses called "System Integration". The syntheses training realize the design and production of intelligent vehicles based on Freescale's MC9SX128 microcontroller. The task is to enable students to master the application of electronic components, master the design and debugging of circuits and PCBs, have the ability to design and develop electronic circuits and the ability to design and develop microcontroller software and hardware systems. Further, the syntheses training can improve students' operational skills and the ability to solve practical problems.

As an important syntheses training course, "System Integration" provides a platform for the integration and syntheses application of the previous specialized foundation courses and specialized courses, which plays a very important role in promoting the formation of students'

vocational ability and cultivating the ability of "system integration".

## 2. THE CURRENT SITUATION AND PROBLEMS OF "SYSTEM INTEGRATION" COURSE

The training course focuses on developing students' practical skills. The content of course training is organized with the production of intelligent vehicles as the main line. The project-based orientation of the entire course content highlights the training of students' vocational skills. The course is taught by the teacher's requirements or demonstrations, and students are organized in groups to carry out practical activities. At the same time, the team members are evaluated through the racing competition of intelligent vehicles, so as to improve the students' enthusiasm and initiative in learning.

However, there are some problems in the actual teaching of this course. Firstly, the course content lacks a logical main line. Project-based course content, follow the "must" "enough" principle, knowledge and ability objectives are clearly pointed out, delete the complexity and simplify. However, this is prone to broken knowledge chain, as well as the blurring of the standard of adequacy, resulting in the lack of a logical thread in the course content. Secondly, the teaching activities lack innovative practice. Task-driven teaching activities are prone to mechanical imitation of learning to produce works, which cannot really mobilize learning initiative, and practical and innovative abilities are not really improved. Thirdly, the assessment method lacks reasonable mechanism. The assessment method based on works is prone to "one size fits all" unreasonable evaluation for higher vocational students with different levels, which cannot effectively improve the practical ability of poor students and highlight the innovative ability of excellent students.

In fact, the training course is a syntheses application part of the previous specialized courses. There need many knowledge elements, high ability requirements and difficult learning for this training. Students will inevitably encounter many difficulties in practice, leading to a decline in motivation and less than ideal learning results. Therefore, dissipating the difficulties of the course, cultivating students' ability and practically solving these problems are the focus of teaching this course.

- 3. THE BASIC IDEA OF TEACHING INNOVATION PRACTICE OF "SYSTEM INTEGRATION"
- 3.1 Innovative teaching idea based on cognitive structure

Teaching is dynamic knowledge generation. Traditional teaching models focus only on how teachers teach or how students learn, without considering the inherent connections. Both the "teaching" and "learning" approaches are derived from experience. Since the 1970s, research in cognitive theory has shown that teaching and learning processes of human problem identification, problem analysis, and problem solving can be explained more rationally and authentically based on cognitive structures. From Piaget's discovery learning theory<sup>[3]</sup>, Ausubel proposed the theory of meaningful learning[4-6], which argues that the success of learning is greatly related to the learner's prior knowledge. Previously, most of the practical courses were the traditional teaching mode, which emphasized student subjectivity but ignored students' original knowledge level. In the teaching of "System Integration" course, students learn new knowledge in the Ausubel model<sup>[7-8]</sup> and construe a scientific process of teaching interaction based on the cognitive

3.2 Hierarchical capability criteria with a focus on teaching to students' needs

The difficulty of "System Integration" as a syntheses training course before graduation in IoT Application Technology is self-evident. The previous "one size fits all" teaching requirements have discouraged many students from taking the course. The core of this reform of the teaching method of this course is to face the actual level of our students and teach them according to their abilities. In the teaching interaction, students are divided into three levels of competence criteria according to their actual level, i.e. knowing how to design, making and telling, followed by assigning work tasks so that they can acquire knowledge through efforts within their ability and get satisfaction in the process of knowledge seeking activities. In other words, the hierarchical capability criteria lead to hierarchical work tasks that allow students to increase their "cognitive drive" and interest in learning activities.

3.3 Optimize the teaching effect through "second class"

The limited time available for teaching in classroom prevents some of challenging content from course being covered in depth. For this reason, the "second classroom" has become an effective extension and supplement to classroom teaching. Further, the "second class" dissolves the contradiction between "not enough" and "not enough" for students of different levels. In recent years, our "second classroom" mainly includes the "Intelligent Vehicle " club and the online interactive platform. Students who have the ability to learn and have strong innovative ability can deepen their knowledge rely on the "second classroom". They compete with each other based on the national intelligent vehicle competition as an opportunity. Thus, "second classroom" can effectively improve students' practical and innovative ability. In addition, the "second classroom" also introduces the latest developments in the discipline, professional information and development prospects to students, and broadens their academic horizons.

4. TEACHING STRATEGIES FOR INNOVATIVE TEACHING PRACTICES OF "SYSTEM INTEGRATION" 4.1 Reconstruct typical project tasks based on work process orientation

This course carefully sets up the work task situation, reconstructs the four projects including project planning, hardware design, software programming and comprehensive debugging. And the course organizes the course content with the production of intelligent vehicles as the main line, and determines 13 typical work tasks. Among them, project planning includes two tasks: requirement analysis and project planning. The hardware design includes five tasks: power supply circuit design, servo control circuit design, motor control circuit design, speed measurement circuit design and path-finding circuit design. The software programming includes three microcontroller programming tasks: speed control, speed measurement and path recognition. The syntheses debugging includes three tasks of structure optimization, hardware testing and software debugging of the intelligent vehicle.

The advantage of organizing the content in this way is that it not only subdivides and "fragments" the tasks, but also "spirals" the knowledge content as the project progresses. Thus, the content of training projects forming a complete knowledge network.

4.2 Set up a reasonable teaching process based on the Ausubel model

This course is practice-oriented, with classroom teaching focusing on "how students learn" and building "teaching practices that enable students to learn in a meaningful way. To this end, the following teaching process is set up. (1) Cognitive first: explain the background of the project and provide reading materials. (2) Problem-driven: propose task requirements and introduce typical cases. (3) Practical inquiry: guide independent learning and promote ability generation. (4) Testing and feedback: carry out self-correction and timely diagnosis and guidance. (5) Expansion and enhancement: Summarize and enhance, consolidate and deepen understanding.

The process combines the project, the difficulty from shallow to deep, the content spiral evolution, the process cycle, so that students form "cognitive internal drive" in time, active learning, active thinking, learning to apply.

Take the task of Project 2 "Path Tracing Circuit Design" as an example. Through practical teaching, the course enables students to understand and master the selection and use of photoelectric sensors, as well as the design and debugging methods of photoelectric tracing module circuit and PCB. The basic teaching process is divided into five steps. (1) Cognitive first: briefly outline the basic principle of photoelectric tracing and the advantages and disadvantages of photoelectric tubes. Also, find and read materials to pave the background of knowledge. (2) Problem-driven: Present a task on the selection and use of photoelectric sensors. After outlining the background knowledge, students will discuss and catalyze the conclusion. (3) Practical inquiry: Through

the introduction of common photoelectric tracing circuits, we guide independent learning and motivate students to participate in the design of photoelectric tracing circuits for intelligent vehicles, reflecting the progression of thinking and promoting knowledge and ability generation. (4) Test feedback: complete the welding and installation of the tracer plate. During the process, the teacher timely diagnosis and guidance; carry out mutual testing and evaluation, guide students to self-correction; site tour to observe, individual guidance exchange. (5) Expand and enhance: Summarize and enhance, consolidate and deepen the understanding, and further consider the camera tracing problem. Meanwhile, write a related technical paper.

4.3 Teaching in line with the student's ability based on hierarchical capability criteria

This course aims to syntheses train students' vocational skills in various aspects such as data review, circuit design, software design, solution modification, circuit construction, report writing, and syntheses debugging. Also, the teaching design focuses squarely on the actual level of students and sets up job position based on hierarchical capability criteria. Specifically, the students were divided into groups of 6 students each, with 2 set for engineer positions, 2 for technician positions, and 2 for technical support positions. Among them, students in technical support positions are responsible for collecting and organizing information, writing technical documents, and demonstrating product creation to develop their application skills. Students in technician positions are responsible for the analysis of information and the construction of circuits during the learning process to develop their practical skills. Students in engineer positions are responsible for the design of circuits and the writing of programs to develop their creative skills. Teachers divide learning groups, select jobs and assign work tasks according to the actual level of individual students in teaching guidance and student learning practice. Different positions have different starting scores. Such a hierarchical structure of "role-playing" and coordination enables students to do their own jobs and make the best use of their abilities to complete projects within their own capacity and to improve their capabilities, so that they can truly learn. The categorized gradient evaluation is also an effective way to motivate students and ensure that they learn effectively in the classroom.

## 5. CAPABILITY EVALUATION CRITERIA FOR YEACHING INNOVATIVE PRACTICES IN "SYSTEM INTEGRATION"

The renewal of teaching equipment, the reform of teaching methods, the reorganization of teaching contents and the stratification of teaching objects all focus on the cultivation of students' abilities.

5.1 Emphasis on learning method guidance, from "learn" to "can learn"

The classroom is a stage for teachers and a world for students. The task of teaching is not only to let students "learn", but more importantly to let them "know how to learn".

In the teaching process, teachers should pay attention to the instruction of students' learning methods, so that they can seize the important link of teaching. In the teaching activities, students should observe what they can observe; they should think about what they can think about; they should express what they can express; they should do what they can do; they should conclude what they can conclude. Teachers cannot take over the learning activities of students.

5.2 Organize the "second classroom" to enhance the innovation ability

With the characteristics of student consciousness, time flexibility and content enrichment, the second classroom activities can serve as an effective extension and supplement to classroom teaching. And, the second class can dissolve the contradiction between "not enough" and "not enough" for students of different levels. Students who with strong learning ability can enhance their practical and innovative abilities through various professional competitions as an opportunity. Moreover, the second classroom also broaden students' horizons via learning platforms, lectures, academic salons, etc.

5.3 Enhanced collaborative learning based on hierarchical capability criteria evaluation

Collaborative learning is not simply group work, but "roleplaying" and coordinated cooperation with a hierarchical structure. Students of different levels can independently choose appropriate task roles, learn independently, discuss with each other, and thus collaborate to complete the project. The categorized gradient evaluation is the guarantee to motivate students and regulate their classroom learning.

#### 6. CONCLUSIONS

The teacher's teaching skill is to lead the way and focus on developing students' interest in learning. The purpose of the innovative teaching practice of the course "System Integration" is to enable students to accomplish tasks within their capabilities under the tiered competency standards, to stimulate their enthusiasm for learning, and to truly put their learning into practice.

Therefore, we should apply the Ausubel teaching mode to realize the innovation of teaching practice of this course based on the higher vocational training objectives and students' actual level. In this way, we deepen the reform of the course, release the vitality of the course, build a new process, a new standard and a new platform for the teaching activities of the course, so that students can stimulate new interests, develop new abilities and show a new style in the process of learning and practice.

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#### REFERENCES

- [1] Qiu Jun, He Xiaoqi, Liu Yihua. "Exploration of competition-driven practical teaching reform in automation". Journal of Anhui Electronic Information Vocational Technology College, vol. 11, no. 2, pp. 67-70, 2012.
- [2] Zhang Ruicheng, Chen Zhikun, Wang Fubin. "Promoting experimental teaching reform with intelligent vehicle competition". Laboratory Research and Exploration, vol. 29, no. 8, pp. 103-105, 2010.
- [3] A. Munari, Song Shanggui. "Piaget's ideas on scientific methodology and their significance for education". Psychological Dynamics, no. 2, pp. 51-55, 1989.
- [4] Wang Benfa. "Ausubel's constitutive theory of achievement motivation drive and its significance". Journal of Tianjin Textbook Institute, no. 4, pp. 53-55, 2002.

- [5] Liu Hongyi. "Ausubel's learning theory and its value to the new curriculum classroom teaching reform". Contemporary Education Theory and Practice, vol. 4, no. 2, pp. 116-118, 2012.
- [6] Fan Lihui. "A study on the application of Ausubel's meaningful learning theory in teaching practice". Xi'an Social Science, vol. 31, no. 2, pp. 153-155, 2012.
- [7] Ruan Wulin. "Research on the teaching strategy of microcontroller based on "teacher-led-student-led" teaching model". East China Normal University, 2010.
- [8] Yang Chao. "Application of Ausubel's meaningful learning theory in mathematics teaching". Journal of Nanchang High School, vol. 25, no. 3, pp. 105-106, 2010.

## Research On the Application of New Media In Staff Training

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Abstract: With the development of Internet information technology, the rapid rise of new media has increasingly become a mainstream way of information dissemination. This paper expounds the meaning and characteristics of new media, the status quo of traditional training mode, the role of new media, explores new media training mode, and the application and practice of new media training mode. This paper will take the new media as the research object, and specifically analyze its practice and role in staff education and training.

Key words: New media; Staff education and training; Practical methods

## 1.OVERVIEW OF NEW MEDIA 1.1 THE MEANING OF NEW MEDIA

New media refers to the environment where everything is media. In short, new media is an environment. As a kind of media form, new media has a broad concept, covering all digital media forms, including digital traditional media, network media, mobile media, digital TV, digital newspapers and magazines, etc. It refers to the use of digital technology, through the Internet, broadband LAN, wireless communication network, satellite and other channels, as well as computers, mobile phones, digital newspapers and magazines TV and other terminals provide users with information and entertainment services. [1]

## 1.2 CHARACTERISTICS OF NEW MEDIA IN STAFF EDUCATION

New media is instant. In the era of new media, network technology has broken the time and geographical restrictions of traditional media, and the communication is instant. Can easily and quickly convey the spirit of the upper class, learning the latest trends in the industry. The new media is interactive, which can be transferred from the superior to the subordinate, and uploaded from the inferior to facilitate mutual learning and communication among employees. The traditional staff education mainly carries out the training work in a single face-to-face way, which is limited by the teaching hours and teaching places, so full-time and part-time teachers and staff can not have in-depth communication. In the era of new media, many social software and platforms have emerged, which makes full-time and part-time teachers students have closer interaction opportunities. Moreover, the characteristics of two-way communication of new media also enhance the interaction between communicators and receivers in a certain sense. New media has a wide range, which can broaden learning channels and make learning resources more extensive. Using new media to carry out employee education, employees have the opportunity and platform

to learn and understand all kinds of new technologies and new knowledge about their industry at home and abroad. New media across time and space, can learn and communicate anytime and anywhere, convenient for training and communication. New media provide various educational channels for staff education. For example, some common platforms such as WeChat group, WeChat official account, mobile phone APP, unit LAN, network video learning are common new media channels, which greatly increase the interaction between workers and staff, and facilitate the smooth development of staff education.

## 1.3 THE ROLE OF NEW MEDIA IN THE EDUCATION AND TRAINING OF EMPLOYEES

New media is a new type of information communication media which is rising with the development of information technology.

First, the new media provides a new and open learning platform.Staff education and training is a process of continuous learning and improvement of management and business level. And the way of training, greatly affects the effect of our training. The content of training is also easily limited by time and space. When the focus of training is inconsistent, the staff's harvest degree is different. Therefore, we should strengthen the change of the way of organizational training and actively expand the depth of training. And the use of new media platform can be achieved here, it can use the network to build a more open platform, to help employees to understand the latest and detailed policies, concepts, etc.In this, the staff can choose the time of learning and training independently. At the same time, they can make repeated use of resources and get new resources in a timely manner.In addition, employees can also take advantage of the network to participate in remote training.[2]

Secondly, the new media teaching method fully follows the concept of people-oriented. When we apply new media to carry out education and training for employees, it can better meet the training requirements of "people-oriented and on-demand teaching". In this, because of the openness and flexibility of new media, the universality and particularity of training requirements of employees can be realized by it.

Finally, the new media has enhanced the effective communication between employees. Through the new media to carry out staff training, this can better protect the workers' voice, and promote effective exchanges between employees.[3]

2.PROBLEMS EXISTING IN CURRENT ENTERPRISE TRAINING

The traditional training mode is single, old-fashioned and limited by time and space, which is not suitable for the rapid technology update and waste of human and material resources.

**INSUFFICIENT ENTERPRISES** 2.1 **HAVE** UNDERSTANDING OF THE ROLE OF NEW MEDIA Although people are aware of the importance of staff training, they do not realize the importance of new media for training. They unilaterally understand the use of new media as replacing blackboard with electronic whiteboard, PPT, or introducing a large number of computer equipment, but they do not give full play to the real effect of these equipment. This kind misunderstanding and application of new media actually does not play a significant role in promoting the training effect, and naturally will not improve the training level of staff education.

## 2.2 THE STAFF TRAINING SYSTEM IS AGING AND THE TRAINING MODE IS SINGLE

The main problem of staff training mode is too single, in the training mode, most of the use of traditional teaching method, the training process is boring, boring, not conducive to stimulate the interest of employees in learning.

### 2.3 LACK OF TRAINING TEACHERS

The teachers selected from the field, though rich in field experience, have ensured that the training contents fit the actual needs of the enterprises and employees, but most teachers have not engaged in professional training management, lack of professional skills and knowledge of training, and may not be able to plan the whole training process as a whole, nor can they mobilize the enthusiasm of their staff in training. It is difficult to receive good training results.

## 3.PRACTICAL METHODS OF NEW MEDIA IN STAFF EDUCATION AND TRAINING

New media is the new situation of information development in today's society. We should strengthen our exploration to give full play to its effectiveness. We can start with the following contents about its practical ways in the staff education and training.

## 3.1 STRENGTHEN THE EDUCATION AND TRAINING AWARENESS OF NEW MEDIA APPLICATION AND IMPROVE THE TRAINING MODE

First of all, we should change our thinking, broaden our thinking, adapt to the new development of society, and strengthen education and training through more optimized ways. New media is developing with the rise of the Internet. It can build a more open platform with the help of the Internet. It enriches the training methods, provides more wonderful and detailed learning contents, and expands the education and learning ability of our employees. We can actively grasp it. [4]

Enterprises can make use of the characteristics that new media is not limited by time and space, and carry out targeted training work in combination with the needs of employees, job responsibilities, technical level and other aspects. For example, practical training can be organized through the combination of virtual simulation software and physical equipment. This combination of high-tech and practical operation can greatly mobilize the learning

enthusiasm of enterprise employees and create a good and efficient classroom environment. For some induction training such as labor safety, rules and regulations, and corporate culture, railway enterprises can transfer the training content to microblog, wechat, QQ group, video and other new media platforms, so that employees can learn by themselves anytime and anywhere and save training time. In the daily business training, such as the development of "micro classroom", regularly push all kinds of professional teaching courseware, video and safety warning cartoon, etc., to realize the subtle influence of training and education; launch the special activity of breaking through and answering questions, and mobilize the enthusiasm of all kinds of workers.

## 3.2 CONSTANTLY EXPAND THE PLATFORM OF NEW MEDIA EDUCATION AND TRAINING

With the gradual popularization of new media applications, it has become a normal training carrier for employees. Now the network has covered workshops and teams. By using new media, we can integrate and push the resources of micro class which is close to the actual production on site.It can also set up education columns on the LAN of the unit, aiming at the work needs of employees in different positions, combining with the work focus in different periods, regularly edit the contents of business skills, rules and regulations, etc., so as to facilitate employees to learn at any time and enrich their knowledge. At present, there are many self-learning distance education platforms in the market, such as MOOC, which integrates a variety of social network tools and various forms of digital resources to form a variety of learning tools and rich curriculum resources. According to the fact that there are many railway stations and depots, the line leader and the employees' rotation time are not unified, in order to facilitate the employees to use their spare time for training and learning, a variety of courses can be arranged in combination with the daily team business learning and post drill, so that the employees can not be restricted by the location, but also use the fragmented time to learn, and break through the number limit of traditional courses through the network It can meet the needs of large-scale course learners.

## 3.3 CREATE EFFECTIVE COMMUNICATION OF NEW MEDIA EDUCATION AND TRAINING

When new media is building a platform for environmental publicity and education and providing learning resources for us, we can't just ask for them. We need to strengthen exchanges in the discussion of information, so that we can understand more thoroughly. [5]

## 3.4 INFORMATION NETWORK INTEGRATION IS APPLIED TO THE UNIFIED MANAGEMENT OF ENTERPRISE MULTIMEDIA EQUIPMENT

With the development of new media technology, wireless network operation is created for enterprise employees to enhance interaction. Today's enterprise training lecturers use multimedia equipment, mainly for courseware playing and film and television materials, but the old equipment affects the interaction in the

teaching process, so we need to use some advanced equipment to replace the old equipment, such as wireless mouse, wireless keyboard, etc., to ensure that the lecturer can interact with the staff in any corner of the classroom, and fundamentally ensure the interaction between the lecturer and the students The space for communication.

#### 4.CONCLUSION

To sum up, new media plays an important role in promoting the training of enterprise employees. Enterprises should correctly understand the importance of new media, optimize the training system and training mode, strengthen the teaching staff, strive to solve the contradiction between work and study, and truly integrate new media technology into the education and training of enterprise employees, so as to promote the efficient development of education and training, and provide reference for the future information teaching The construction has far-reaching practical significance and practical value.

#### REFERENCES

- [1] Hu Weili. Thinking about applying experiential training to enterprise training under the new media [j].China Press, 2013 (6): 115-116.
- [2] Liaojing. The influence of new media on cadre education and training [J]. Practice and theory of special zone, 2015 (05)
- [3] Li Qiang, Wang Yongqiang.On the path of innovating the education and training of Party members in Colleges and universities with the new media as the carrier [J].Legal system Expo, 2015 (21).
- [4] yuan Jun.the practice and role of new media in staff education and training [J].Management and technology of small and medium-sized enterprises (last issue), 2019 (02).
- [5] Li Qiang, Wang Yongqiang.On the path of innovating the education and training of Party members in Colleges and universities with the new media as the carrier [j].Legal system Expo, 2015 (21): 21.

# Study on the Work of Head Teachers in Vocational Colleges

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Abstract: Class teacher of higher vocational colleges is a strong team active in ideological and political education and student work on campus, and the undertakes political guidance, life guidance, psychological counseling, employment counseling, etc. This work occupies an extremely important position in the ideological and political education system of higher colleges. This article combines the practical experience of class teacher work in higher vocational colleges and universities, and on the basis of analyzing the importance of class teacher work in higher vocational colleges and universities, further discusses the work philosophy, class routine management methods and methods The working attitude that should be possessed.

Keywords: Vocational college; Student work; Class management

#### 1.INTRODUCTION

In recent years, with the rapid development of Higher Vocational Education in China, the number of students in higher vocational colleges is increasing. Especially after the enrollment of 1 million students in Higher Vocational Colleges in 2019, the scale of higher vocational colleges will be further expanded, so the student management of higher vocational colleges will also face more challenges. The students in higher vocational colleges are different from those in ordinary undergraduate colleges. They have their own distinctive characteristics. In the process of management, they need to combine their characteristics and carry out humanized management. In the process of student management in higher vocational colleges, the head teacher is not only the first person who has close contact with students, but also the leader on the way of students' growth and success, whose influence on students is direct, important and key. The management mode and method of the head teacher is very important for the effective management of students and the effective cultivation and education of students. Therefore, it is more urgent to study how to do a good job of head teacher in higher vocational colleges. With the rapid development of vocational education, higher vocational education has occupied half of my country's higher education, and the education work of students in higher vocational colleges has become a hot spot of social concern. Therefore, the class teacher of higher vocational colleges plays an important role in the education of this student group. In the educational practice of higher vocational colleges, the class teacher, as the organizer, implementer and mentor of education management, has been given more imagination and expectation by the majority of students, acting as a communicator of the party's educational line and guiding students to become The triple role of a mentor of socialist construction talents and a manager of students' study and life. For the country, to achieve the goal of becoming a

strong industrial country requires a large number of highquality skilled talents, and the class teacher plays an important role in the process of training excellent skilled talents. It can be said that the class teacher guides the students' future development and trains the future builders and creators of the motherland. Under the new situation, class teachers in higher vocational colleges must not only fully realize the importance of their work, but also clarify the sacred mission requirements of this post.

## 2.THE WORK STRATEGY OF THE CLASS TEACHER IN HIGHER VOCATIONAL COLLEGES

With game theory as the research tool, this paper constructs a model to explore the working mechanism of the head teacher. First, it is clear that all the players in the game are consistent groups, and there is no individual difference. Secondly, in the established model, the school is in the position of macro management, which can regulate the management affairs carried out by the head teacher and the behavior standards of the students, and supervise, handle and regulate them. Therefore, the evaluation results of the head teacher or the students' behavior are in line with or not in line with the school norms; In the game model, students belong to the management object of the school and the head teacher, and they don't have much strategy choice, but they also have the cost and benefit of compliance or violation; As the direct executor of student management, the head teacher has the right of micro adjustment, that is, under certain conditions, according to the actual situation, he can relax the management on a small scale to meet or not meet the demands of students.

As the class manager, the class teacher of higher vocational colleges and universities is the most direct and basic implementer of students' ideological and educational work. It is also an important support for student education and management. It plays an important role in student management and education management. Irreplaceable. The quality of the class teacher, the work ability of the class teacher not only affects the effectiveness of the school's education, but also affects the university life of college students and even their lives.

In recent years, as the admission rate of higher education continues to rise, higher vocational colleges and universities have also shown a trend of enrollment expansion. However, many of these expansions are quantitative expansions, not qualitative expansions. With the rapid growth of the number of students, the investment in running schools is obviously insufficient, the resources for high-quality education and teaching are scarce, and the software and hardware conditions of some majors, especially emerging ones, are seriously lagging behind. The reform of education and teaching remains on the surface, and the reform is not strong enough. The blind expansion of enrollment or the expansion of enrollment beyond its own development ability makes it difficult to guarantee the

quality of teaching and teaching, which affects the realization of the goal of training talents in higher vocational colleges. A common problem of higher vocational colleges and universities is that they have a certain degree of arbitrariness in professional settings, overemphasize the adaptability of social needs, and do not establish a true industry dependence relationship.[1] The class teacher, as a bridge between professional teachers and students, should continue to learn professional knowledge, understand social needs, understand enterprise needs, and actively achieve a balance between schools, enterprises, and students.

In recent years, due to various reasons, such as the expansion of enrollment in colleges and universities and the decrease in the number of students, the source of students in higher vocational colleges has gradually been shrinking, and the mentality of the majority of students has been unstable. Students do not pay attention to learning, but pay more attention to part-time work, self-employment, etc., do not listen to classes, mobile phones do not leave their hands.In response to this situation, the head teacher should first adjust the students' psychology, so that the students fully understand the importance of skill learning, selfesteem and self-esteem, and do not be selfish. Use students' psychology of economic importance, addicted to the Internet, and use network resources to show students the importance of skills and professional qualifications in the employment process; provide students with opportunities for professional internships, so that they can understand while creating economic income The importance of professional learning, through various efforts to stabilize student emotions and arouse students' enthusiasm for learning.

The class teacher should consider the teaching conditions of the school according to the characteristics of the major, actively seek the best teachers from inside and outside the school, and cultivate the professional qualities of the students. Students should be motivated, actively conduct market research, understand potential manpower needs, enhance professional attractiveness, and broaden professional employment, rather than just use existing classrooms or experimental training equipment for education.

## 3.THE MAIN CONTENT OF THE WORK OF CLASS TEACHER IN HIGHER VOCATIONAL COLLEGES

Safe work is the foundation and starting point of all work. As a class teacher, we must raise awareness, clarify responsibilities, and focus on the eight major aspects of electricity safety, property safety, food safety, traffic safety, fire safety, network safety, rule of law safety, and drowning prevention safety. Details, establish and control safety mechanisms, and strengthen students' awareness.Regularly carry out safety education themed class meetings in the class, using various real events on campus as cases, instilling various safety knowledge to students through explanations, thereby helping students to firmly establish safety awareness, understand safety common sense, and learn Self-protection, improve resilience, and reduce and eliminate all kinds of accidental injuries as much as possible.[2]

First of all, strengthen classroom and dormitory hygiene management, pay attention to classroom hygiene at all times, regularly check dormitory hygiene, seek student talks in time for deductions, and supervise and solve problems. At the same time, students are encouraged to participate in the selection activities of "Harmonious Classes" and "Civilized Dormitory" in order to strengthen the formation of students' good behavior habits. Secondly, strengthen student discipline management to prevent lateness, early departure, and non-requisitions to be cancelled according to regulations; emphasis on not speaking during class, not sleeping, not playing mobile phones, and not doing anything irrelevant to class, requiring students to correct their learning attitude and make full use of the classroom Learn professional knowledge.

For school students, both school and family are important growing environments. If any party is missing, our education is incomplete and the psychological development of the students will be incomplete. If there is weakness on the one hand, our education will generate internal friction and will create a situation with less effort. The requirements and expectations of parents for children are also at various levels. Some requirements and expectations and the actual situation of students may not be consistent with our educational ideas. Therefore, we must contact and communicate with parents in order to understand and understand each other, reach a consensus on the concept, elevation, and practical operation of educating children, and form a joint force of education.

Do regular communication with the teachers in class to fully understand the learning situation of the class students. The problems reported by the teacher should be resolved on the basis of timely understanding. In addition, education on professional learning should be conducted regularly. On the one hand, students are mobilized to go to the library to borrow books to enrich themselves; on the other hand, students are encouraged to take exams, including English, computer grade certificates, and professional skills certificates. Improve students' learning initiative, make students understand the current social status of the major and the work achievements of others, so as to grasp their own learning direction and prepare for future employment.On the one hand, the class teacher should plan, purposefully and scientifically organize and carry out thematic class activities around some topics of interest to students, in order to strengthen the moral education of students, cultivate students' collective sense of honor, and enhance class cohesion; On the one hand, it leads students to carry out colorful campus activities, such as various volunteer service activities, theme education activities and study style construction activities, etc., in order to enrich students' extracurricular life and promote them to develop good behavior habits and moral qualities. First, establish a heart-to-heart system, and often go deep into dormitories, classrooms, and event venues to grasp first-hand information, and find problems that are new and prone to be handled in time. Second, attach importance to mental health education and guide class psychologists to carry out their work. Again, give full play to the role of weekly diary, class information officer, and moral education practice class.[3]Through the development of mental health education themed class meetings, students' psychological self-mediation ability is improved to guide students' correct understanding of various psychological problems. By giving examples, students are made aware of the necessity and importance of psychological safety, so as

to strengthen their self-mediation ability. Treat "problem students" with a little more patience. In the process of helping, we must respect the students, establish their selfesteem, work patiently and meticulously, and look for the bright spots on them. To understand the behavioral dynamics of these students in a variety of ways; invite them to come to the office to help them with small things, talk to them in labor, draw closer to the relationship, and understand the dynamics of thoughts; designate excellent student cadres to study in pairs with "problem students" and urge them Complete assignments in various subjects; communicate more with class teachers, pay attention to attendance and classroom performance of "problem students", give more affirmation, help build confidence, and increase interest in learning; often communicate with parents of "problem students", and both schools and families work together. Joint supervision and education.

#### 4.CONCLUSIONS

Professional teachers as head teachers in higher vocational colleges can make the education effect more significant to a certain extent. Of course, in the whole management process, there will be many unexpected problems, some teachers may not be able to solve efficiently due to lack of sufficient management experience. In this regard, teachers should not be discouraged, dare to meet the challenges, go deep into the student group, actively communicate with students, timely understand the situation of students, and constantly improve their management level. Through continuous practice and exploration, professional course teachers will explore a more suitable way of management, and make continuous progress and growth. An excellent

class teacher must be good at learning, diligent in practice, brave in innovation, willing to dedicate, and constantly enhance his own quality. We must truly study our work as a discipline, pursue it as an education, and strive as a sacred post. The work of class teachers in higher vocational colleges and universities requires a love, treats students with sincerity, equality and trust, and cares for each student wholeheartedly. In the class, they are both the parents of the students and the close friends of the students.Love affects students and truly achieves the effective combination of strictness and love. To be an excellent class teacher has a long way to go. Only by constantly updating concepts and changing work ideas and methods can we continuously adapt to the new requirements of work and promote better and more comprehensive development of higher vocational education.

### REFERENCES

- [1] Chen Hongxia, Huang Yongkang. Some thoughts on professional teachers in Higher Vocational Colleges as head teachers [J]. Popular science and technology, 2013, 15 (8): 108-109.
- [2] Xu Yang.On the characteristics of "nannying" of class teachers in colleges and universities [J].Contemporary Education Practice and Teaching Research.2019 (2): 106-107
- [3] Huang Linping.On the work of freshman class teachers in vocational colleges [J]. Exploration. 2011 (1): 74-75.
- [4] Xiong Ying. Reflections on the work of head teachers in Higher Vocational Colleges [J]. Neijiang science and technology, 2011, 32 (3): 174 + 64.

# Teaching Reform Practice and Preliminary Exploration of Integrating Process Evaluation into Project-based Teaching

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Abstract: This article takes the "Single Chip Microcomputer Application Technology" course in higher vocational colleges as an example to illustrate the method. The process evaluation is incorporated into project-based teaching process so as to realize teaching reform, improve students' learning methods and develop their personal potential, and to provide teachers with advanced methods in the teaching process to improve the quality of teaching. Keywords: Project-based teaching; Process evaluation; Teaching reform

#### 1. INTRODUCTION

The course of "Single-chip Microcomputer Application Technology" is a compulsory for the major of electrical automation technology. The concept of this course is abstract, the hardware is difficult to understand, and the software is difficult to design. The purely theoretical explanation of the teaching process cannot improve students' interests in learning. The final assessment alone cannot reflect the students' mastery of the course, nor is it conducive to students' mastery of the knowledge system and professional skills. Through years of teaching exploration and practice, we have implemented certain model reforms on the teaching process and evaluation results of this course, and achieved certain results. [1]

The implementation process is roughly as follows: the project teaching method is implemented in the teaching process, the teaching knowledge is integrated into the project task during the teaching process, and the project work is assigned to the students at the end of the term. In the process of project task implementation and project work design process, process evaluation is completed for students' knowledge mastery and ability development in order to provide teaching feedback for students' further learning and teachers' in-depth teaching, thereby improving students' learning interest and learning ability, while improving teachers' teaching concepts and teaching level. At the end of the semester, the summative evaluation will make a conclusive evaluation of the student's learning quality and at the same time evaluate the teaching quality of the course, thus providing a basis for the next course reform and course construction. [2-3]

## 2. PROJECT TASKS AND PROCESS EVALUATION

The reform of the course teaching mode and examination mode of "Single Chip Microcomputer Applied Technology" is based on the course standards, centered on the course teaching objectives and quality standards, and develops a three-dimensional comprehensive evaluation system of course knowledge, ability and quality. Each student has an evaluation of the completion of the project task before each project task. The evaluation of the

completion of project tasks is required. According to the characteristics of the electrical automation technology major and the course characteristics of "Single Chip Microcomputer Application Technology", the weight of knowledge, ability and quality in the project task evaluation is determined to be 30% for knowledge, 50% for ability, and 20% for quality. According to the teaching situation and the integration of the "Single Chip Microcomputer Application Technology" course project teaching, five corresponding evaluation items are formulate: design and production of answering devices, design and production of traffic lights, design and production of stopwatches, design and production of temperature controllers, design and production of smart cars. At the same time, according to the content of the project, the teaching modules are integrated into the project tasks, and the evaluation index system, knowledge system and evaluation plan are developed. The evaluation index system elaborates the project tasks, first-level and second-level indexes and index connotation, main observation points, assessment methods and scores of the course. [4]

Give full play to the function of the project task, and integrate the microcontroller hardware system, instruction system, subprogram design, timing and interrupt system, microcontroller display and keyboard interface in the five knowledge modules into the design and production of responders, traffic lights, stopwatches, and temperature control. In the five project tasks of the device, students can master theoretical knowledge and operating skills in the process of completing project tasks.

Through the evaluation plan, the observation and situation of teachers' comprehensive classroom, the skill level and the achievement achieved is taken as the basis of the evaluation. The process runs through the entire studying process of students. From the evaluation results, the teacher obtains the feedback on the accuracy and effectiveness of students at a certain stage of students. This can provide reference information for the next phase of learning, thereby helping teachers improve teaching.

#### 3. PROJECT WORK AND FINAL EVALUATION

According to the theoretical knowledge of the course learning field, the teacher combines the practical operation skills of the project task, and at the beginning of the course study, the teacher arranges the project work for the students. Under the guidance of teachers, students can also choose their own topics, design and develop projects by themselves, complete them in their spare time, and hand them in at the end of the semester. The project work evaluation is divided into 2 first-level indicators, 3 second-level indicators and 9 third-level indicators, each

accounting for different proportions. Now we take the temperature controller as an example. First, students need to design a simple temperature measurement circuit, which involves the knowledge of the microcontroller hardware system. And the second, temperature measurement circuit plate is being made, this step involves the design of the plate making software and the circuit schematic. [5]The third, hardware welding, this process involves the selection of components, plug-ins, welding and other processes. The fourth, software programming, the project involves singlechip instruction system and subprogram design, timing and interrupt system, single-chip display and keyboard interface. The fifth is debugging which involves software and the relationship between hardware coordination-work. The process is to debug software, hardware, troubleshooting, so that the project product can work normally. The sixth is to write a thesis. This process involves the students' thesis writing skills. The implementation of project work through the above all processes can give full play to students' subjective initiative. It can encourage students to learn actively, improve students' self-control ability, and tap students' learning potential. [6]

## 4. INNOVATIVE POINTS OF TEACHING REFORM

- (1) Process evaluation runs through the entire learning process, comprehensively inspect students' knowledge level, improve students' personal qualities, and exert their personal potential, which is helpful to the overall development of students' physical and mental quality. Therefore, the evaluation of the teaching process is stimulating for students' learning.
- (2) Guided by the final evaluation, we can make a quantitative analysis of the students' learning situation, compare them among students, and evaluate the actual skills and achievements of the students based on the completion of the project, so as to identify the level of knowledge mastery of the students. Through the evaluation results, it will point out the development direction of personal ability for students, which is conducive to the formation of autonomous learning ability and the overall development of students' physical and mental quality. Therefore, the reform of the examination mode is instructive for the personal development of students.
- (3) The teaching model reform that combines project task training and project designing, through implementation, prompts teachers to comprehensively, in-depth and meticulously summarize the experience and lessons of courses, textbooks and teaching methods, and find improved teaching methods for teaching in the new semester and ways to improve the quality of teaching. Therefore, the reform of the examination model provides a forward-looking basis for teachers' teaching.

#### 5. TEACHING EFFECT

(1) Theoretical knowledge is integrated into the project training, which increases the interest of learning and improves students' self-inquiry. Teaching theoretical knowledge instructions are integrated into the project training. Five parts of the textbook theoretical knowledge are assimilated into the five project training: MCU hardware system is assimilated into the design and production of the responder; the instruction system is assimilated into the production of traffic lights; the subprogram design is assimilated into the production of

- stopwatch; the timing and interrupt system is assimilated into the production of temperature controller; the singlechip microcomputer display and keyboard interface are assimilated into the production of smart car. [7]
- (2) It transforms the purely conclusive theoretical examination with one paper in the final examination into a motivational assessment combining theoretical knowledge and operational skills.
- (3) It changes the poor learning attitude of students who are usually lazy, passively waiting, and busy with exams at the end of the semester. It provides students with an opportunity for continuous self-improvement and improvement. At the same time, it improves students' learning methods and develops their personal potential.
- (4) Teaching and evaluation reforms can also encourage teachers to summarize courses in a comprehensive, indepth and meticulous manner, determine students' learning progress, and provide teachers with teaching feedback, thereby improving teachers' teaching methods, improving teachers' teaching standards, and finding ways to improve teaching in the new semester and ways to improve the quality of teaching.
- 6. USING THE FINAL EVALUATION AS THE RESULT At the end of the course, a final evaluation is made for each student in the staged assessment and evaluation. The teacher makes a quantitative analysis of the student's learning situation through the evaluation plan, and compares it among students. Based on the completion of the project in the learning process, the actual skill level and the achievements of the students will be evaluated, which can identify the level of knowledge mastery of students. Through the analysis of the evaluation results, it points out the development direction of students' personal abilities, which is conducive to the formation of independent learning ability and the overall development of students' physical and mental quality. At the same time, it can also encourage teachers to comprehensively, in-depth and meticulously summarize the experiences and lessons of courses, teaching materials and teaching methods, and help teachers to find new ways to improve teaching methods and improve teaching quality for the teaching of the new semester. [8]

## 7.THE ROLE OF EXAMINATION MODEL REFORM

7.1 PHASE EVALUATION AND ASSESSMENT ROLE In test mode reform of "SCM Application Technology", a formative evaluation through in everyday teaching, it is part of the inherent procedure of classroom teaching. The results of each evaluation provide reference information for the improvement of the next stage of learning and show the progress of students. At the same time, teachers can obtain accurate and effective feedback on students' learning from the evaluation results, which can help teachers improve teaching. This method can evaluate the complex and hidden learning results and learning skills that can not be reflected by the traditional written test. The method also can effectively detect the degree of mastery of students and can reveal the individual emotional attitudes and learning strategies of students in learning. It can make judgments on the interests, attitudes, and participation activities of students in the learning process, thus playing a diagnostic, motivating and strengthening role for the overall development of students. It can encourage students

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to learn in real situations and provide reliable feedback, quality monitoring and guidance for teaching improvement. 7.2 THE ROLE OF FINAL EVALUATION

In order to promote the overall development of student's knowledge, abilities and qualities, the proportion of the two results of formative evaluation is used as the final evaluation result, so as to change the attitude of students to achieve goals and make students work hard in the direction of learning. This not only points out the direction for students' ability development, but also provides information feedback for teachers' teaching. In the future teaching, we can check the gaps and make up for the omissions, and teach students in accordance with their aptitude. Therefore, students are encouraged to use personal development as a reference, compare themselves with themselves, and pay attention to their own efforts and progress. This play a guiding and leading role for students' follow-up professional knowledge learning improvement of skills.

# 7.3 THE EFFECT OF THE REFORM OF THE EXAMINATION MODEL

The key to the reform of the examination mode is to scientifically design an examination mode synchronizes theory with practice and the software and hardware equipment required for teaching. Through the reform, teachers not only better understand students' knowledge, abilities, interests and needs, but also focus on the development potential of students. Students have completed the design and production of the smallest single-chip microcomputer system, the design and production of traffic light systems, intelligent answering device systems, and infrared rays, the design of alarms, LED dot matrix writing display screens and other projects. Students have also actively participated in teachers' teaching and research projects, and participated in provincial and national electronic design competitions many times, and have achieved excellent results.

In short, the examination is one of the means to check and judge the quality of talent training. Through reforming the

"Single Chip Microcomputer Application Technology" course examination mode, we will continue to explore a scientific and reasonable assessment and evaluation system. This reform provides students with motivation, provides a reliable basis for curriculum systems, teaching content and teaching methods.

- [1] Tranquility, Xiao Jie, Miao Baiqi, Dai Xiaoli, Song Changnai. Research on the correlation between college entrance examination scores and college scores[J]. Higher Education of Sciences; 2001-03.
- [2] Li Dechun . The reform of the examination system of higher vocational education [J] . Vocational Education Research, 2006-06.
- [3] Wang Zhongshun . Reform the traditional examination mode to highlight the characteristics of higher vocational talent training[J] . Adult Education, Issue 11, 2005.
- [4] Zhang Dingqiang . Research on the Positioning of Information Technology in the New Mathematics Curriculum System [J] . Audio-visual Education Research, Issue 08, 2004.
- [5] Cao Wei, Shao Zhongliang. Exploration of the examination reform of the principle and application of the single-chip microcomputer [J]. Journal of Guangdong Technical College of Water Resources and Electric Power, Issue 02, 2004.
- [6] Gao Yanyang, Zhang Feng. A review of research on the reform of examination methods in colleges and universities[J]. Research on Higher Education in Science and Technology, 2003-06:58-59.
- [7] Li Hongsheng. Technical characteristics and development trends of modern embedded systems [J]. Manufacturing Automation, 2010 (12): 1-2.
- [8] Jing Jing, Xiao Jie, Miao Boqi, Dai Xiaoli, song Changnai. A study on the correlation between college entrance examination scores and University scores [J]. Higher science.

# Study On the Mixed Teaching of Computer Professional Courses

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Abstract: This paper takes the teaching of "computer assembly and maintenance" course in Higher Vocational Colleges as an example, and makes an empirical research on the reform of the mixed teaching mode of computer professional courses in Higher Vocational Colleges Based on the platform of learning link under the environment of full coverage of campus network. With the help of the learning platform to carry out the mixed classroom teaching activities of the course, and carry out the data analysis of the teaching activities of the whole class, study the feasibility of the learning platform in the teaching of computer professional courses in higher vocational colleges.

Keywords: Xuexuetong; Blended teaching; Online and offline

### 1. INTRODUCTION

Nowadays, the demand for computer related professionals is increasing. As an important place for training applied and skilled talents, teachers should not only impart theoretical knowledge to students, but also strengthen their professional skills through practical training. However, there are some problems in the teaching methods of computer major in most vocational colleges. The graduates of computer major can not meet the needs of computer talents. In order to solve this problem, the reform and innovation of computer classroom teaching becomes inevitable. Teachers should actively introduce mixed teaching mode to explore the advantages of network to classroom teaching.

## 2. CURRENT SITUATION OF COMPUTER TEACHING

The old teaching content of computer major courses in some vocational colleges is relatively fixed, and there is a certain lag in the teaching materials and teaching contents which are not combined with the development of the times, which leads to the knowledge and skills that students have can not meet the needs of society and enterprise Posts well, which is not conducive to the future employment of students.

The teaching methods of teachers are too traditional to summarize the current computer professional classroom, there are two extreme phenomena: one is the phenomenon of "filling duck" in full-scale. The teacher indoctrination is the main task. In order to catch up with the teaching progress, the whole process is controlled by the teacher. The students are passively accepted and studied without considering the acceptance of the knowledge points. The result is that the teacher speaks in a hot mood and the students still cannot touch their mind. The other is to let students learn by themselves. Teachers do not understand new teaching methods well, such as using flipped classroom. This part of teachers

think they should speak less or not, by students selfstudy, answer questions, no questions regardless. For the vocational students who lack the initiative and independence of learning, such teaching methods are counterproductive.

It is very strong to attach importance to theory teaching and ignore the professional practice of practical computer course. Only under the guidance of theoretical knowledge can we get better teaching effect by operating practice for a certain time. Now, some schools are lack of training rooms, which increase the theoretical teaching hours of teachers in the classroom. The examination of the course is mainly written test, which makes students recite the concept and operation steps mechanically, which leads to students' habit of "talking on paper" and memorizing hard to cope with the test. Some teachers only pursue the purpose of teaching when they are in practice class, only teach students to remember the operation steps, but ignore the ability of guiding and thinking and giving one thing and one thing, which leads to students not to be flexible, they do not really master the skills they have learned, and the classroom teaching effect is poor.

3. LEARNING THROUGH AND MIXED TEACHING The hybrid teaching fully explores the advantages of traditional classroom teaching and digital classroom teaching, which is an organic combination and complementary advantages of the two, thus forming an online and offline teaching mode. The introduction of this teaching model into the classroom can make students master the knowledge learned from the shallow to the deep. Learning is a professional mobile learning platform developed by superstar company, which has a large number of books resources, periodicals and domestic and foreign literature. It supports the construction of network courses, the sharing of teaching resources, the tracking statistics of teaching process, the evaluation and feedback of teaching process, etc., and provides an interactive teaching and learning platform for supporting teachers to carry out multi-mode teaching. Teachers can prepare lessons online by building network courses, creating classes, adding students, uploading teaching resources and arranging teaching tasks. Teachers can use app to release sign in, select people, vote, answer, discuss, test in class, live broadcast, etc. in class, so as to fully mobilize the classroom interaction between teachers and students. Students only need a mobile phone or tablet, log in to the "learning through" app, and can view or download teaching resources, participate in discussions, submit homework, complete online testing, etc. Learning communication supports mobile phone screen, which can present classroom activities and activity data on the large screen. Teachers can track students' learning

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situation in real time through background data so as to adjust teaching plan and teaching progress in time. The teaching space of computer major courses has been greatly expanded.

### 4. APPLICATION OF MIXED CLASSROOM TEACHING

In July 2017, Tsinghua University Education Research Institute held "mixed teaching ability improvement training and seminar". The training theory is applied in the daily teaching middle school, and a hybrid teaching class based on the online and offline combination of computer assembly and maintenance is carried out. The construction of smart classroom and the full coverage of campus network provide the basis for the use of the platform.

(1) The students who prepare for higher vocational education are not active in their study before class, and they are hard to learn theoretical knowledge because of the many computer parts and complex routing. However, they like multimedia and are willing to accept more intuitive learning methods. In order to enable them to study actively in their spare time, they made a lot of preparations online and offline: modified the teaching design, uploaded the platform, and arranged the pre class tasks. The students are grouped and the principle of integral system is set up, which is cooperation and competition. Using students' interest in the tiktok to create flash video guide, pre test. Upload 3D animation of assembly and maintenance of each part of computer, and directly present the whole process of assembly of each part of the computer. The analysis course is made for the difficulties and precautions in the assembly and maintenance of each component. The game of answering questions breaking through is developed and produced to enhance the interest of the classroom. The questionnaire of feedback of teaching effect after class

(2) The students in higher vocational education are not easy to generate interest in many courses, and there are problems in the classroom, such as concentration, difficulty in understanding and lack of learning motivation. The introduction of "learning through" Internet + "online technology is to improve students' learning status and classroom teaching effect reasonably and effectively, so that traditional classroom will go to smart classroom. Computer assembly and maintenance is the core course of computer major in higher vocational colleges. It is the ability that students must master when they move to the post. It is also difficult for them to get on with it. For example, the difficulty of computer hardware assembly operation learning is that the wiring is complex and attention is more in the assembly process of computer parts. If there is a slight carelessness, it is possible to burn down a part and cause safety hazards. The traditional teaching method is "teacher demonstration + student operation": in class, teachers first demonstrate on the platform and students watch in their seats. Students can't see the whole process of the internal assembly of the case and the details to be noticed. And for students, the operation can not be remembered only once. When doing it, it will still be

impossible to start, and will make mistakes, and damage parts and parts, thus attacking the enthusiasm of learning. In order to solve the problems in the operation of students, teachers may need to dismantle and dismantle the case repeatedly, and introduce the principle, process and precautions repeatedly. During the operation of each group, teachers can only check by walking among groups, and can not see the whole process of operation of each group of students, and can not find improper operation in the assembly process in time, which has potential safety risks. Teachers can not monitor the results of each teaching activity in real time, and they can not know whether the students master the operation. With the introduction of "learning through" platform, students can log in to app, which means they can access the teaching resources under the course, such as PPT, 3D animation, micro class, etc. Teachers no longer need to repeat the demonstration operation, 3D animation, micro class video has been all-round non dead angle display assembly process and precautions. Students can log in to app to watch 3D animation and micro class video at any time when they encounter any incomprehensible points during operation, and follow the video while learning to complete the operation. The whole process of each group can use the function of platform live broadcast to video and upload it to the teaching platform. Teachers can see the whole process of each group operation in real time on the platform, and correct the problems immediately if they appear. Live broadcast process can not only cast screen in real time, but also support playback. Everyone can see the operation process of other groups, which is convenient for mutual evaluation between groups. Teachers can realize real-time monitoring of all links in the whole teaching process, which helps to find out the key and difficult points of the course.

(3) After class expansion, students are required to log in to learn to watch the operation video playback of other groups, find problems, summarize experience and deficiencies, and sublimate learning. The students can complete the questionnaire survey of the teaching effect of this class, and the results of the questionnaire will be automatically counted in the background of the system and feedback to the teachers through data, charts and other forms. Teachers can understand the teaching effect of this class in time, and adjust the teaching plan and progress according to feedback.

### 5. REFLECTION ON MIXED CLASSROOM TEACHING

In the mixed classroom with two class hours, teachers use the "learning through" app, and combine the simulation, micro class, 3D animation, small game and other information teaching tools to integrate online and offline hybrid teaching is an innovative teaching mode. This kind of attempt has the effect and the insufficiency, now carries on the reflection to this lesson [5].

The teaching content is optimized, and the teaching content is not limited to the boring and outdated knowledge and materials. The platform contains a large number of teaching resources. Teachers can integrate online and offline teaching resources according to the

talent training plan and the professional post requirements. Teaching design tasks or cases can be derived from the post and life reality of the enterprise, keep pace with the times, and better meet the needs of teaching and employment.

Taking students as the main body, making the classroom more efficient use of online teaching interaction built by app runs through every teaching link of "before class in class - after class" of this course. It is no longer a boring computer assembly course for traditional classroom students to watch the teacher operation first, and then the students operate. Teaching design is really realized by taking students as the main body, inspiring students to be diligent in thinking and self-study to complete learning ability, so that students can actively and independently invest in learning. The results of questionnaire statistics on the platform have significantly improved the teaching effect compared with the previous teaching of the course.

In the traditional computer assembly classroom teaching, it is difficult for teachers to understand the students' pre-class preview and materials learning. In the process of classroom implementation, teachers can not monitor the absorption of knowledge points in time. Students can only consult teachers or other students to solve problems. After class, the review of students is difficult to follow. Through learning, teachers can monitor the browsing of students' pre class data. The data of classroom interaction can feedback the students' mastery of operation in real time, and the students' absorption and mastery of classroom knowledge can be tracked through online test after class. Teachers can adjust the teaching progress and teaching focus in time according to the feedback of platform data, so that the classroom teaching is more targeted.

One of the disadvantages of hybrid teaching is that due to the difference of the new and new mobile phones, different brands and operators, the performance and network of mobile phones will also show certain differences. Some students will inevitably have the phenomenon of mobile phone delay, button or unable to answer questions in the course of classroom interaction, which makes some students unable to complete the interaction between teachers and students and combat learning enthusiasm. Secondly, the implementation of classroom teaching requires a high teaching environment, and needs to have a sound and stable campus network environment. Otherwise, rich online classroom interaction will lead to the difficulty of controlling classroom time and affecting the progress of classroom teaching. Thirdly, the workload of teachers preparing for lessons increases, teachers with more teaching plans will be in a high load state, and the incentive mechanism of teachers is not perfect, which leads to teachers not enough time and energy to innovate teaching mode. Fourthly, the role of teaching platform in the teaching of teachers and students' learning is only a kind of auxiliary teaching tool, not a teaching artifact that can be realized in everything. The core of each class is the continuous optimization and integration of teaching content, the design of all links of the whole teaching process and how to mobilize the enthusiasm of students' learning. The pursuit of platform interaction will make teachers turn upside down in the process of classroom implementation.

#### 6 CONCLUSIONS

This kind of mixed teaching mode, which is based on "learning through" and combining micro class, animation, live broadcast and small game, has opened a new situation of the reform of the classroom teaching mode in higher vocational colleges. The novel coronavirus pneumonia, which was crazily in 2020, made learning Tong a good opportunity for many colleges and universities to develop online teaching. It provided a new opportunity for online teaching. In the post epidemic era, colleges and universities should increase their awareness of crisis, and it is imperative to change teaching mode. In the era of education information 2.0, if higher vocational schools can further optimize the network environment of teaching and solve the shortcomings of the found shortcomings of hybrid teaching process, this online and offline hybrid teaching mode can be widely used in computer professional classroom teaching.

- [1] Meng Shuguang. A study of computer teaching mode based on hybrid learning. Occupation, 2019 (34): 58-59.
- [2] Yang Bo. Application of Hybrid Teaching in computer classroom teaching in vocational colleges. New communication in China, 2019, 21 (06): 185.
- [3] Yan Yali. Research on hybrid learning mode of Higher Vocational Computer Courses Based on mobile app [Master's Degree Thesis]. Xihua Normal University, Nanchong, 2018.
- [4] Zhang Ling. Exploration of teaching reform of computer assembly and maintenance course in vocational colleges. Computer and telecommunication, 2019 (12): 65-67.
- [5] Li Hongzhang. A study of mixed teaching of Photoshop course in Higher Vocational Colleges Based on rain class. Computer products and circulation, 2020 (04): 200-201.

# Analysis and Research on The Mainstream Ideological Work in Colleges and Universities In The New Era

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Abstract: In today's era, there are many problems in the field of ideology, and the situation is increasingly complex. As an important position to cultivate socialist builders and successors, colleges and universities should firmly grasp the mainstream form of ideology and culture, and take moral cultivation as the basic task. This paper analyzes the challenges and problems faced by the mainstream ideological work in Colleges and universities, and then takes effective countermeasures to realize the innovation of Ideological and cultural work.

Keywords: Colleges and Universities; Ideology; Challenge

### 0.INTRODUCTION

With the continuous development of the times, the country pays more and more attention to the importance of ideological work, and emphasizes that the relationship between ideology and culture is inseparable. As the main position of our party's leadership, colleges and universities must firmly grasp the leadership of the mainstream form of consciousness, understand the many challenges faced by the current ideological work, and carefully analyze the problems, so as to continuously innovate, do a good job in the work of the mainstream ideology, and master the effective discourse and leadership.

# 1.ALLENGES FACED BY THE MAINSTREAM IDEOLOGICAL WORK IN COLLEGES AND UNIVERSITIES IN THE NEW ERA

At present, all kinds of thoughts collide with each other in society, and the culture presents the characteristics of diversification. Many bad social customs will spread to the campus, which will have a negative impact on the thoughts and values of students and teachers. Money worship, individualism and other bad cultures are gradually affecting batch after batch of students, which requires colleges and universities to strengthen the improvement and innovation of mainstream ideological work, so that the majority of teachers and students can have correct values, We will not go into the wrong way of thinking.

The Internet has changed the habits of teachers and students to receive and read information. Today, with the high popularity of smart phones, more and more we media convey information to people. Teachers and students can choose information according to their own interests. New media makes information transmission more convenient, at the same time, it also begins to carry more and more non mainstream ideology. Once these contents penetrate into the campus, it may have a negative impact on some college students. Because college students' ability to distinguish information needs to be further improved, non mainstream ideology will lead to college students' ideological misunderstanding, political stance is not firm, and even

some extreme behavior. Therefore, colleges and universities must grasp the mainstream ideological work and actively improve and innovate this work.[1]

Higher education is undergoing vigorous reform. In order to realize the cultivation of innovative talents and improve the quality of higher education, it is necessary to innovate the mainstream ideological work. While carrying out various business work smoothly, it is necessary to further improve the relevant theories of the mainstream ideological work, so as to better guide practice. College students are the main body of ideological work in Colleges and universities. Under the influence of diversified culture, many college students are full of strong self-consciousness, which will easily lead to the bad tendency of College Students' value orientation and ideological understanding, such as attaching importance to material and belittling ideology; Lack of ideal, more utilitarian[2]. Therefore, the mainstream ideological work in Colleges and universities needs to be improved and innovated in combination with the actual situation of college students, so that it can meet the needs of college students.

# 2. PROBLEMS IN THE CURRENT MAINSTREAM IDEOLOGICAL WORK IN COLLEGES AND UNIVERSITIES

2.1 THE WORKING MECHANISM IS NOT PERFECT The working mechanism is not perfect, some universities' mainstream ideology working mechanism is relatively loose, can not combine the work of various departments, lack of effective coordination, poor linkage ability. The linkage between departments needs to be improved, and there is no effective communication mechanism. The work of each department is independent and separated from each other, which affects the normal work of mainstream ideology. The majority of teachers and students in Colleges and universities know little about the ideological work and can not fully participate in it, which will lead to the further implementation of the mainstream ideological work.

## 2.2 THE WORKING METHODS ARE RELATIVELY BACKWARD

The effective mainstream ideological work method is relatively traditional, and it can not fully keep pace with the times, which will lead to the ideological work in a rigid state, unable to achieve the ideal effect. When conveying the spirit and instructions of the higher authorities, they usually focus on holding meetings and implementing documents without fully understanding the connotation of the spiritual instructions of the higher authorities, which will inevitably affect the effectiveness of the mainstream ideological work. At present, the mainstream ideological work in some colleges and universities has not been carried out in combination with the physical and mental

characteristics and actual needs of college students, so it is difficult to arouse the resonance of the majority of teachers and students, leading to the emptiness and lack of pertinence of the mainstream ideological work.[3]

### 2.3 UNCLEAR JOB RESPONSIBILITIES

Although many colleges and universities begin to attach importance to the work of mainstream ideology and formulate corresponding systems, in the process of actual implementation, they have not been well implemented, the responsibility is not clear enough, and the guarantee role of corresponding mechanisms can not be effectively played, which will weaken the function of ideology. Although colleges and universities set up special ideological work leading groups, the members of these groups can not fully understand their own responsibilities, do not pay attention to the mainstream ideological work, and are prone to buck passing and other situations in case of problems. The corresponding accountability mechanism is not sound enough to correct and punish the wrong behavior and speech in time, which makes it difficult to improve the work quality of mainstream ideology.

3. ON THE IMPROVEMENT AND INNOVATION OF THE MAINSTREAM IDEOLOGICAL WORK IN COLLEGES AND UNIVERSITIES IN THE NEW ERA 3.1 USING ADVANCED THEORY TO PERFECT CURRICULUM SYSTEM

In the process of carrying out the mainstream ideological work, colleges and universities must apply advanced theories and ideas and make full use of the advanced Marxist theory to guide the work. At the same time, we should also study the socialist thoughts with Chinese characteristics in the new era in combination with the characteristics of the times, so that the majority of teachers and students can understand these theories, and highly identify them from the ideological and emotional aspects, and have good political literacy and firm political position. We should actively play the role of Ideological and political courses, improve the corresponding curriculum construction system, improve the quality of Ideological and political education, but also establish the concept of curriculum thinking and politics, ensure that all kinds of courses can be combined with ideological and political theory, play a joint role, so that students can have mainstream values.[4]

# 3.2CLEAR DIVISION OF LABOR TO ENSURE EFFICIENT COLLABORATION

First, colleges and universities should put ideological work into the important agenda, establish a sound work responsibility system, and make clear the first responsible person. Leaders should often go deep into the grassroots, understand the ideological trends of teachers and students, find problems in time and solve them; The second is to refine the responsibility, according to the job responsibilities and work content of different posts, so that the ideological work can gradually penetrate and be implemented. It is necessary to select teachers strictly, to improve the quality of teaching as the premise, to conduct a comprehensive assessment and evaluation of the quality of teachers; Strengthen the supervision and control of teaching quality, and carefully compile teaching materials; We should strengthen the management of academic lectures and forum salons, carefully control and guide public opinion, especially the public opinion control of ACADEMIC PUBLISHING HOUSE

new media; Third, it is necessary to hold regular meetings to timely analyze the problems existing in ideological work and put forward corresponding improvement countermeasures. When it comes to important projects and academic activities, it is necessary to establish a perfect linkage mechanism, make relevant plans for emergencies, keep information unblocked, strengthen the cooperation of various departments, and realize the effective use of resources.

3.3ACTIVELY APPLY NEW MEDIA AND STRENGTHEN THE SUPERVISION OF NETWORK PUBLIC OPINION

Make full use of the Internet and new media, occupy the main position of public opinion propaganda, so that the mainstream ideological work has a strong carrier. Colleges and universities should actively open microblog and wechat official accounts, build campus network forums, and make a variety of micro courses, so that teachers and students can get all-round education. We should give full play to the subjective initiative and potential of teachers and students, make original micro films and videos related to the mainstream ideology with the help of the advantages of student associations, stimulate the enthusiasm and initiative of the majority of teachers and students, so that they can improve their ideological awareness and have more positive energy in the process of participation. According to the law of the majority of teachers and students using the network, we should understand the impact of the network on teachers and students, so that we can effectively prevent and control the public opinion of the network. Establish a sound public opinion tracking and early warning mechanism, strengthen supervision, effectively screen the network content, and deal with the problems in time once they are found. Rumors and negative information should be dealt with in the first time to avoid further expansion of the scope of such information. We should combine the ideological and political theory course with the Internet, establish a perfect ideological and political theory course system, and realize the unified combination of online and offline work. It is necessary to establish a perfect performance evaluation mechanism so that the ideological education can be implemented.

### 4.CONCLUSIONS

Colleges and universities are the cradle of talent cultivation in China, and the important place for the construction of mainstream ideological discourse, which is directly related to the security of national politics and the stable development of society. Therefore, colleges and universities should actively pay attention to the construction of the discourse power of mainstream ideology. In addition to the above-mentioned path, local colleges and universities also need to deal with the core relationship between mainstream and non mainstream, and establish and improve the network education mechanism of mainstream ideology. At the same time, the focus of reconstruction is to promote the supply side reform of Ideological and political education, establish the peopleoriented scientific supply concept, and promote the reform of network teaching mode of Ideological and political theory course.

The innovation of mainstream ideological work in Colleges and universities will be directly related to the achievements of moral education, and also the key to the International Journal of Education and Teaching Research Vol.2 No.2 2021

reform of colleges and universities. In the new era, the development of colleges and universities is facing many challenges. Grasping the leadership and discourse power of the mainstream ideology can not only realize the cultivation of excellent talents, but also maintain the political security of the country. In the context of globalization, the situation in the field of ideology in China is more complex, which requires the continuous improvement of efficient mainstream ideological work with good effectiveness.

### REFERENCES

[1] Li Rongrong, Wang Yingying. Research on the construction path of mainstream ideology in Colleges and universities [J]. Research on communication power, 2019,

3 (21): 218-219.

- [2] Zhong Lehai. Research on the necessity and practical path of promoting the discourse power of mainstream ideology in Colleges and universities in the new era -- from the perspective of cyberspace discourse power [J]. Journal of Henan Radio and Television University, 2018, 31.
- [3] Zhao Peng. Innovation research on the construction of ideological discourse system in Colleges and universities with new era characteristics [J]. Innovation and entrepreneurship education, 2018, 9 (5): 136-139.
- [4] Yao Mengzhu, Zhou Xuezhi, Guo Jia. Give full play to the "four step role" of Party building in the construction of campus culture and build the "mainstream ideology building" of college students [J]. University education, 2020.14 (01): 185-188.

# Reform of Practice Teaching Mode for Digital Empowerment of Intelligent Manufacturing Specialty

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Abstract: Aiming at the background of the digital age, facing the new requirements of the development of the intelligent manufacturing industry and the problems of the integration of production and education in vocational colleges. This article focuses on "constructing a practical teaching model of integration of production and education, complementing the shortcomings of work experience, and improving the effect of education" as Reform ideas and discuss the reform of the practical teaching mode of "cultivating skills in practice and improving quality in learning" for digital empowerment of higher vocational intelligent manufacturing majors.

Keywords: Digitalization; Intelligent Manufacturing; Practice Teaching Mode

### 1. INTRODUCTION

The digital age is the best time for the reform and development of higher education, and the new technological revolution will shape a new form of higher education development. The outbreak of the new crown pneumonia epidemic in early 2020 has presented global higher education with an unprecedented challenge and opportunity, and has become a catalyst for global education reform. In response to the adverse effects of the epidemic, universities and colleges have used various platforms to carry out online teaching to ensure the continuity of education. The huge demand for education will quickly promote the integration of information technology and education, and new forms and new normal of "Internet + education" and "smart + education" will continue to emerge. Higher vocational education has also begun to move from large-scale education to digital, individual, and diversified intelligent education. [1] Driven by the new technological revolution, "Internet +" and "Artificial Intelligence +" have become the main theme of the development of education in the new era, and the field of higher education is bound to be digitally transformed and intelligently upgraded. Digital twin technology is a basic technology for building a digital factory and digital world. It can create a digital version of a "clone" based on equipment or systems. This "clone" can realize the reproduction of ontology data and signals. It can run through the entire cycle of product design, development, manufacturing, service, and maintenance, and can achieve two-way flow of data and signals with the ontology. It is currently widely used in digital industrial manufacturing [2-3]. With the help of a new generation of information technology, in the face of the new requirements for the development of the intelligent manufacturing industry and the problems of the integration of industry and education in vocational colleges. the reform is to "construct a practical teaching model for integration of industry and ACADEMIC PUBLISHING HOUSE

education, complement the shortcomings of work experience, and enhance the effect of education" Thoughts, to explore the practical teaching mode of "cultivating skills in practice and improving quality in learning" in higher vocational intelligent manufacturing majors. It is of great significance for improving students' vocational skills and cultivating professional spirit, and cultivating students' sense of social responsibility, innovation spirit, and practical ability.

## 2. BUILD A TECHING CARRIER FOR TRAINING HIGH-QUALITY AND SKILLES TALENTS

Take the cultivation of innovative talents as the fundamental task, focus on quality, build characteristics, and create brands. The curriculum teaching of the professional group is adjusted to a docking product life cycle, an integrated teaching mode that is task-driven and product-based, and uses digital twin technology to carry out integrated training of teaching, learning and doing. In teaching, each task is carried out based on the virtual end and the real end of the production line at the digital twin technology-training center, and the data flow between the two can be realized. With the help of digital twin technology, the professional group curriculum teaching reform attempt has significantly improved the effect of the integration of theory and practice, project-based curriculum teaching, enabling students to master the knowledge and skills of each link of the product life cycle, and understand the core concepts of digital manufacturing. Enter the classroom through production practice and enterprise technology projects to enrich the teaching carrier of practical teaching. Allow students to train closer to the actual production of the enterprise, docking jobs, shorten the adaptation period for students after graduation, solve the problem of students' lack of corporate work practice, and cultivate students' application transformation ability, learning ability, problem discovery and problem solving ability.

# 2.1 REAL PRODUCT IS TRANSFORMED INTO "DIGITAL TEACHING PRODUCTS"

In the production cooperative enterprises, the selection of real products of different complexity and technical content is suitable for different stages of teaching. Take the processing of a certain part as an example, with the help of digital software, the part is designed and transformed into the part drawing of "Mechanical Recognition and Drawing". The process carrier of "Machining Process" and "CNC Machining Process". "CNC Machining Programming and Implementation" The project case was finally used for real product processing training in the training workshop. Students can be exposed to real industrial products in different courses.

The conversion of real products must meet the following

conditions: first, the school is teaching conditions must meet the requirements of productive internship training; second, there are products of different complexity and technical content, and different batches. Through such "teaching products", students will transform from a "novice" to a "skilled worker" who masters and applies technology through a training process from simple to complex, from shallow to deep.

# 2.2 THE TECHNICAL PROBLEMS OF THE ENTERPRISE ARE TRANSFORMED INTO "TEACHING PROJECTS"

Vocational colleges serve the regional economy, so they cannot be without technical services. Intelligent manufacturing majors are particularly important. At the same time, the development of students cannot lack the foundation of technical research. The School of Mechanical and Electrical Engineering of Zibo Vocational Institute relies on the national practice teaching base, and after several years of exploration, three types of topics are integrated into the student training process. One is tooling design, process optimization, program optimization, electrical control design, etc. The other is new materials and new the research on technology and new equipment. The third is equipment transformation and the automation and intelligent upgrade of production lines. Through these three types of topics, each enterprise technology project is transformed into a "teaching project" that students can participate in, learning by doing and learning by doing. At the same time, technical topics are integrated into different teaching links. the company produces first-line technical projects into class and outside project homework, do real work, do real questions, achieve real learning and real work, experience "real" and "real" work processes in school, and use learning knowledge Create value, improve ability and quality, accumulate experience, and make up for the shortcomings of the real work experience of vocational college students.

# 3. CONSTRUCT AN MODEL OF "APPLICATION OF KNOWLEDGE IN PROJECTS AND IMPROVENT OF QUALITY IN PRACTIVE "

The cultivation of high-quality technical and skilled talents pays more attention to practicality, which is reflected in "doing while learning, learning by doing". [6] Therefore, the implementation of practical teaching requires the use of a combination of teaching and production, and a combination of teaching and technical research. After several years of exploration, we have trained some students to become "big apprentices" through the engineering technology innovation room, skill training classes, professional associations, etc., and then "big apprentices lead small apprentices" for practical production, and "big apprentices" participate Workshop management, serving as workshop scheduling, group teaching team leader, and teacher assistant for subject research. Through the experience of multiple identities, more students are allowed to participate in practical training, production, and projects, which shortens the adaptation period for students to work after graduation and improves their ability to work competently. This kind of education model makes learning tasks from simple to complex, integrates knowledge and skills into specific learning (work) project tasks, gradually cultivates special skills and comprehensive abilities, and achieves knowledge, technology, experience accumulation and ability progression. To achieve the cyclic process of "learning-experience-reflection-abstraction-re-

experience" in which the training of talents can be used as the carrier of productive training. Realize the renewal of knowledge in teaching projects and the improvement of quality in productive practice. [7]

### 4. INNOCATIVE PRACTICAL TEACHING PROCESS EVALUATION MECHANISM

Adopting the teaching carrier of real product production transformed into "teaching products" and actual enterprise technical problems transformed into "teaching projects", allowing students to experience the working process of actual job standards at school, and the teaching process is seamlessly connected with job standards and industry requirements. The evaluation process adopts the work result evaluation of "zero tolerance for faults". The student performance evaluation is divided into two parts: one is processing quality. According to the company's product inspection standards, there are only two evaluation results of "qualified" and "unqualified"; the second is professional quality, According to the 5S management standard, there are only two evaluation results of "qualified" and "unqualified". Do not use scores to determine the results, improve students' quality awareness, and cultivate professional awe, responsible responsibility, and lean excellence. By experiencing the "real production labor process and results evaluation results", experiencing the sense of accomplishment and gain of "solving technical problems in the real production process and transforming knowledge into the value of results", cultivate students' professional qualities and professional attitudes, thereby inspiring students to learn and innovate power.

# 5. BASED ON BIG DATA ANALYSIS TO IMPROVE THE QUALITY OF " DUAL-PROFESSIONAL TEACHERS"

"Dual-professional" teachers are the characteristic and focus of the construction of higher vocational education teachers. Vigorously strengthening the construction of "dual-professional" teachers has become the common voice of the society and education circles. [4-5] "Dualprofessional" teachers should have both theoretical teaching and practical teaching qualities, have strong theoretical and practical teaching abilities, and be qualified teachers for student skill training and guidance. In the context of big data, with the help of various online Teacher Development Center Platforms, teachers can conduct adequate self-analysis and career opportunity analysis, and based on clarifying development goals at various stages, they can formulate personal career plans through the teacher development center. Taking digital teaching projects as the carrier, relying on different project types, organize different teams to carry out work, and improve the teaching ability, practical ability, resource development ability, teaching and research ability of team members, social service ability, information technology application ability, team cooperation ability And innovation ability. In order to make up for the lack of practical teaching by teachers in the school, high-educated workers with many years of front-line work experience are introduced from the company, or retired engineers with rich experience and good health are hired as part-time teachers to guide students' production practices and operations, and at the same time promote improvement. The practical teaching

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ability of the teachers in the school. These teachers are familiar with the required knowledge, abilities, and quality requirements of professional positions, and can integrate theory with practice in teaching, and cultivate high-quality technical skills talents that meet the needs of the market. Secondly, hire famous professors and well-known enterprise experts to be guest professors, and come to our school regularly to give academic lectures and academic guidance, and provide guidance and help for the school's teaching and scientific research. At the same time, he was hired as a technical consultant for scientific research projects to continuously improve the vision of teachers and improve the quality of "double teachers".

### 6. CONCLUSIONS

With the digital and intelligent application of production equipment in the manufacturing industry, the ability to apply digital and other new-generation information technologies to solve actual production and technical problems, the spirit of cooperation, and the rapid integration of enterprise production teams have become the fundamental motivation for industry enterprises to select and employ personnel. Digital empowerment of higher vocational education, allowing students to cultivate skills in practice, improve quality in learning, improve the quality of student training, and enhance students' employment competitiveness is a fundamental requirement. Therefore, higher vocational colleges are actively exploring the practical teaching mode that adapts to the development needs of students in order to meet the current problems in the practical teaching of intelligent manufacturing majors in higher vocational colleges, and cultivate compound high-quality technical skills talents that meet the requirements of the development of the times., To promote the high-quality development of higher vocational education in the new era.

- [1] Wang Sa. Talking about the practical teaching of mechanical specialty in higher vocational schools [J]. Heilongjiang Science and Technology, 2016, (7).
- [2] Liu Datong, Guo Kai, Wang Ben kuan, Peng Yu. Overview and Prospect of Digital Twin Technology [J]. Computer Integrated Manufacturing System, Chinese Journal of Scientific Instrument. 2018, (11).
- [3] Zhang Zhongyong et al. New model of product research and development for manufacturing enterprises in the digital age [J]. Gansu Science and Technology, 2019, 35(16).
- [4] Wei Xiong et al. Research and implementation of digital twin workshop based on real-time data drive [J]. Computer Integrated Manufacturing System, 2021, (1).
- [5] Sun Yong. Strengthening the cultivation of students' application ability-the exploration and practice of teaching reform in higher vocational machinery majors [J]. Value Engineering, 2014, (22): 29.
- [6] Gong Minli. Problems and countermeasures in practical teaching of mechanical majors in higher vocational colleges [J].2017, (3).
- [7] Yan Jinhua. Research and exploration of the practical teaching reform mode of mechanical manufacturing courses in higher vocational education [J].2013, (13).

# Research on the Comprehensive Evaluation System of Students

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Abstract: With the gradual advancement of the globalization process, new education problems continue to emerge, and there is an urgent need to implement curriculum reforms. How to give students a suitable evaluation is a key point of the reform. This article establishes a relatively complete student evaluation system, and uses the "Computer Aided Aircraft Manufacturing" courseas an example to illustrate it, giving students a more comprehensive evaluation.

Keywords: Educational issues; Curriculum reform; Comprehensive evaluation

### 1. INTRODUCTION

In the context of deepening globalization, the pressure of employment competition continues to increase. Today's society demands not only solid theoretical knowledge, but also good communication skills, adaptability, temporary resilience and strong psychological qualities. The call for cultivating comprehensive talents in society is increasing. In this general environment, the traditional curriculum learning evaluation system that places too much emphasis on theoretical learning and ignores students' comprehensive abilities is no longer applicable.

# 2. SHORTCOMINGS OF THE TRADITIONAL EVALUATION SYSTEM

The traditional curriculum learning evaluation system is formed and developed on the basis of traditional examination-oriented education, which has a certain degree of convenience. However, due to the excessive influence of the traditional evaluation system by the testoriented education, this indicator system obviously shows the tendency of emphasizing the final result and despising the process, the theoretical knowledge and the ability, the class and the after-class evaluation. In the final evaluation, the proportion of scores is too high, and the evaluation method using scores as the main evaluation criterion will inevitably lead to students becoming utilitarian, and it is also easy to cause students to solidify their thinking. In this case, the first factor most students think about is the test results rather than the knowledge. The result is that although students have mastered scientific theories to a certain extent, many other abilities have not been explored and improved, and their will is not firm enough to adapt to the work.

# 3. BASIC PRINCIPLES OF LEARNING EVALUATION REFORM

Following the basic theories of curriculum learning evaluation, according to the laws of education and teaching combined with the actual situation of teaching work, the basic principles that need to be followed in the reform of learning evaluation of mechanical professional courses have been established.

### 3.1 FOCUS ON TALENT TRAINING GOALS

Talent training is the fundamental task of higher education, and the principle of "taking talent training goals as the core" is placed at the top of the principle. Based on cultivating comprehensive application-oriented talents, attach importance to the establishment of a comprehensive ability training system. In teaching, stimulate students' curiosity, cultivate students' curiosity, and enable students to learn to apply and innovate. Form a more detailed and comprehensive way of thinking, and cultivate practical and innovative abilities. Cultivate talents with the ability to learn, apply, explore and innovate. [1]

### 3.2 STUDENT-CENTERED

"Student-centered" does not refer to the difference in roles, identities, and status between teachers and students, but refers to the transformation of teaching philosophy, management philosophy, service philosophy, and the transformation of teaching methods and evaluation methods.[2] The "student-centered" teaching method requires teachers to pay attention to the real life and possible life of students, and make the curriculum a bridge between the real life and possible life of students.[3] "Student-centered" should emphasize three focus points, namely learning, development and results. For this reason, in the setting of curriculum items, the setting of teaching content and the selection of teaching methods, we should consider as much as possible how to benefit the overall development of students to meet the needs of improving students' quality and ability.

# 3.3 FOCUS ON PROCESS ASSESSMENT AND ABILITY ASSESSMENT

Curriculum learning evaluation should combine student learning process evaluation and result evaluation, highlighting the process of talent training. Make students change and grow in dynamic learning, avoid students from positioning the ultimate goal of learning in test scores, and reduce the impact of "exam-oriented education". [4] Talent training requires a cycle, in which different tasks must be completed at each stage. Teachers need to teach students in accordance with their aptitude in the teaching process, in order to achieve the goal of common progress in education and learning. In the learning process, we should give students an objective evaluation, affirm their progress and point out their shortcomings. Even if the final result is not ideal, we should affirm the student's learning process.

### 4. NEW LEARNING EVALUATION SYSTEM

In order to solve the problems of the single evaluation method of the traditional curriculum learning evaluation system, the lack of evaluation of the learning process that accounts for most of the study life, the lack of comprehensive evaluation of the process, ability and results of students, and the malfunction of the evaluation feedback mechanism. On the basis of following the above three reform principles, this paper constructs a relatively complete comprehensive learning evaluation system in a

form of evaluation that is different from the traditional onepaper-set results. The following takes the "Computer Aided Aircraft Manufacturing" course as an example to introduce the evaluation system.

### 4.1 EVALUATION OBJECTIVES

- (1) Establish a set of learning evaluation system suitable for students learning the "Computer Aided Aircraft Manufacturing" course. Comprehensive assessment of students' mastery of basic knowledge of sketch design, part design, engineering drawing and assembly design; assessment of students' ability to use the engineering software CATIA design theory to analyze and solve specific product design problems of aircraft parts.
- (2) Comprehensively assess students' ability to use computers for practical operations, and promote students to master the ability to use the engineering software CATIA to design aircraft fuselage, wings, landing gear, engines and other components. Master the basic skills required by the aircraft manufacturing industry.
- (3) Cultivate students' practical ability, expand students' knowledge, exercise students' thinking ability, and enable students to solve practical engineering problems independently or cooperatively.[5] Ensure the content of the course, and actively explore teaching methods that use information technology such as flipped classrooms, and increase the application of 3D modeling software in engineering software courses and after class. The teaching mode of the "Computer Aided Aircraft Manufacturing" course after the reform is shown in Figure 1.

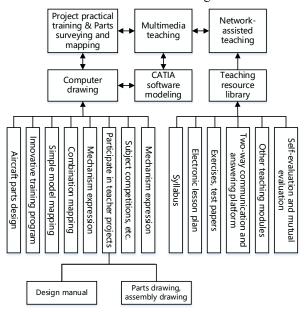


Figure 1. Teaching mode of the "Computer Aided Aircraft Manufacturing" course after the reform

### 4.2 EVALUATION PROJECT

This article uses multi-faceted, multi-level evaluation indicators to evaluate students' learning process, ability training and learning results. Some evaluation indicators in the current evaluation system, such as written tests, homework, course essays, etc., have their advantages and functions, and can be integrated into the new evaluation system at a certain ratio. Various forms of extracurricular activities such as study reports, regular meeting discussions, literature study reports, study records, project analysis, curriculum design, subject competitions, etc., while deepening the depth of memory, focus on assessing ACADEMIC PUBLISHING HOUSE

students' understanding and application ability of theoretical knowledge, which can be added new evaluation system. Of course, the evaluation project must also pay attention to the evaluation of the results, because the results represent the learning results to a certain extent, and represent the effect of transforming knowledge learning into practical effects. In addition, evaluation cannot only come from other people. Students' self-evaluation is also an extremely important part. [6] Self-evaluation can be integrated into the new evaluation system in a certain proportion. After comprehensively considering various factors, a new evaluation system with diversified evaluation indicators is established as shown in Figure 2. Process evaluation and result evaluation respectively account for a part of the total evaluation. The new curriculum learning evaluation system incorporates student self-evaluation and mutual evaluation. The new system has shifted from focusing solely on imparting theoretical basic knowledge and computer-based operation skills to focusing on students' learning process and knowledge application. The new system takes guiding the growth of students' logical thinking as the core, simultaneously exercises innovative thinking, and pays attention to the guidance and cultivation of the three views of students in the learning process.

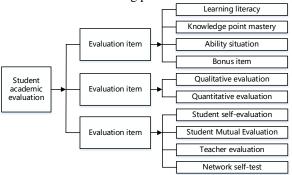


Figure 2. Diversified learning evaluation system 4.3 EVALUATION SUBJECT

This article adopts a multi-faceted, multi-level and diversified evaluation system to comprehensively evaluate the learning situation of students. The evaluation system gives students a reasonable evaluation of various abilities and encourages students to develop in a healthy and allround way. The evaluation subjects include: the project team leader, a reasonably configured teaching team, experts in related fields outside the school, and course teachers. The specific composition of the evaluation subject is shown in Figure 3. In the teaching process, students are divided into several groups to create a benign competitive atmosphere. A group leader leads 5-6 group members to work together to solve problems. The course learning evaluation system can ensure that all students participate, effectively avoiding the problems that a few people do most of the work and many students do not get opportunity to exercise. According to the characteristics of the courses taught, teachers design evaluation indicators that combine teacher evaluation, student self-evaluation and student mutual evaluation, and give full play to the subjective initiative and role of students. The evaluation part outside the school is carried out by experts and scholars outside the school. The evaluation items set up include subject competitions,

extracurricular scientific and technological activities, practical learning and cooperative exercises that students participate in. Course teachers make reasonable evaluations of students' learning process and learning conversion efficiency through attendance rate, homework, and after-school communication. The teaching team evaluates students by setting up various written tests.

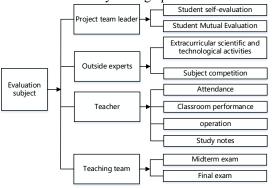


Figure 3. Evaluation subject 4.4 GRADE COMPOSITION

The final score of the student's academic level consists of four parts: computer graphics (computer practice) scores, usual scores, test scores, innovation and development scores, as shown in Figure 4. The proportions are:

- (1) Computer graphics scores include: exercise exams, seminar summary, research reports, case project design, etc. on the computer, accounting for 25% of the total score.
- (2) The usual results include class performance, class notes, student self-evaluation and mutual evaluation, attendance, etc., accounting for 30% of the total score.
- (3) Test scores include mid-term and final exams, accounting for 35% of the total score.
- (4) Innovation and development achievements include publishing papers, applying for patents, participating in subject competitions, applying for innovative training projects, extracurricular scientific and technological activities, participating in teacher teaching and research projects, etc., accounting for 10% of the total score.

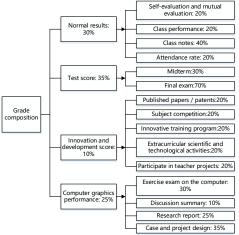


Figure 4. Score composition

### 5. CONCLUSIONS

The stable and rapid development of higher education greatly promotes the progress of society and the country. In traditional education, the evaluation of students is too single, lack of process evaluation, and the curriculum reform has a long way to go. This article proposes a new learning evaluation system, and uses the "Computer Aided Aircraft Manufacturing" course as an example to illustrate the new system, hoping to provide some help for the subsequent reform and improvement of the evaluation system.

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- [1] Xu Weimin Huang Junhua. The theory and construction of the reform of course learning evaluation based on the diversity of students' development [J]. Journal of Wuhan Polytechnic University, 2016, 35 (04):107-109+113.
- [2] Li Jinchao Wu Yong. Student-centered Educational Idea in Peralta Community College in California [J]. Higher Education Development and Evaluation, 2019, 35 (04):92-99+113.
- [3] Tao Caihong Liu Baoyong Sheng Li Lei Yang Cai Jieqiong. Construction and Reform of the Course System of Principles of Chemical Engineering under the Background of Engineering Education Certification [J/OL]. Univ. Chem.:1-6[2021-05-17].
- [4] Li Qingli. The Operating Mechanism of the Internet Public Sphere with the Citizens ' Participation [J]. Economic Research Guide, 2014 (25):222-226.
- [5] Liu Xiaoyan. Construction of Diversity Evaluation Based on Smart Classroom [J]. Journal of Electrical & Electronic Education, 2020, 42 (04):42-44+133.
- [6] Xie Yuting Dai Xiuyun Huang Xianli Li Jiping Liu Shouyin. Research on Quantitative Evaluation of Students'comprehensive Quality Based on Academic Achievements [J]. Higher Education of Sciences, 2021 (01):115-123.

# Research on the training of professional skilled personnel in electrical automation technology in Vocational Colleges

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Abstract: The purpose of the teaching of electrical automation technology in vocational education is to train skilled talents with strong hands-on ability, so as to lay a solid foundation for their future work and entrepreneurship. At present, the teaching of electrical automation technology in vocational education, including vocational colleges and technicians college, still stays in the traditional theoretical teaching mode, and does not pay attention to the cultivation of students' hands-on ability. Therefore, this time, the paper discusses the important measures to cultivate students' practical ability based on the problems in the teaching of electrical automation technology in vocational education, hoping to provide reference and help the relevant teaching staff to improve their practical ability.

Key words: Practical ability; Vocational education; Electrical automation technology major; Teaching status

### 1. INTRODUCTION

Nowadays, various specialties and disciplines in various colleges are undergoing reform, including electrical automation technology in vocational education. In the past, the teaching of electrical automation technology in vocational education mainly focuses on the explanation of theoretical knowledge, and the current technology is not related to the latest technology. The teaching with less hands-on practice makes students' hands-on ability far from meeting the needs of enterprises for talents. It is conceivable that the traditional teaching mode can not meet the needs of the current social development, and the traditional teaching mode has seriously hindered the development of electrical automation technology in Vocational Education in China. Therefore, for the professional teaching of electrical automation technology in vocational education, we should pay attention to the training of students' practical ability and the combination of the current popular technology while teaching theory. [1] In recent years, the development of high-tech has greatly promoted the industrialization development process of our country, and promoted the steady and high-speed development of our economy. The electrical automation technology specialty in vocational education is the foundation of high-tech development, so it has been paid attention by various colleges and universities.[2]The cultivation of electrical automation technology professionals with high skills and high-quality vocational education is the need of social development and scientific and technological progress. As far as the current domestic professional teaching of electrical automation technology is concerned, the teaching method which focuses on theory and formula derivation still occupies the leading position, but neglects the cultivation of students' practical practice ACADEMIC PUBLISHING HOUSE

and innovation ability. As a professional engineering course, modern society requires students of electrical automation technology in vocational education to have solid theoretical knowledge and should also have certain practical ability. This also requires that the teaching staff should pay attention to the cultivation and improvement of students' practical ability in the teaching process.

### 2. ANALYSIS OF POTENTIAL PROBLEMS IN TEACHING

# 2.1 THE PROFESSIONAL STUDENTS' PRACTICAL ABILITY AND CONSCIOUSNESS ARE LOW

According to the relevant survey, a large number of students are interested in practical courses, and their participation is not ideal. The main performance is that as long as we master solid theoretical basis, we can have a good understanding of the subject, and there is no need to carry out practical learning and other concepts. The neglect of such thinking seriously affects the enthusiasm of students' participation in practical courses, and the practical ability can not be effectively cultivated and improved. The separation of theory teaching from practical operation will cause students' fear of practice for a long time, and it is difficult to master the equipment operation skills effectively. In addition, because of the rapid development of electrical technology, the equipment reserved by colleges and universities is difficult to be in line with the advanced technology of society in time. Therefore, the equipment is usually old, which will cause a sense of useless for students and have a certain impact on their initiative. [3]

2.2 OVER EMPHASIS ON THEORETICAL TEACHING Throughout the current teaching mode of electrical automation technology in Vocational Education in domestic colleges, the theory teaching is carried out first, and then centralized practical teaching is carried out. The teaching method of practice operation through the guidance of perfect theoretical knowledge has certain scientificity. But according to the principle of forgetting curve, it is bound to cause a long time between theory and practice to set up practical teaching after the theoretical course is finished. [4]The long time interval makes students forget or be unfamiliar in the aspect of theoretical knowledge, which eventually leads to the disjunction between theory and practice. Based on the influence of traditional teaching mode, the excessive dependence on theoretical teaching and ignoring the practical courses, or the practical courses are only symbolic and not well implemented. The importance of teaching personnel to practical courses is not enough, which has great influence on students entering the society and practice in the future. 23 INFRASTRUCTURE IS NOT EQUIPPED **PROPERLY** 

To improve the practical operation ability of students, colleges and universities should be equipped with perfect basic equipment. For some colleges, the basic equipment is still insufficient, and the old equipment is difficult to be in line with the social reality. The specialty makes the actual school learn little effect for students in the future. Besides, the imperfect arrangement of student practice platform and practice base makes it difficult for students to have a good opportunity to participate in social practice, thus affecting the enthusiasm of students' learning participation to a certain extent. The perfect basic supporting system needs a lot of capital investment. Some colleges are not enough in terms of capital, and it is difficult to pay high costs and provide necessary basic guarantee for students. To some extent, it also affects the students' practical ability.

### 2.4 LACK OF HIGH LEVEL TEACHING TEAM

The electrical automation technology major in vocational education is a course which needs rich practical experience and solid theoretical foundation, so it requires higher requirements for relevant teaching personnel. For students, the teaching staff is the guide of students' learning, which is of great significance to improve the students' comprehensive quality. However, some teaching staff have insufficient knowledge reserve, and the school has more teaching tasks, which makes it difficult for some teaching personnel to implement the relevant contents of practical courses. The imperfect echelon of teaching talents and the inadequate teaching staff make students' learning and mastering of knowledge ambiguous, which leads to a great reduction of their interest in learning, and ultimately affects the students' practical ability and has a serious negative impact on their future development.

## 3. ANALYSIS OF MEASURES TO IMPROVE STUDENTS' PRACTICAL ABILITY

### 3.1 REFORM OF TEACHING METHODS AND INTEREST IN LEARNING

In the course of electrical teaching, the application of flexible teaching method can effectively improve the students' enthusiasm for learning. For the teaching staff, we should take effective guidance according to the different situations of students, so that they can better understand the difficult theoretical knowledge and keep their interest in learning. Scientific and effective teaching method can make difficult problems easier, help students master the focus of learning, and better implement the relevant contents of theory and practice. The main body of electrical automation technology teaching in vocational education is students. Therefore, the study and inquiry of professional knowledge based on self stimulation will be better than that under the urging of teachers. Strong interest in learning is the basis of students wandering in the knowledge ocean, and also the key to cultivate problemsolving ability. In the actual teaching process, teachers can improve the communication between students based on group discussion and joint research, and keep interest in knowledge exploration, and finally achieve the effect of self-improvement. For the teaching staff, they should also learn and improve themselves constantly, and help and students better through interaction train and communication.

### 3.2 IMPROVE STUDENTS' ENTHUSIASM FOR PARTICIPATION

For some students' enthusiasm in practical courses is not very high, the teaching staff can use reasonable teaching methods to improve their enthusiasm for participation. Then, it can establish their own interest in learning and actively participate in the practical courses. Practice has proved that in the teaching process of electrical automation technology in vocational education, the display of some competition works can effectively stimulate the curiosity and fun of students. Students will show their own practical works to students, which helps them improve their sense of self-pride and sense of honor. For other students, we can stimulate the desire of self participation through the observation of others' works, and finally more students can participate in the practical courses. The teaching method of competition display can improve students' self-study ability, stimulate their strong interest in the study of professional knowledge of electrical automation technology in vocational education, and lay a foundation for their active participation in skills training and practice. In addition, because of the increase of group activities in the practical course, students can better grasp their professional knowledge, and through cooperation, the relationship between students can be improved, thus achieving complementary advantages, which is of great significance to the improvement of comprehensive practical ability of both sides.

### 3.3 REASONABLE OPTIMIZATION OF TEACHING RESOURCES

The improvement and optimization of supporting teaching resources is the key to improve the practical ability. In the actual teaching, the choice of teaching resources should be combined with the needs of students and curriculum teaching, so as to scientifically combine the teaching content with the actual situation, and ensure that all students master advanced theoretical knowledge. Advanced equipment and perfect teaching facilities are the important premise for cultivating students' practical ability. In the course teaching, the teaching staff should carry out targeted teaching design, based on the assistance of advanced equipment and experimental explanation, apply abstract theoretical knowledge to practice and deepen the learning effect of students. The establishment of the supporting equipment and the equipment maintenance platform of the electrical automation technology specialty in vocational education is of great significance for the combination of theoretical teaching and practical training. It can raise students' interest in learning and finally achieve the purpose of improving practical ability.

# 3.4 OPTIMIZE TEACHING MODE AND THEORETICAL PRACTICE BASED ON THE CURRENT SITUATION

There are many factors that influence the teaching results in practice, and the teaching mode is one of the key factors. Compared with the traditional teaching mode, the teaching staff should adopt the active and flexible teaching mode in the new period. Through the interaction and exchange between teachers and students, students can be encouraged to learn interest, actively study and study independently, and promote the improvement of self-integrated ability, self-study ability and practical ability. Open teaching method can combine practice and theory well, and then effectively consolidate students' basic knowledge, and improve their practical ability, so as to improve students'

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practical awareness and cultivate and improve innovation ability.

### 3.5 IMPROVE THE ASSESSMENT MECHANISM

In the past, the teaching methods pay too much attention to the evaluation of teaching results, often taking student achievement as the main assessment point and the final result as the main basis. Similar to such a single one-sided assessment mode, students' daily learning and participation in practical courses are seriously affected. There is no scientific basis for the assessment of teaching results based on theoretical results alone. Therefore, comprehensive consideration should be made on the scores, practical exercises and participation degree, Not only do students actively learn and master solid theoretical foundation, but also need to pay attention to the improvement of self practice ability and the cultivation of innovation ability.

Practical courses play an important role in the electrical automation technology specialty of vocational education, so the proportion of the teaching in the practical teaching can be increased appropriately. To improve the proportion of experimental courses, we can take them as a course alone, so as to cultivate students' practical ability and innovative thinking. In the past, the experimental course as a subordinate course teaching method will inevitably cause students and teaching personnel to ignore it, and also bring certain influence on the cultivation of comprehensive talents.

### 4. CONCLUSIONS

With the increasing incentive of social competition, our country attaches more and more importance to vocational education. Students can better and faster based on the society by constantly improving the professional skills related to electrical automation technology. In the past, most of the teaching focuses on the teaching of theory, so the trained talents often have good foundation in theory, but in practice, they are unsatisfactory and difficult to meet the needs of enterprises. Therefore, for vocational colleges at present, we should focus on the teaching of practical courses, combine theory with practice, so as to prove theory by practice, guide practice with theory and carry out the teaching of theory practice integration, so as to help students learn and master theoretical knowledge better. Improving the practical ability can help students to adapt to the needs of their posts and realize their own values as soon as possible after they enter the society in the future, and to continuously transfer skilled talents for the society.

- [1] Liu Zhihong. Exploration of teaching practice system of electrical specialty under the concept of "teaching concept reform" [J]. Education circles, 2017 (22): 223-223. [2] Liu Jie. Research on blended learning mode and application of electrical specialty [J]. South China Normal University. 201 (515).
- [3] Cai Li, Liu Xiaojie, Qiu Gang. Practical ability training of electrical engineering students based on subject competition [J]. Three Gorges higher education research, 2017 (4).
- [4] Cheng Haijun, Chen Xiaoying, Jiang pijie. Exploration on the cultivation of innovation and practice ability of electrical majors [J]. Contemporary education theory and practice, 2016 (4).

# Research on the Application of Micro Course In Ideological And Political Education In Higher Vocational Colleges

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Abstract: In recent years, with the development of science and technology, multimedia is widely used in the field of education and teaching. Using micro class to improve the level of classroom teaching has become the development direction of modern education. The ideological and political education in higher vocational colleges has not been very ideal. In order to improve the teaching effect of ideological and political courses in higher vocational colleges, relevant teachers can introduce the micro-class mode. This paper analyzes the application advantages of micro-course in ideological and political education in higher vocational colleges and discusses the application practice of micro-course in ideological and political education in higher vocational colleges

Keywords: Micro-course; Higher vocational colleges; Ideological education; Application

### 1.INTRODUCTION

China's education departments put forward to vigorously promote the combination of information technology and higher education, and comprehensively improve the teaching level of ideological and political courses in higher education. Higher vocational colleges should actively respond to national policies and accelerate the pace of ideological and political teaching reform. Micro-class is a new teaching method. The application of micro-class in ideological and political teaching in higher vocational colleges is conducive to stimulating students' interest in learning. The short and well-welded teaching videos closely follow the current current affairs and achieve the effect of keeping pace with The Times.

2.ADVANTAGES OF MICRO-COURSE IN IDEOLOGICAL AND POLITICAL TEACHING IN HIGHER VOCATIONAL COLLEGES 2.1BE INTERESTING

Micro-class is a teaching mode based on short videos, which can fully record the teacher's explanation process of key contents. As a new teaching method, it is of great interest and can attract students. The application of micro-class teaching highlights the teaching theme, concentrates the important content, and has clear teaching objectives. It presents the knowledge in a dynamic and illustrated way and stimulates students' interest in learning. Micro-class integrates music, pictures and videos, which makes the teaching content more clear and activates the teaching atmosphere. The abstract knowledge is animated to help students understand and accept, which is conducive to improving the teaching efficiency.

### 2.2 IT IS CONVENIENT

Micro lesson video broadcast 5-8 minutes commonly, volume is small, beautifully designed, structural integrity, good convenience, enhances the interaction between teachers and students, the class can assist students self preparation before class, online browsing thematic cases, access to learning materials, afterschool review, specific great use value, students can use class fragmentation time student activities, Students can choose the corresponding micro course contents according to their learning needs, solve problems in time and improve learning efficiency. In addition, micro-lesson videos made by teachers can be transmitted to students without time and space restrictions. The use of micro class can reduce students' learning pressure, and can also preview new lessons to better improve their academic performance. [1]

### 2.3 BE INTERACTIVE

Micro-class teaching spreads knowledge and learning methods on the Internet and realizes classroom reversal. Students can supplement knowledge at any time after class, communicate with students about learning, or answer and answer with teachers online, and explain difficult problems online. Teachers and teachers can also make use of the network platform for teaching discussion, and constantly optimize the teaching design model of course content. The interactivity of micro class enables teaching to realize multi-dimensional interaction, achieve the effect of sharing teaching resources, and promote the common progress of teachers and students.

3.THE APPLICATION STRATEGY OF MICOR COURSE IN HIGHER VOCATIONAL IDEOLOGICAL AND POLITICAL EDUCATION
3.1 CHOOSE TEACHING CONTENT

3.1 CHOOSE TEACHING CONTENT EFFECTIVELY

In teaching, teachers in higher vocational colleges should effectively choose the teaching content when making micro-lesson videos. Due to the characteristics of prominent content and short time, the teacher should choose an important knowledge point of the course. Fully grasp the content of the teaching material, grasp the teaching objectives, select knowledge. For example, when talking about the knowledge of "morality and law in professional life", the focus of this chapter is to let students understand the basic moral and legal rules of professional life, strengthen their own moral and legal cultivation, and lay a good foundation for their career. Therefore, legal norms can be listed as a key point. Appropriate micro class videos can stimulate students'

interest in ideological and political courses. In ideological and political teaching, higher vocational teachers should fully adhere to the important and difficult points in the textbook, connect with current issues and hot topics, select content with profound significance, attract students' attention and actively participate in class discussions. Teachers of ideological and political science can choose textbooks according to students' learning needs. The teaching purpose of ideological and political science micro course is to answer students' doubts, which is different from ordinary specialized courses that focus on the dissemination of knowledge. Students are often at a loss in life and will choose to help ideological and political teachers. Teachers' answers play an important role in guiding students and make students feel a sense of security. Ideological and political teachers can make professional and independent micro-lesson videos according to the teaching material outline. [2]Micro education class is not a simple, direct to carry the part of education courses to classroom teaching, but accurately grasp the students' ideological dynamic, from the social hot spots, reality, international and domestic situation, professional issues, students' thoughts, such as import ideological content, finely crafted, do fine, stationary material combined with the material is impromptu, interesting and timeliness, We should not only enrich the contents of the class, but also active the atmosphere of the class and improve the quality of education. For example, the use of video in the lecture, case, images, innovative entrepreneurship, corporate culture, the honest code of honor, such as ideological content, the credibility of the enterprise culture into the quality education of university students, through effective enterprise culture and education, enables the student to the good faith more profound understanding and the understanding, understand the importance of honest and trustworthy, In order to help students to shape the good quality of honesty and trustworthiness. 3.2 MASTER ALL KINDS OF IMAGE RECORDING To make high quality micro lesson video has some technical difficulties, higher vocational colleges of education teacher at the time of making micro video, can make full use of advanced teaching equipment and technology, make video picture more vivid, clear, structure is compact, clips, delicate, sweet voice, emphasize on the main point of knowledge, has the profound education value, objectively reflect the modern education thought. Micro teacher education must strengthen their own micro class production ability of learning, constantly improve the quality of making the teaching video, and other excellent teachers develop close exchange of teaching team, please senior teacher demonstration teaching process, using advanced teaching technology, grasp the spirit system, a variety of image editing skills, good micro teaching video important influence on teaching, Ideological and political teachers in higher vocational colleges must optimize the production level of micro courses. [3] 3.3 MICRO-COURSE TEACHING DESIGN

vocational colleges should effectively attract students' attention in teaching, which is also the key factor for the success of teaching. In order to improve the learning effect of students' ideological and political courses, teachers should carefully design the teaching process of micro-class. For example: talking about "profession morality and law of life" knowledge, education teacher in front of the lecture, guide students through the way of watching micro class, self preparation about "workers' rights" and "labor contract" and so on knowledge, combined with the teaching requirements, create the teaching problem, let the students learning with doubt, activate the students' brain thinking, deepen students' understanding of knowledge. Students can watch the micro lesson repeatedly. If they do not hear clearly in class, they can continue to study in the time after class. In the preview, students can combine their own learning habits, effective choice of learning methods, can repeatedly watch the micro lesson video, also can be divided preview, seize the knowledge points contained in the question. In the classroom teaching, the teacher can answer the questions recorded by the students in the preview in time and effectively, and also lead the students to discuss in groups to summarize the key knowledge of this lesson. In the design of ideological and political micro-course teaching, teachers should combine textbook theories with social hot events to attract students' attention, exercise students' eloquence and debating thinking through group discussion, and improve the teaching effect of ideological and political course.[4] Micro class education should adhere to khalid ents education idea, the ideological elements into the reasonable curriculum standard, teaching design, teaching plans, teaching resources, the spirit of patriotism, socialism core values, the spirit of craftsman, switching from spirit and moral cultivation, through education in classroom teaching. the value guidance, knowledge, ability training organic unify, To realize the effective integration of ideological education and professional knowledge, through the combination of in-class and after-class, in-school and off-campus, implementation of multiple the comprehensive evaluation, forming a synergistic effect of close combination of professional course teaching and ideological and political theory course teaching.

### 4.CONCLUSIONS

Anyhow, ideological education has an important role in the whole education teaching in higher vocational schools, in order to adapt to the modern education career development requirements, higher vocational colleges of education courses to introduce class mode, give full play to the subjectivity of the students in the classroom learning, choose appropriate teaching content, improve the quality of micro class production, increase education courses teaching fun, convenience, interactivity, Using a variety of network videos, pictures, typical cases and other forms of intuitive, effective, students are willing to accept, teaching through entertainment, moisten things silently infiltration of teaching, ideological education, moral education and aesthetic education effectively integrated. To realize the role of value

Ideological and political micro course teachers in higher

guidance, personality shaping, moral edification and professional accomplishment promotion. To help students better understand the essence of ideological and political courses, to achieve the application of learning to solve practical problems, to improve students' ideological and political quality.

- [1] Tang Hui. Research on the Application and Practice of Micro-class Model in the Teaching Reform of Ideological and Political Courses in Higher Vocational Colleges [J]. Research in Contemporary Educational Practice and Instruction, 2017, (10):22-23.
- [2] Wu Hongxing. Practical research on the application of MOOC micro-course in the teaching reform of

- ideological and political courses in local universities [J]. Journal of Yan 'an Vocational and Technical College, 2017(2).
- [3] Peng Peilin. Application Analysis and Practice Exploration of Micro-course Model in Ideological and Political Course Teaching Reform in Higher Vocational Colleges [J]. Research on Contemporary Educational Practice and Teaching (Electronic Journal), 2018, (09):283.
- [4] Li Nan. Research on the Application and Practice of Micro-class Model in the Teaching Reform of Ideological and Political Courses in Higher Vocational Colleges [J]. Journal of Hubei Open Vocational College, 2019, 32(04):80-81.

# The integration of socialist core values into Higher Vocational Ideological and Political Education

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Abstract: Higher vocational college students are the backbone and pillars of the future national construction. The ideological and political work of higher vocational education is to cultivate the spiritual quality and moral cultivation of higher vocational students as the main purpose, integrate the theoretical system of socialism with Chinese characteristics and socialist core values into Higher Vocational Ideological and political education, and create a fresh ideological and political classroom.

Keywords: The core values of Chinese socialism; Vocational school; Ideological and political education; Integrate into

### 1.THE PRESENT SITUATION OF SOCIALIST CORE VALUES IN HIGHER VOCATIONAL EDUCATION

The report of the 18th National Congress of the Communist Party of China further refined and summarized the core socialist values, which were prosperity, democracy, civilization, harmony, freedom, equality, fairness, rule of law, patriotism, dedication, honesty and friendship. Among the 24 Chinese characters, the objective, orientation and specific criteria of socialist core values are summarized from the three aspects of individual, society and state. Socialist core values are the concentrated aggregation and embodiment of contemporary Chinese spirit, which includes the common value pursuit of all Chinese children. Higher vocational education should fully integrate the socialist core values into it, and take full responsibility for the cultivation of national rejuvenation and successors of socialism, strengthen the education guidance, practice constantly, explore and construct perfect system guarantee measures, and effectively promote the penetration of socialist core values in the ideological and political teaching of higher vocational colleges.

With the development of network technology, diversified information is integrated into students' study and life, and there are many wrong and negative information transmitted to students. Ideological and political education as the basic moral cultivation education should not only meet the requirements of in-depth classroom, but also into the daily life of students, However, because the teaching objectives of most vocational colleges are to improve students' professional knowledge and professional skills, to some extent, they neglect the ideological and political education of students, and reduce the hours of Ideological and political education, which leads to the simple teaching content of teachers, even the dryness and the lack of formalization, the lack of active classroom interaction atmosphere and the single teaching means, Thus, some students will feel that they are not concerned about the study of this course. This kind of education method makes students have a great deviation in their thoughts, and their ACADEMIC PUBLISHING HOUSE

cognition of moral cultivation is not clear and profound, and at the same time, it also reduces the sense of social responsibility and social identity of students, and even may make bad behaviors. [1]

Teachers usually pass on the oral and teaching materials to help students in Ideological and political education, which has not played a good teaching effect. On the contrary, students will not listen to the class carefully, even have conflicts. The result of not listening and understanding seriously is the lack of understanding of basic legal norms, and even more likely to make illegal acts. Because of the weak legal awareness and lack of citizen norms, college students often occur in a series of civil and criminal cases, These behaviors also give rise to more college students. 2.THE IMPORTANCE OF SOCIALIST CORE VALUES IN HIGHER VOCATIONAL EDUCATION

COUNTRY'S **PROSPERITY** PROSPERITY REQUIRE THE IDEOLOGICAL AND POLITICAL EDUCATION ROOTED IN HIGHER

VOCATIONAL COLLEGES

As the name implies, values are the evaluation standards of a person for something. As the main force of social construction, higher vocational colleges need to have the judgment and ability to correct values. But in some vocational college students, there is a "money has everything" and its wrong values. This wrong value is not in line with the construction of a rich, strong, democratic, civilized and harmonious socialist power, which is extremely harmful to the realization of social freedom, equality, justice and legal environment. Personal patriotism, dedication, honesty and friendship are impossible to talk about. How can students with such incorrect values bear the great responsibility of building socialism with Chinese characteristics. Therefore, we need to guide students to establish positive and positive ideas and establish correct outlook on life and values. Only by establishing positive and healthy ideas, can students get comprehensive improvement in the three spiritual levels of society, family and individual. While constantly consolidating professional knowledge and skills, we should promote the students' all-round development, and undertake to realize the prosperity of the country, the people and the strong The important task of rejuvenating the Chinese nation.

2.2 THE DEVELOPMENT OF SOCIETY REQUIRES HIGHER VOCATIONAL COLLEGES TO DEEPLY **CULTIVATE** IDEOLOGICAL AND **POLITICAL EDUCATION** 

The progress of the times is very fast. The progress of society and the times needs fresh blood injection. Now, the college students in higher vocational colleges are the main force of the construction of the times. In the ideological

and political aspects, the school needs to invest more energy in strengthening the education of the core values of socialism for students, so that students can establish a clear understanding of the development of society, Stimulate the sense of responsibility and urgency of students.

Through further research and in-depth discussion on the value theory system, the socialist core values are constructed, which reflects the overall grasp of the world development and the overall planning of the national development of the CPC Central Committee. In the process of higher vocational education, it can promote the ideological and political education by integrating the core values education into it. In the core value system, all kinds of Ideological and behavioral and activity contents contained in it contain distinctive characteristics of the times, which are closely combined with contemporary vocational education and modern vocational education. When implementing the socialist core value system, it should be integrated into the ideological and political curriculum, ensure the effective combination of teaching and education, and implement the socialist core value system in Ideological and political teaching into various teaching links, thus giving impetus to the society and the country to different degrees. [2]

# 2.3 STUDENTS' RICH IDEAS NEED TO BE INTEGRATED INTO IDEOLOGICAL AND POLITICAL EDUCATION IN HIGHER VOCATIONAL COLLEGES

In the process of the ideological and Political Curriculum Teaching of higher vocational education, it can cultivate the contemporary college students to form correct cognition and establish the key courses of correct outlook on life, values and employment. In the process of vocational education, the goal of talent training should always be to establish morality and cultivate people, to ensure that the professional quality of the trained talents is high and has comprehensive strength. Therefore, higher vocational education is required. In the process of Ideological and political work in the future, professional quality and moral training of vocational students should be implemented to the reality, and the value objectives of students should be developed closely around the talent training program, and a perfect moral standard should be formed, the ideological and political education connotation should be strengthened constantly, and the theoretical education and practical education should be effectively combined. [3]

The times are developing rapidly, the information dissemination speed is very fast, and the impact of various information on students is quite large. There are not enough information to induce students' values in these information. Therefore, enriching students' thoughts and improving students' legal consciousness has become the key to improve their self-cultivation. During the study of higher vocational colleges, students' plasticity is relatively strong. At this time, the integration of socialist core values can fundamentally solve the problems of students' values. Only if students have established socialist core values, can we correctly distinguish the beauty and ugliness and right of social images.

3.EFFECTIVE STRATEGIES OF INTEGRATING SOCIALIST CORE VALUES INTO HIGHER VOCATIONAL COLLEGES

### 3.1 BUILDING A RICH CAMPUS CULTURE

To integrate socialist core values into students' lives, we should first integrate them into their living environment. The most common living environment for students is campus. To integrate socialist core values into the construction of campus culture and create a rich and civilized and harmonious campus environment, schools should actively carry out various special lectures, Organize and carry out the campus cultural activities with clear themes. In addition to instilling correct values into students in daily life, we should combine educational practice to help students understand and understand the socialist core values system through hand brain interaction. After the course of learning socialist core values, students can be organized to volunteer to consolidate their grasp of socialist core values.

### 3.2 BUILDING A MULTI-LEVEL LEARNING PLATFORM

Besides normal teaching, we should create opportunities for students to learn independently. First, they can not only tell the students in a rigid way, but also adopt diversified, visual and vivid learning methods, such as multimedia teaching, combination of graphic and video, classic cases, scenario simulation, role play, and real-time scene reproduction, It can also use short video to interpose in learning, and deepen the understanding and mastery of students.

With the rapid development of the Internet age, students regard mobile phones as the treasure in their hands. Therefore, we can use the network to convey the correct values to students. Students can learn the socialist core values anytime and anywhere by using mobile phones, and encourage students to participate actively and actively cooperate with learning. Nowadays wechat micro blog has become an important carrier of students' social entertainment. Reasonable use of these platforms enables students to integrate ideological and political education content while using mobile phones, and repeatedly emphasize the formation of correct values, which plays a positive role in education.

We can make full use of the opportunities for the integration of Ideological and political thoughts and politics on festivals and commemorative days, such as theme group day activities, affidavit education, party class, etc., to carry out lectures or organize students to participate in volunteer activities, carry forward the socialist core values, transmit positive social energy, and guide students correctly with the resources of the school, The core values of socialism are transmitted at the right opportunity.

# 3.3 STRENGTHEN THE CONSTRUCTION OF PRACTICE ACTIVITY SYSTEM.

By accelerating the construction of the practical activity system, the ability of contemporary vocational students to practice socialist core values can be further improved, and the teaching effect of Ideological and political can be further improved. On the one hand, vocational colleges can actively develop the ideological and political education training base by using the red education resources in the region, and fully integrate the core values into the education base, effectively combine theoretical teaching and practical education, give full play to the function of red education resources, and rely on red education resources to realize and realize the core values, Fully integrated into the

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ideological and political teaching work, the campus culture with characteristics is formed within a short time. In addition, we should pay attention to strengthen the practical exploration of vocational students in society, through deepening the school, in-depth enterprises, indepth communities, and carrying out extensive publicity and driving. In addition, relevant staff can be invited to communicate with students and teachers in the way of inviting in, so as to further understand the cultural needs of different levels, and then carry out targeted practical education activities in combination with actual needs.

### 4. SUMMARY

Generally speaking, in the environment of higher vocational colleges, vocational students are the hope of the future construction of the country. It will also be a long-term process to integrate socialist core values into the ideological and political education of higher vocational colleges. However, it is lifelong benefit to help students form correct ideas and carry out their work smoothly after graduation. In the process of Ideological and political education in higher vocational colleges, we should organize various activities and lectures to create a learning atmosphere of socialist core values, and at the same time, we should strengthen the integration of students' daily life. In the process of teacher lecture, we should abandon the traditional teaching methods and adopt the more

acceptable way for students, Through multi-level integration, the core socialist values can be better implemented and implemented.

Higher vocational education is related to the development of a country and the hope of the nation. In the process of Ideological and political education in higher vocational education, by integrating the socialist core values into it, it can help contemporary vocational students to establish correct ideological understanding, clarify the best development direction, ensure that the trained talents can better meet the requirements of socialist construction and become the successor of socialist construction.

- [1] Li Qiuxiang. Education of socialist core values in Higher Vocational Ideological and Political Education [J]. Science and technology information, 2014, 000 (028): 182-182
- [2] Chen Anqi. Interpretation of socialist core values in Ideological and political education in Higher Vocational Colleges [J]. Education modernization, 2017, 000 (039): p.277-278.
- [3] Gong Xifang. Integration of socialist core values into Ideological and political education in Higher Vocational Colleges [J]. Education modernization, 2016, 000 (026): p.259-260262.

# Practical Exploration of the Ideological and Political Construction of Implementing Courses for Engineering Major

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Abstract: Curriculum ideology and politics is the main goal of course teaching reform under the new situation. This article takes a professional course of electrical automation technology as an example, and explores the teaching that integrates the content of professional courses with curriculum ideology and politics from the aspects of teaching objectives, teaching content and teaching methods. The model guides students to establish a correct outlook on life and values, stimulates their interest in learning and patriotic enthusiasm, guides students to have good professionalism, legal awareness, and strict adherence to industry standards, and further improves the quality of professional education.

Keywords: Curriculum Ideological and Politica; Electrical Automation Technology Professional Course; Teaching Reform.

### 1. INTRODUCTION

"Curriculum ideological and political work" is a new concept of ideological and political work, that is, "Curriculum carries ideological and political work" and "Ideological and political work in curriculum". In 2016, General Secretary Xi emphasized that colleges and universities should run ideological and political work throughout the entire process of education and teaching at the National Conference on Ideological and Political Education in Colleges and Universities. We must make good use of the main channel of classroom teaching and implement ideological and political education in every class. We must unremittingly cultivate and promote socialist core values, promote harmony and stability in universities, cultivate a healthy and rational and peaceful attitude, strengthen humanistic care and psychological counseling, and build universities into a model place of stability and unity. In June 2018, Minister Chen Baosheng of the Ministry of Education made clear requirements at the education work conference that all courses in colleges and universities must have elements and responsibilities for educating people, and encourage every professional teacher to develop a "curriculum ideological and political" teaching design to achieve the curriculum There are ideological and political aspects, and all teachers are about educating people.

Compared with liberal arts courses, engineering teaching is more inclined to the study of professional theory and the application of knowledge, and it is difficult to integrate ideological and political education into the curriculum. Therefore, there is a general situation that the combination of professional education and ideological and political education is not close enough in engineering professional courses. [1] This article takes the professional course

"Motor Control Technology" in the direction of geotechnical engineering as an example, combines the development trend of contemporary education, reforms the teaching objectives, teaching content and teaching methods, and explores the teaching that integrates the professional course content with the curriculum ideology and politics. mode.

2. PRINCIPLES AND IDEAS OF INTEGRATING COURSE IDEOLOGY AND POLITICS INTO PROFESSIONAL COURSES

2.1 CHANGE PROFESSIONAL TEACHERS' EDUCATION CONCEPT

For a long time, most of the teachers of engineering majors think that the ideological and political work of college students is the work of ideological and political course teachers, counselors, and class teachers, and they only need to explain the professional knowledge in the courses. However, the fundamental task of education is to educate people. Higher education trains socialist builders and successors who go directly to society and assume social responsibilities. The key to succession training is teachers. If colleges and universities want to truly realize the fundamental task of "building morality and cultivating people", they must establish and uphold the educational philosophy of "all teachers have the responsibility of educating people, and all courses have the function of educating people". [2] In the course of course construction, full-time teachers should improve their own moral education awareness and value education ability, establish a sense of mission and responsibility of "teaching a good book" and "educating good people", and be able to dig and refine various professional courses in depth according to the characteristics of the disciplines. Containing elements of moral education, integrate the core values of socialism, the basic principles and requirements of doing things into professional curriculum teaching, and realize the organic unity of education and teaching. [3]

2.2 DO A GOOD JOB IN THE OVERALL DESIGN, CLARIFY THE EDUCATION GOALS, AND FORM THE MAIN LINE OF IDEOLOGICAL AND POLITICAL ELEMENTS INTO THE CURRICULUM TEACHING

"Motor Control Technology" is a professional course for electrical automation technology, with strong theoretical and practical nature. In addition to the original professional teaching goals, the goal of ideological and political education has been introduced. Through the combination of ideological and political education elements and professional knowledge, students can establish a correct outlook on life, world outlook and values; possess noble morals and professional ethics, good scientific literacy and humanistic feelings, determined to take root in their jobs,

contribute to the country, and be active Dedicated to the construction of socialism with Chinese characteristics in the new era; with good teamwork spirit and communication skills, with the spirit of seeking truth and innovation and a broad international perspective, to become a qualified builder and reliable successor of socialism

"Motor Control Technology" is the core course of the national high-level professional group of electrical automation technology and the national professional teaching resource library. It is the first batch of national textbook construction awards recommended by Shandong Province. It is running on 4 open platforms such as MOOC of Chinese University. The course is offered in the first semester of the sophomore year. At this stage, the focus is on cultivating general professional abilities. The course is positioned to cultivate craftsman-like talents who care about society and integrate skills; talents with technical skills for installation, debugging, and maintenance of electrical and electrical equipment; Sustained development talents with learning innovation, cross-industry integration, communication and collaboration, and knowledge and action.

The course integrates motor technology with industry companies, combines typical tasks such as installation, commissioning, and maintenance of motors and electrical equipment, and organizes the content of the textbook based on the professional growth experience of practitioners, and summarizes the formation of six teaching modules such as "Renaissance of domestic low-voltage equipment manufacturing", The content of each module is carried out according to the project teaching mode. The course focuses on integrating "patriotism, dedication, professionalism, and craftsmanship" into the knowledge teaching, debugging, inspection and evaluation of each project. Project design and case selection combine the relevant knowledge of China's rapid rise in motor technology and advanced manufacturing. Strengthen students' understanding of new technologies, new processes, and new standards, and at the same time allow students to perceive my country's achievements in the field electrical machinery technology and current development difficulties, and increase students' sense of mission and responsibility for learning courses.

# 2.3 CLARIFY TEACHING GOALS, RESTRUCTURE COURSE CONTENT, AND REFINE EDUCATION GOALS INTO TEACHING PROJECTS AND TASKS

"Motor Control Technology" is a vocational ability course for students to participate in the electrician qualification appraisal, X skill certificate assessment and vocational skill competition. According to the requirements of the integration of student value shaping, knowledge transfer and ability training, the curriculum teaching objectives are formulated: Master the basic operating knowledge of domestic low-voltage electrical appliances, learn basic electrical control units in scenarios that demonstrate the strength of the motherland; stimulate students' aspirations to learn with a high-tech research and development background, and enhance students' interest in learning boring abstract DC motors; combine current energy-saving and emission-reduction issues and technical measures Understand the product materials and process knowledge of special motors; use old fans to make wind generators to be familiar with the principles and processes of AC motors; comprehensively use motor-related control circuit installation and debugging to complete production and operation projects.

2.4 STRENGTHEN ENGINEERING ETHICS EDUCATION, CULTIVATE CRAFTSMAN SPIRIT, AND EXPAND CURRICULUM IDEOLOGICAL AND POLITICAL CONSTRUCTION PATH

The first is to use the rise of domestic motors to realize the integration of ideological and political education elements. According to the teaching content of the course, combined with the touching deeds of the craftsman spirit, the typical cases of electric motor companies, and the news of current affairs that are highly related to the teaching content, teachers and students discuss their feelings and perceptions together to cultivate students' professional ethics. The second is to fully consider the teaching content and combine problem-oriented teaching methods in the mixed teaching reform. For example, "Do you know how long a nuclear submarine can stay underwater and do you know its basic design principles" is the starting point. Research topics are proposed before class, a team is formed during class, and new knowledge and new technology related content are expanded after class., To cultivate students' inquisitive spirit and take responsibility for paying attention to the development of national electrical machinery and equipment manufacturing. The third is to innovate teaching design to improve students' ability to analyze and solve problems. Realize the effective integration of ideological and political education. Classroom teaching takes students as the main body, forming study groups, completing 10-15 minutes of preclass business research and website data collection. The two groups of students are divided into pros and cons, and debates are carried out to improve student unity and cooperation. The spirit of friendliness and mutual assistance. Fourth, teachers reserve more practical engineering cases to help students understand the ideological and political elements integrated into the teaching of electrical machinery in a simple and simple way. Teachers can allow students to perform technical roleplaying and scenario simulations in the training room; in the factory-entry training link, they can connect with the real work tasks of the company, conduct job abilities and analysis, and achieve unity of knowledge and action, honesty and dedication, and dedication.

2.5 THE IDEOLOGICAL AND POLITICAL ELEMENTS OF THE CURRICULUM ARE EXTRACTED WITH "TEMPERATURE", AND THE IDEOLOGICAL AND POLITICAL ELEMENTS ARE CLEVERLY INTEGRATED INTO THE TEACHING PROCESS

Avoid bluntly implanting ideological and political elements in the teaching process. Otherwise, it will not only fail to achieve the goal of ideological and political education, but will arouse students' disgust and reduce their interest in professional knowledge learning. Existing teaching experience proves that the way that teachers first introduce stories or explain engineering cases can better capture the attention of students, and then gradually elicit theoretical knowledge, which will not only help students understand, but also increase their interest in listening to lessons. Through designing problems and launching group

analysis and discussion, students can actively think and participate in the classroom. In this process, ideological and political elements are naturally integrated into it, and students can deepen their understanding of the true meaning of education. The new teaching content strengthens the practical teaching part. In addition to introducing a large number of engineering examples in the classroom, it also provides students with opportunities to exercise in the mechanical workshop, allowing them to connect theoretical knowledge with practice in a timely manner, which has deepened students' understanding The understanding of theoretical knowledge can also achieve the purpose of applying what has been learned.

The ideological and political elements of the curriculum are selected close to the times and close to life. Teachers use case-based and experiential teaching methods to promote the interaction and emotional resonance between teachers and students. Use old computer fans to make homemade wind generators to familiarize students with the principle and technology of three-phase asynchronous AC motors, and cultivate students' sense of innovation; in the analysis and study of motor forward and reverse circuits, introduce a practical case of a thrilling process without accidents, and let students The design of the retractable door control of the school gate has exercised the students' comprehensive ability such as teamwork, and educates the students on safe production and standardized operation with the blood and tears of the teacher's personal experience of dangerous accidents. The teaching cases have received enthusiastic responses.

Through the stories in the mechanical workshop, precept and deeds, cultivate the spirit of craftsmanship, and ground the professional curriculum ideology and politics. The teaching team has established a four-in-one curriculum education model of thought-leading-theory teaching-cultural infiltration-practical education. The workshop teaches the installation and commissioning of DC, AC, and stepping motors, which increases the knowledge, humanity, and practicality of the course, enhances the leading, contemporary and openness, and promotes students to experience, think, and sharpen in practice. The caster advocates excellence Professional background color.

From the results of the questionnaire survey, it was found that the students said that they could feel the ideological and political education carried out by the teacher, and they also learned a lot of positive and positive thoughts and so on. At the same time, students said that after the integration of ideological and political content, the classroom will become more vivid and interesting, no longer just a boring theoretical explanation. Therefore, the actual effect of introducing curriculum ideology and politics into professional classrooms is ideal.

## 2.6 SYNCHRONOUSLY IMPROVE TEACHING RESOURCES

According to the ideological and political elements excavated, the syllabus is revised, mainly in five parts: teaching objectives, teaching requirements, teaching content, class hours allocation and assessment methods. Based on the purpose of curriculum ideological and political education, improve teaching methods, summarize typical teaching cases, compile curriculum ideological and political teaching plans, improve teaching courseware, and change performance evaluation methods.

2.7 ADOPT MULTIPLE EVALUATION MECHANISM AND "THREE MULTI" EVALUATION SYSTEM TO COMPLETE COURSE EVALUATION AND ASSESSMENT

"Motor Control Technology" combines the characteristics of courses, majors and industries, breaks the summative assessment, strengthens multi-stage testing, adopts multi-subject assessment methods such as teachers, supervisors, students, and units to establish daily assessments, job ability assessments, behavior assessments, and finals Examine the "four-in-one" multi-evaluation mechanism, formulate quantitative evaluation indicators for 6 items, and establish the "three-to-many" evaluation of theory-skills-literacy multi-dimensional assessment, teacher-college-school multi-level participation, and multi-type assessment methods system.

The "Motor Control Technology" course was launched on 4 platforms including MOOC of Chinese University. 40, 000 students have completed the study and left a good evaluation of the course teaching in the teaching evaluation area. The survey found that the students' teamwork ability, craftsmanship spirit, and awareness of safe electricity use have been further improved, the sense of responsibility and discipline has been significantly improved, professional learning has been more attentive, and the national pride of students has increased.

### 3. CONCLUSION

This article takes the ideological and political reform of the course "Motor Control Technology" as an example, and conducts a preliminary design and practice of integrating the ideological and political curriculum into the curriculum teaching. Fully excavate the ideological and political elements, and find a way to implant ideological and political education subtly and silently, so that students can integrate patriotism in specific theoretical study and knowledge application, and have good character And professional literacy, have legal awareness, improve the comprehensive literacy of students, and achieve the true purpose of "curriculum ideological and political".

- [1] Guo Nan, Li Guodong, Zuo Hongliang. Discussion on the reform of professional courses based on ideological and political construction[J]. Education Teaching Forum, 2019
- [2] Chen Dan. Ideological and political practice research on the course "Bridge and Culvert Construction Technology" [J]. Contemporary Educational Practice and Teaching Research, 2019 (10).
- [3] Wu Yueqi. On the three focal points of colleges and universities to promote "curriculum ideological and political"[J]. School Party Building and Ideological Education, 2018 (1).

# Research on the Strategies of Improving Teaching Ability of Innovative Education and **Employment Guidance for College Counselors**

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Abstract: In recent years, the employment situation of college students in our country has become more and more severe, and college students will face a huge test. How to help students achieve employment or start a business has become a key issue that universities need to pay attention to, and counselors should strengthen education in this area. However, judging from the current abilities of college counselors, they still do not meet the requirements of entrepreneurship education and employment guidance teaching. Effective measures need to be taken to enhance counselors' abilities in this regard. Based on this, this article studies the strategies for enhancing the teaching ability of college counselors' innovation and entrepreneurship education and employment guidance, and hopes that the discussion of the article can provide some reference for other colleges and universities. Based on this, this article studies the strategies for enhancing the teaching ability of college counselors' innovation education and employment guidance, and hopes that the discussion of the article can provide some reference for other colleges and universities.

Keywords: college counselor; innovation entrepreneurship education; employment guidance teaching; promotion strategy

### 1.INTRODUCTION

There are millions of college graduates every year, and they all flock to the society to find jobs. There is a situation where the supply of jobs exceeds the demand. Many college students are facing the dilemma of unemployment after graduation. In order to avoid this situation, colleges and universities began to strengthen entrepreneurship education and employment guidance teaching, and counselors were mainly responsible for the teaching responsibilities. Counselors have their own advantages in this aspect of teaching, but there are also great drawbacks. How to avoid them, and continuously improve counselors' entrepreneurial education and employment guidance teaching ability has become the top priority. Below the author carries on elaboration in view of relevant content.

### 2.ADVANTAGES AND DISADVANTAGES OF COLLEGE COUNSELORS IN INNOVATION AND ENTREPRENEURSHIP EDUCATION AND EMPLOYMENT GUIDANCE TEACHING

Entrepreneurship education and employment guidance are very important contents in current college education. In many colleges and universities, counselors are responsible for this work. Judging from the actual work of counselors, they have obvious advantages and disadvantages, as shown in Table 1.

Table 1 The pros and cons of college counselors in entrepreneurship education and employment guidance

teaching		
Advantage	Convenience	Counselors are responsible for students' study and life, and they have close contact with students, so they can carry out related education and teaching work according to students' situations
	Professional foundation	They have strong professional qualities, understand students' demands for career development, and design educational objectives in a more comprehensive way to meet students' own needs
	Know the students better	Understand students, such as students' character, thoughts, and heart, which is conducive to the development of entrepreneurship education and employment guidance
Disadvantage	Inexperienced	Counselors are mainly postgraduates in their majors. Employment education and guidance teaching pay more attention to operability and practicality. Counselors are lacking in this respect.
	Lack of ability	The counselor is too young and lacks rich work experience, resulting in insufficient ability
	Imperfect knowledge structure	Lack of relevant knowledge and theory can not support the development of entrepreneurship education and employment guidance teaching, and it is difficult to help students effectively guide employment and entrepreneurship
2 THE DOLE OF COLLEGE COUNCELODS IN		

#### 3.THE ROLE OF COLLEGE COUNSELORS IN INNOVATION AND **ENTREPRENEURSHIP EDUCATION AND EMPLOYMENT GUIDANCE**

Entrepreneurship education and employment guidance teaching occupies a relatively short time, which is mainly to carry out professional teaching, that is to use teaching means to complete the education work in this respect<sup>[1]</sup>. Nowadays, counselors have become a very important force in entrepreneurship education and employment guidance teaching, and counselors have played a very important role in it, as shown in Table 2. Table 2 The role of college counselors in

entrepreneurship education and employment guidance teaching

Guide students to start their own businesses Strengthen actual combat

entrepreneurship

employment activities

Use your own experience and knowledge to carry out purposeful teaching, strengthen extracurricular activities, guide students to actively participate in extracurricular entrepreneurship activities, and enhance students' entrepreneurial ability Entrepreneurship education and employment guidance should be realized through extracurricular activities, and at the same time strengthen communication with students, so that students can exercise their employment and entrepreneurship abilities through practice

Assist students in entrepreneurship and employment

The counselor tracks the students' entrepreneurship and employment, analyzes their problems in the process, solves the difficulties they encounter, and promotes their growth in employment and entrepreneurship

# 4.STRATEGIES FOR IMPROVING THE TEACHING ABILITY OF COLLEGE COUNSELORS' INNOVATION AND ENTREPRENEURSHIP EDUCATION AND EMPLOYMENT GUIDANCE

(I)Optimize the educational environment

Judging from the current overall environment of entrepreneurship education and employment guidance teaching in my country's universities, there is generally a lack of a strong atmosphere. Compared with entrepreneurship education and employment guidance teaching, colleges and universities pay more attention to professional education for students, and to a certain ignore entrepreneurship education employment guidance teaching. The proportion of responsibilities undertaken by counselors in this regard is also very small, and this part of the work is basically undertaken by public class teachers[2]. Because on the education system is not sound, and teaching modes are basically through the course content, competition is just assume the role of the auxiliary teaching, which makes the teaching content is relatively single, not only attractive, and professional alignment is low, even appear disjointed situation, teaching lack of obvious pertinence. For colleges and universities, they should build a good environment, create a more dynamic campus atmosphere, and lay the foundation for the development of entrepreneurship education and employment guidance teaching. According to different majors, relevant entrepreneurial competitions can also be held, so as to arouse students' enthusiasm in this area, and also enable them to grow in the process.

### (II)Launch system training

In order for college counselors to have strong abilities entrepreneurship education and employment guidance teaching, and to meet the needs of education in this area, college counselors should be trained. Before the formal mount guard of instructors, need to be system training, and learning also requires its working process in the related education knowledge and theory, makes its own ability to support entrepreneurship education and employment guidance teaching, so as to improve students in entrepreneurship and employment in terms of quality, making of the students can find a satisfying job<sup>[3]</sup>. When training instructors, in addition to the explanation of professional knowledge, it is also necessary to conduct training on the status quo of the professional industry, national policies. These contents also very important in the teaching entrepreneurship education and employment guidance. When the counselor can master this knowledge and content, then the counselor can obtain more ideal results in the actual education process, otherwise all education teaching work will be lost Its meaning. Therefore, schools should pay attention to the training of counselors, through training to make them more comfortable in actual teaching, and it can also play

a positive role in students' entrepreneurship and employment.

(III)Strengthen the construction of the counselor team In public courses of colleges and universities, entrepreneurship education and employment guidance is a very important course content. In addition to training professional teachers, colleges and universities will also let professional teachers into counselors, or set up full-time positions on entrepreneurship education and employment guidance, so as to complete the teaching work with high quality<sup>[4]</sup>. In order to make counselors full of enthusiasm at work, colleges and universities should also increase the salary or treatment of counselors. Set up incentive awards according to the actual situation of colleges and universities, so that they can consider their own responsibilities when facing assessments, work harder to complete their own work, and continuously strengthen learning about their own shortcomings, so that they can complete related work with high quality. In addition, in strengthening the team construction of counselors, their recognition of the work of counselors should be enhanced. Only with a high degree of recognition can you become more serious and responsible at work. Facing entrepreneurship education and employment guidance teaching work, they will use various methods to improve their abilities and literacy in order to ensure the quality of the teaching work.

### (IV)Strengthen supervision

According to the assessment indicators of current counselors, entrepreneurship education employment guidance teaching work is not included in the assessment scope. From a certain point of view, no one knows whether the counselor effectively completes the educational work. This will easily lead to the perfunctory phenomenon of the counselor, cause the entrepreneurial education and employment guidance teaching work to lose its own role and significance.In the face of the actual situation, colleges and universities should appropriately strengthen the supervision in this aspect and replace the teaching work entrepreneurship education and employment guidance with the assessment of counselors, so as to arouse the awareness of counselors and replace the education and work<sup>[5]</sup>.Counselors make reasonable arrangements according to their own specific situations in daily work. Through the education work, students can have a clearer understanding of entrepreneurship and employment, which lays a foundation for students' choice of employment and entrepreneurship in the future, and promotes every student to have a good career.

### 5.CONCLUSION

In short, college counselors must have a clear understanding of the current entrepreneurial and employment situation. At this stage, the society urgently needs "double innovation" talents, and this is also the key to college education. For counselors, this should be the focus of their future work, and actively carry out entrepreneurship education and employment guidance teaching, so that students can actively participate in relevant interactions, and gradually become talents

needed by the society, which also requires counselors to have a strong educational ability. The article discusses the improvement of counselors' entrepreneurial education and employment guidance teaching ability, mainly from the four aspects of optimizing the educational environment, launching systematic training, strengthening the construction of the counselor team, and strengthening supervision. Entrepreneurship education and employment guidance teaching can be carried out well.

### REFERENCES

[1] Li Yunfeng, Min Xiaoyang. Research on the Teaching Ability Improvement Strategies of Innovative and Entrepreneurship Education and Employment Guidance for College Counselors[J]. Theoretical Research and Practice of Innovation and Entrepreneurship, 2020, 003(006):171-172.

- [2] Zhou Liping. Research on Innovation and Entrepreneurship Education and Guidance Improvement of College Counselors[J]. Modern Economic Information, 2017, 000(030):448.
- [3] Wang Feilong, Liu Lili, Lan Juan. Research on the Improvement of College Counselors' Innovation and Entrepreneurship Education Guidance Ability under the Innovation-driven Development Strategy[J]. Journal of Taiyuan Urban Vocational and Technical College, 2019, 000(001): 148-150.
- [4] Zhang Xiaoxuan. Research on the Innovation and Entrepreneurship Education and Guiding Ability Improvement Path of College Counselors[J]. Think Tank Times, 2018, 164(48):294-295.
- [5] Wang Yipin. Research on the Innovation and Entrepreneurship Education of College Counselors[J]. Science and Technology Wind, 2020, No.439(35):139-140+174.

# Contrastive Research on the Interpersonal Meaning of Modal Adjuncts on Brexit in SinoUK News Reports: A Systemic Functional Perspective

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Abstract: Since the announcement of Britain's formal withdrawal from the EU on January 31st, 2020, the news reports related to it have drawn widespread attention from domestic and foreign news media and academic circles. After Brexit, Sino-UK relations were different from the past, entering a new and historical journey. During the process of Brexit, the mainstream media in China and Britain continuously published Brexit news reports. These reports contained a large number of modal adjuncts expressing interpersonal meanings, which had an impact on readers' judgments, therefore having research value. This thesis uses Halliday's Systemic Functional Grammar as the theoretical framework to analyze the corpus. it can be seen that Chinese news reports on Brexit used different kinds of modal adjuncts to show the Brexit process in a relatively objective and realistic manner based on Brexit. Meanwhile, China news reports show a consistent attitude to Brexit: respect and believe in choice of the British, and firmly believe that China will have a good cooperative relationship with the UK. However, British news reports used a variety of modal adjuncts to show the contradictions and conflicts of the Brexit in a relatively subjective way, which accordingly affects the readers' judgment and achieve political purposes. The study visually demonstrates the features of language in the news media of the two countries, explores the attitudes of the Chinese and British media to the Brexit incident and the reasons behind the differences, and thus tries to provide a new way of development for the future development of relations between the two countries.

Keywords: Brexit news report; comment adjunct; modal adjunct; mood adjunct

### 1. INTRODUCTION

In news discourse, modal adjuncts are an important lexical and grammatical resource, reflecting interpersonal functions. They are also a mode of interpersonal means, with reporters using them to intervene in propositions and express their attitudes and positions implicitly (Chen, 2018). By reading Brexit reports, people have found that the mainstream media in China and Britain use different kinds of modal adjuncts to express interpersonal meaning when reporting on the Brexit event. As such, based on Halliday and Mattiessen's (2004) modal adjunct

system, this thesis conducts contrastive research on the interpersonal meaning of Brexit in Sino-UK news reports, conducted to find solution methods for negotiation and cooperation. To fulfill the above objectives, three research questions to be addressed through the current study are proposed as follows:

- (1) What are the distributions of mood adjuncts and comment adjuncts in Sino-UK news reports?
- (2) What interpersonal meaning is realized by mood adjuncts in Sino-UK news reports?
- (3) What interpersonal meaning is revealed by comment adjuncts in Sino-UK news reports?

### 2. LITERATURE REVIEW

The impact brought about by Brexit is also an issue concerning many scholars. Mihail Danov(2020) points out that Brexit has a direct effect on the application of the EU private international law instruments in the UK. Such a change in the legal landscape relevant to PIL could affect private parties' access to remedies. Kai Oppermann, Ryan Beasley, and Juliet Kaarbo (2020) focus on the UK's foreign policy after Brexit in 2016. They claim that after Brexit vote in 2016, British foreign policy is at a turning point. In order to avoid being isolated, the UK develops a disoriented foreign policy that includes some incompatible roles such as major powers, global trading nations, leaders of the Commonwealth, regional partners of the EU, and allies loyal to the United States. These role conflicts in the UK, as well as the conflicts between their different role expectations, will have pushed British policy to its unnecessary isolationist role, which may affect the long-term orientation of British foreign policy after Brexit. Sweeney and Winn (2020) analyze post-Brexit strategic choices of the EU following the launch of the EU Global Strategy. They conclude that European Union security should cooperate with the post-Brexit UK to achieve global strategic autonomy, otherwise, both of them will reduce their influence on the wider world in the next few years.

Scholars in China have done lots of research on Brexit itself from the perspective of diplomacy, economics, and politics. Some previous linguistic researches have analyzed Brexit from the perspective of the linguistic field, such as Appraisal theory (Shi & Jiang, 2018), Hedges (Wang, 2019), critical discourse analysis (Xiao, 2018), political discourse analysis (Yang, 2018), grammatical metaphor analysis (Wang, 2020), speech act promising analysis (Wang, 2019), and translation

strategy analysis (2020, Guo). Some of the domestic scholars conducted discourse analysis in terms of appraisal resources and engagement resources based on Appraisal theory in order to reveal the hidden attitudes to Brexit behind different news reports or British internal ideology and power. For example, Shi (2018) make contrastive research on the appraisal resources embodied in Brexit news from the three perspectives of Appraisal theory to reveal different attitudes to Brexit from various news agencies, Jiang (2018) studies 30 English news reports about Brexit from the Guardian's official websites and adopted qualitative and quantitative methods to reveal the British ideology and power reflected by the engagement resources, and Wang (2019) analyzes four types of hedges from the perspective of semantics and pragmatics in Brexit news within mainstream news reports. His analysis revealed that proper use of hedges can improve the credibility of news and safeguard the image of the country, as well as personal privacy.

### 3 METHODOLOGY

The qualitative and quantitative research methods were adopted to conduct a contrastive analysis of the interpersonal meaning of modal adjuncts on Brexit news reports in China and the UK.

Firstly, the Brexit news reports within the year of 2016-2020 were selected respectively from Chinese mainstream newspapers and British mainstream newspapers. Secondly, all the modal adjuncts resources in the Brexit news reports from China and UK were classified by the author based on Halliday's modal adjuncts system. Thirdly, the author compared and analyzed different types of modal adjuncts resources used in Brexit news reports. Lastly, the frequencies and examples were applied to explain the differences and similarities of these different types of modal adjuncts realizing the interpersonal meaning.

The research object of this thesis is about Brexit news reports delivered by China and British official news agencies, which are popular and authoritative with people. Considering the reliability of the research data, the texts of the Brexit news reports were all downloaded from official websites in the English language. For China, 180 articles of news reports were downed from these websites: www.chinadaily.com.cn; www.xinhuanet.com; and www.cgtn.com. For the UK, 180 articles of news reports about Brexit were downloaded from the following websites: www.thetimesnews.com; www.guardian.ng; www.telegraph.com.

### 4 DISCUSSION

4.1 Discussion for the Findings of Modal Adjuncts This section is designed for the discussion of the findings from the Brexit news reports within the framework of interpersonal function, namely mood, modality, and evaluation system. The specific examples are employed to promote to examine the interpersonal functions of the modal adjuncts in Brexit news reports under the theoretical framework of Systemic Functional Grammar. The modal adjuncts of

Brexit news reports in both groups are discussed respectively in the next section.

### 4.1.1 Discussion for Mood Adjuncts

Mood adjunct, which mainly represents different types of assessment of the proposition or proposal, is an important aspect of interpersonal function realization. It is closely associated with the meanings construed within the three subsystems: temporality, modality, and intensity. On this basis, it is easy to see what interpersonal meanings are revealed by these types of mood adjuncts. The data collected show that there are differences in the distribution of different types of mood adjuncts, which will be discussed in the following parts of this section.

### 4.1.1.1 Discussion for Adjuncts of Temporality

Halliday (2004) puts forward that temporality adjuncts could be further divided into "time" and "expectation". For instance, "eventually", "ultimately", and "finally" belong to the former, and words like "still", "already", and "no longer" belong to the latter. Most news reports are mainly for different types of assessments with temporality adjuncts to express their attitudes, hoping to influence the audience, to persuade the listeners to accept what they said, and even to gain support. As mentioned earlier, the main function of temporality adjuncts is to provide information about deictic time and positive or negative expectations. In all adjuncts of temporality, "still" and "already" are employed most frequently in Chinese and British news reports to deliver assessments. Hence, the following examples are selected from Chinese news reports to be analyzed in detail.

(1)Yet it's still well below pre-referendum levels, with one hedge fund manager predicting it could recover to \$1.55 in the longer-term on a positive Brexit outcome (China Daily, 2018).

(2) What we are seeing is people still talking about Brexit all the time, and we need to just ensure that is motivating people to the ballot box on Thursday (CGTN, 2017).

(3)We are going to deliver not a soft Brexit or a hard Brexit, but an open Brexit, one that ensures that the UK is still turned outwards, and more engaged than ever before (Xinhua, 2020).

No analysis could be done without the background of the context. In example (1), the background is the currency of the UK has increased almost 4 percent, which is still well below pre-referendum level. Regarding this question, on the one hand, "still" is used to illustrate the current state of the British currency and on the other hand, it shows that the British currency has more room for growth. By employing the temporality adjunct "still", the authors of these Chinese news reports successfully convey a positive expectation on the currency of the UK to the readers. In example (2), people are "still" talking about Brexit with the advent of the vote, which is helpful to increase ballot for Brexit successfully. It conveys positive expectations for the outcome of Brexit to readers. In example (3), an open Brexit is a trend whether Brexit is soft or hard, which shows the speaker's confidence in Brexit and positive expectations for the future of the UK. The following examples of temporality adjuncts "still" are selected from the British news reports.

(4)The Great Depression of the 1930s was traceable to economic dislocation in Britain; the UK occupies a central position in global trade, politics, and economic alignment; and as a former colonial master, most Commonwealth countries still look up to the UK for leadership and direction (The Guardian, 2016).

(5)EU leaders, still reeling from Britain's decision to become the first country to leave the bloc in its 60-year history, pressed May for a quick divorce (The Daily Telegraph, 2016).

(6) Tusk told leaders ahead of the summit that "our unity will be key" in negotiations on Brexit, with the EU still in shock from Britain's June 2016 vote to become the first-ever member state to leave the union (The Guardian, 2017).

In example (4), "still" conveys to readers that the United Kingdom is still an important leader of the Commonwealth, and tries to persuade others to support Brexit in order to withdraw from the EU. In example (5), the use of "still" shows the EU leaders' anxiety about Brexit and enhances British's confidence in Brexit. In example (6), Tusk uses "still" to emphasize the fact that Brexit does pose a significant consequence to the EU. He also emphasizes that as long as the British are united, they can succeed in Brexit, and expresses his confidence in Brexit to readers.

Next is about the analysis of temporality adjunct "already", and here are some examples from Chinese news reports.

(7)There has already been a reaction to Brexit – earlier this month health authorities reported a dramatic slump in the number of EU nurses applying to work in Britain's National Health Service (China Daily, 2017). (8)The British government, which is overseeing the talks alongside the Irish government, has already had to take steps toward ruling the region directly from London for the first time in a decade, setting its budget late last year (Xinhua, 2018).

(9)The Association of British Travel Agents (known as Abta) said there had been an increase of almost one-third in the number of holiday bookings to the country this year compared with 2018 when there had already been a rise in the previous year (CGTN, 2018).

The adjuncts of "already" express either the experience or the positive expectation to the thing related to the speakers now. In example (7), "already" means "even by or before", and it shows that many aspects of Britain have been affected by the Brexit event, including Britain's National Health Service. Britain has realized that this is a serious problem to Britain's National Health Service. In example (8), it conveys to readers that both the British government and the Irish government have adopted measures to guarantee the region's peaceful development last year, which represents positive attitudes of the two governments toward the future of the Irish. In example (9), the Association of British Travel Agents says that the holiday booking has increased compared with that in 2018, which shows its positive expectation for British Tourism in the process of Brexit.

Different from those temporality adjuncts "already" in Chinese news reports, some in British news reports not only indicate deictic time "even by or before" but also imply hidden attitudes to Brexit.

- (10) This is especially prevalent among public and voluntary sector workers who have already showed signs of feeling less secured in their roles and expect the economic consequences of Brexit to adversely affect their jobs (The Guardian, 2016).
- (11) European rules has already allowed member states to expel other EU citizens on security grounds, and between 4, 000 and 5, 000 EU prisoners were deported from Britain last year, according to the interior ministry (The Guardian, 2017).

(12) The British government has already announced it had committed £662 million (753 million euros, \$877 million) towards preparations for Brexit, including the establishment of two new ministries, and said more would be available where necessary (The Times, 2017). In Example (10), the adjunct "already" shows that public and voluntary sector workers have felt insecure for a long time due to Brexit, which expresses their opposing to Brexit. The adjunct of "already" in the example (11) shows that EU rules have directly threatened the residency of EU citizens in Britain. Britain's news reports about European rules aim to make readers realize the terrible consequences of European rules, which in turn can draw more people's attention on Brexit. However, there exist a few examples of "already" to indicate the positive attitudes to Brexit. In example (12), the British government has made many preparations for the work of Brexit, which shows the government's active reaction to the Brexit.

To sum up, the Chinese media maintain a consistent attitude towards Brexit, express respect and faith to the British, and firmly believe that the two countries will have good prospects for cooperation. However, British mainstream media express their different attitudes towards Brexit from different angles, such as citizen residence, the attitude of the Party, and Brexit work. This seems to reflect the objectivity of news, but in fact, different news reports have different attitudes with regard to Brexit. Different news agencies represent different political parties, and their language also guides public views to a certain extent. That is why there are both approval and disapproval of Brexit in British news reports.

4.1.1.2 Discussion for Adjuncts of Modality

Adjuncts of modality focus on the intermediate degrees, which is between absolute affirmation and absolute negation. The scale of probability and the scale of usuality are known as modalization. Modalization can be divided into three levels: low, medium, and high, which has a specific performance at different levels. Selected words include "possibly", "perhaps" "seldom", and "hardly" at a low level; "probably", "likely", and "usually" at the middle level; and "certainly", "definitely", "always", and "never" at a high level. Apart from this, the scales of obligation and inclination are

known as modulation.

Modal value is an important reference to analyze the realization of interpersonal functions and also a reflection of the different attitudes held by the speakers. Correspondingly, modal adjuncts also vary on different levels. The speakers express their specific attitudes with different values. According to the data last part, it is clear that Chinese news reports prefer the medium and high degrees of possibility adjuncts of modality, such as "probably", "likely", and "certainly", while British news reports adopt more modality adjuncts to indicate the medium and low levels of possibility, such as "probably", "likely", and "maybe". Meanwhile, "never" and "always" are the most frequently adopted adjuncts of usuality in both Chinese and British news reports. It is worth noting that adjuncts of modulation are rarely used in those news reports, which may be related to the subjectivity of the language. The adjuncts of modalization can express not only possibility and usuality but also personal opinions and attitudes to some issues. It can be said that the adjuncts of modalization contain the distinctive features of subjectivity in news reports. Therefore, they are employed more times than the adjuncts of inclination and obligation.

The following "certainly" examples are selected from Chinese news reports.

- (13) Officials on both sides have made much of the "golden era" of relations between Britain and China, and that is certainly a fair description as cultural and investment links flourish in the wake of President XI's state visit a year ago (China Daily, 2018).
- (14) Brexit Secretary Stephen Barclay told BBC Radio 4's Today program the attempt at consensus-building means the UK is almost certainly now heading for a softer Brexit (CGTN, 2017).
- (15) Rather than having everything "boxed off" by the end of January, Rogers, speaking to Xinhua in a recent interview, said the negotiations could almost certainly stretch into the second half of the third decade of the 21st century (Xinhua, 2018).

These examples from Chinese news reports all use the high-value adjunct "certainly" to express interpersonal function. In example (13), after Brexit, China and Britain usher in a new cooperative relationship, which means that the UK no longer carries out trade negotiations with China under the framework of the European Union. Here, it is an irreversible trend to use the word "certainly" to emphasize this. In example (14), Brexit Secretary Stephen Barclay uses the adjunct "certainly" to indicate that Britain will choose a soft Brexit rather than a hard one. The high level of the modality adjunct "certainly" indicates the highest possibility to the future of Britain. In example (15), Ivan Rogers, the Britain's permanent representative to the EU, adopts the high-value adjunct "certainly" to emphasize Britain's departure from the bloc which is just the starting point in a everlasting rocky-road for many years. The following "certainly" examples are selected from British news reports.

- (16)The years of wrangling since the referendum over how, or even if, Britain leaves have certainly dampened the high spirits of that 2016 June night (The Guardian, 2019).
- (17) The sentiment is certainly not new there have been calls for a do-over vote for years, with many pointing toward perceived "Bregret" and the huge and to some degree unexpected disruption the process of leaving the E.U. has added to life (The Daily Telegraph, 2017).
- (18) He said: "There's a lot of anger out there in the country. I've been on the doorstep over the weekend and our activists certainly are very dissatisfied with our failure to deliver Brexit in almost three years since the referendum" (The Times, 2017).

In example (16), the adjunct "certainly" indicates that the process of Brexit has weakened the high spirit of British people since 2016. It is a clear sign of interpersonal function that the British show their strong dissatisfaction with Britain. "Certainly" in example (17) demonstrates some British citizens are not satisfied with the results of the first referendum on Brexit and they want to hold a second referendum. The word "certainly" in example (18) indicates a fact that activists are dissatisfied with the failure to deliver Brexit in almost three years since the referendum.

These examples are selected from Chinese news reports, which use the medium

value adjunct "probably" and "likely" to express interpersonal function.

- (19) However, economic and political risks are likely to intensify next year, once the UK government formally begins the process of withdrawing from the EU (China Daily, 2016).
- (20) Brexit is not only likely to make time estimations for import and export near-impossible, but also largely disrupt the company's business, in particular the annual charity shoebox initiative, which sends thousands of aid packages out to orphans and children in need across the continent for Christmas (China Daily, 2019).
- (21) In the longer run, however, the UK probably needs the US more than the reverse and the same probably holds true for its relations with China (Xinhua, 2020).
- In example (19), Brexit means that the UK no longer carries out the trades and the politics under the framework of the European Union. Here, using the medium value adjunct "likely" expresses the coming challenges and risks for Britain to a large extent and provides true information to readers. In example (20), the delay of Brexit has led to more uncertainty, including the time of the UK's imports and exports to the continent. In example (21), adopting the adjunct "probably" indicates Britain probably needs to maintain sound cooperative relations with China as well as with the US after Brexit. These examples are selected from British news reports.
- (22)Not many of those lining up to succeed her will want to inherit the unresolved Brexit mess. The extension is probably good news for Brexiteer leadership candidates who can spend six months attacking the prime minister and pressing for no deal (The Guardian, 2019).
- (23) The threat has hung over Mrs. May since June last

year when she was humiliated by the loss of her majority in the snap general election. It is likely to lead to a bitter contest between hard Brexiteers and Remain-supporting Tories, pitching for the support of the party faithful (The Daily Telegraph, 2019).

(24) The EU has rejected plans for such a bespoke deal, saying Britain would have to choose from existing models such as Norway's or Canada's. This position is likely to soften as negotiations get underway (The Times, 2017).

In example (22), the adjunct "probably" indicates the extension of Brexit is good news for those who support a no-deal Brexit. This sentence describes the outcome of the struggle between the leaders of Britain. The example (23) demonstrates May's election woes could lead to another fierce race between Brexit and the Conservatives. With the medium adjunct "likely", the British news reports convey to readers that there will be a tricky problem in Britain. In example (24), the adjunct "likely" shows the EU will make a compromise with Britain on a deal plan and indicates Britain will be further advanced in the process of Brexit.

Here are some examples selected from the Chinese news reports.

(25)Post-Brexit, the UK may be able to continue participating in them, but it will not have the influence it currently enjoys in the development, planning, and leadership of missions and operations (China Daily, 2018).

(26)China is the main focus, as it is the fastest-developing economic superpower and is increasingly becoming the world's banker. Politicians and analysts on all sides agree that relations with a China that is in the ascendant are key to Britain's survival, and there is a danger that British officials may be taking China for granted (CGTN, 2016).

(27)The two sides remain deadlocked, and this week's summit, which had been billed as a make-or-break moment, turned simply into a chance for Britain and the EU to give themselves more time perhaps until the end of the year to break the logjam (Xinhua, 2018).

The example (25) demonstrates the UK will have fewer chances to participate in the EU than before. It tells readers that the relationship between the UK and the EU is no longer that close and its influence on the EU will also be much reduced. The "maybe" in example (26) reflects that some of the British officials do not realize the importance of China. They believe that China is a country with risks in terms of cooperation as before. In example (27), the adjunct "may" demonstrates the relationship between the UK and the European Union continues to be deadlocked, and there is little chance of progress over a short period of time.

Below are some examples selected from the British news reports.

(28) She acknowledged that there may be compromises, without spelling them out. The single market is built on a balance of rights and obligations.

And we do not pretend that you can have all the benefits of membership of the single market without its obligations (The Times, 2017).

(29) But officials in Brussels argue that unless London also retains EU rules on manufacturing and working practices after Brexit it may be able to compete unfairly in the single market (The Guardian, 2018).

(30) It has been the most divisive issue in modern British political history. So it is perhaps no surprise that cabinet ministers cannot agree on the best way to mark the moment that Britain leaves the European Union tonight (The Times, 2019).

In example (28), "maybe" indicates May's chance of compromise is very slim, and expresses her determination to insist on fair market relations with the EU. In example (29), "maybe" shows that London will face unfair competition when failing to follow EU rules on manufacturing and working practices after Brexit. In example (30), the adjunct "perhaps" shows that Britain's cabinet ministers still cannot agree on the best way to leave the European Union at once because Brexit is the most decisive issue in the modern British political history.

According to Halliday (2006), modalization has two types: one is probability, and the other is usuality. Modality adjuncts of possibility have been discussed. Next, the author will discuss the modality adjunct of usuality. There are many modality adjuncts of usuality, such as "always", "usually" "seldom", and "never". According to the distribution of the data in Chinese and British news reports, "never" is used frequently in both groups. Thus, the author solely discusses the adjunct "never". As mentioned above, "never" belongs to the high-value adjunct.

The adjuncts of usuality "never" are selected from Chinese news reports.

(31) Our position is not ideological, it has never been, but pragmatic, he said. It is in Ireland that Brexit creates the most problems and carries the highest risk ... This is the only place where the EU has a land border with the UK, in addition to a specific political situation (Xinhua, 2019). (32) Soubry told journalists she had warned May that there were some Conservative MPs who have never rebelled in their political careers but were now talking, for the first time ever, of rebelling against the government (Xinhua, 2017).

(33) Barnier also said the UK never mentioned during negotiations that it would leave the bloc without a deal if it didn't get the deal it wanted (China Daily, 2019).

In example (31), the EU members use "never" to indicate what they are doing is good for both the EU and Ireland. Example (32) illustrates Conservative MPs have never opposed the government before, but began opposing it for the first time then. Here, "never" indicates that Conservative MPs have a strong negative attitude towards the British government now. In example (33), the adjunct "never" shows that the UK won't choose Brexit without a deal. It aims to tell readers that Britain has a cautious and responsible attitude towards Brexit.

The adjuncts of usuality "never" are selected from British news reports.

- (34) As Britain shapes up to what is increasingly looking like a messy divorce from the European Union, or a "hard Brexit", attention is being focused as never before on Britain's relationships with other world partners (The Guardian, 2019).
- (35) The longer this takes, the greater the risk of the UK never leaving at all. It would mean letting the Brexit the British people voted for slip through our fingers, she said in a video message released on Sunday (The Daily Telegraph, 2019).
- (36) British Prime Minister Theresa May vowed she will never accept a draft Brexit agreement published Wednesday by the European Union, raising the prospect that the negotiations are heading for a breakdown (The Daily Telegraph, 2017).

With the development of Brexit, "never" in example (34) shows that there will be no the relationship between Britain and other countries under the framework of the EU, and Britain will build new relationships between itself and the other countries of the world. The background of example (35) is the impasse in negotiations between May and the Labour party. "Never" indicates that the chance of a successful Brexit will become slim for as long as the deadlock remains. "Never" in example (36) shows the British Prime Minister Theresa May would not give in to the EU, and it also means the road to Brexit is once again blocked.

In general, Chinese news agencies use a lot of high and medium valued modality adjuncts of modalization to tell readers that the UK may undergo major changes, such as relationships with other countries, Brexit with a deal or not, and economic and politic changes. Compared with Chinese news agencies, the British news agencies adopt high-value modality adjuncts of probability to describe the negations of the UK and the EU about Brexit. They state the fact that there exist some fierce conflicts between the UK and the EU, such as Irish land problems, single market problems, and hard Brexit or soft Brexit. British news reports indicate a clear attitude towards Brexit by using the modality adjuncts. With regard to the conflict of interests between the two countries, the UK will not succumb to the EU, and hope that the EU will make concessions to the UK.

### 4.1.1.3 Discussion for Adjuncts of Intensity

Adjuncts of intensity take up 48. 8% and 57.1% of the repertoire of mood adjuncts in the Chinese and British corpus respectively. This kind of adjunct also plays an important role in expressing interpersonal function in news reports. As summarized in the above table, "completely" and "just" are used most frequently in the British corpus. And the Chinese dataset is similar to the British corpus. It frequently uses the following adjuncts "widely", "just", and "actually". Next, the author will analyze some representative adjuncts of intensity from Chinese and British news reports to reveal the different interpersonal functions.

Examples are selected from Chinese news reports with total degree adjunct "widely".

- (37)However, the Supreme Court is widely expected to back a legal challenge that would oblige the government to subject that process to a parliamentary debate during which its Brexit strategy might be challenged (China Daily, 2017).
- (38)With negotiating time running out and huge amounts of ground to be covered, prospects of the two sides reaching an agreement for future trading relations seem slim, leading to the prospect of a so-called No-Deal Brexit, which is widely predicted to cause major economic and social upheaval (China Daily, 2020).
- (39) Simon Rubinsohn, a Ries chief economist, said: "Resolution of the Brexit negotiations is widely seen as critical to encouraging potential buyers back into the market, although whether that will be sufficient in London and parts of the South East, where affordability remains stretched and the tax changes are most penal, remains to be seen (Xinhua, 2019).

In example (37), "widely" shows that most of the British are willing to support the Supreme Court and oppose Britain's tough hard Brexit strategy. Brexit is not acceptable to them. In example (38), "widely" indicates most of the British deeply concern about the development of Britain after Brexit. In example (39), the adjunct "widely" indicates the settlement of the Brexit has a major impact on the British economic recovery. The "widely" in the three examples are all used to emphasize or describe the degree of something.

Examples are selected from British news reports with total degree adjunct "completely".

- (39)May said "I want to completely reassure people that under these plans no EU citizen currently in the UK lawfully will be asked to leave at the point the UK leaves the EU," she told parliament (The Guardian, 2017).
- (40)Scotland voted against independence by 55 percent to 45 percent in a 2014 referendum but Sturgeon argues that circumstances have changed completely since last year's Brexit vote (The Guardian, 2017).
- (41) Ministers are set to confront May during Tuesday's meeting, warning that the EU's demands were "completely unacceptable", according to the Daily Telegraph (The Guardian, 2018).

The adjunct of "completely" is a representative of the total degree of intensity adjuncts, which is used frequently in British news reports. In example (40), "completely" indicates May's promise that citizens totally do not have to worry about their residency. Meanwhile, she uses the adjunct "completely" to strengthen their confidence in the British government. In example (41), because of all the possible problems of Brexit, the 2014 anti-independence Scotland now wants independence. Here the adjunct "completely" undoubtedly shows the disruptive results of Brexit, and Scotland's dissatisfaction with Brexit. The adjunct "completely" in example (42) shows that Britain totally disagrees with the draft provided by the EU.

As shown in the tables of data distribution from Chinese and British news reports, counter-expectation adjuncts "just" and "actually" appear most frequently. Furthermore, the author will analyze the two adjuncts and

reveal their different interpersonal meanings.

Examples are selected from Chinese news reports with the adjunct "just".

- (43) The Nursing and Midwifery Council said the number of applications fell from over 1, 300 last July to just 34 this April. It said the NHS has a shortage of 30, 000 nursing staff (China Daily, 2017).
- (44) After British Foreign Secretary Boris Johnson said the EU can go "whistle" for Britain to pay any excessive bill, Barnier retorted that "I am not hearing any whistling, just the clock ticking" with the deadline of March 2019 drawing ever closer (CGTN, 2017).
- (45) It has been a number of months since London was the UK's top-performing region. In October, that honor belonged to Wales. And, just within England, parts of the so-called northern powerhouse have outperformed London in 2017 (CGTN, 2018).

"Just", an adjunct of counter-expectation, may show the speakers' disappointment, amazement, and the meaning of "nothing but". In example (43), Brexit has led to a sharp drop in the number of people applying for jobs, which shows an anomaly in order to highlight the negative impact of Brexit. In example (44), "just" expresses Britain's dissatisfaction with the EU, and also reflects the obstruction of the Brexit process. In example (45), the adjunct "just" indicates that some of the northern powerhouses have already surpassed London, and implies that the economy of London is seriously affected by Brexit.

Examples are selected from British news reports with the adjunct "just".

(46) He said the Council's reaction to Brexit was "we shouldn't change anything, just implement existing European policies". "I find this shocking and irresponsible," he said angrily (The Guardian, 2016). (47) Elsewhere in the survey, more than one in five (22 percent) employees said that they felt less secure in their jobs as a result of the UK's vote to leave the EU, compared with just three percent who felt more secured. Again, this insecurity was particularly evident in the public sector, where a third (33 percent) of employees said they felt less secure because of the Brexit decision (The Guardian, 2016).

(48) Uncertainty has hit the economy, with official data on Monday showing that gross domestic product grew by just 0.1 percent in October from September. Johnson's dramatic resignation on Monday just hours after Brexit minister David Davis quit late on Sunday plunged the value of the pound on currency markets (The Times, 2018).

In British news reports, most of the adjunct "just" show the speakers' disappointment or amazement. In example (46), the adjunct "just" shows that the European Union's disregard for Brexit's terms. In example (47), the adjunct "just" indicates few people have confidence in Brexit. In example (48), the adjunct "just" indicates the economic growth of the UK is far from expectations and expresses the disappointment in the Britain economy.

Below are some examples with "actually" selected

from Chinese news reports.

- (49) One key early advance that EU officials hope for this week is for Britain to stop challenging the principle that it will owe Brussels money though how much will have to be argued over and cannot be calculated until Britain actually leaves (CGTN, 2017).
- (50) A change of leadership at this point isn't going to make the negotiations any easier... what it will do is mean that there is a risk that actually we delay the negotiations and that is a risk that Brexit gets delayed or frustrated (CGTN, 2019).
- (51) If you look at the past six months the economy has actually gained momentum. In the first quarter the economy had all but stagnated with growth of 0.1 percent quarter on quarter, it recovered to 0.4 percent in the second quarter and in our estimates it is likely to be around 0.7 percent in the third quarter, "Kara said (China Daily, 2017).

In example (49), the argument caused by Brexit is incalculable before Britain really leaves. The adjunct "actually" is used to draw the audience's attention on Brexit in a polite way. In example (50), the adjunct "actually" is used to show there exists risk if the Brexit continues to delay, which reflects the speaker's exactness and confidence. In example (51), "actually" shows a comparison between the past and present economy of Britain, and explains the British economy is slowly recovering now.

There are some examples with "actually" from British news reports.

- (52) "This is not about whether we should stay or leave this is actually about how we leave," Miller told AFP on Wednesday (The Daily Telegraph, 2017).
- (53) "We expect that we will actually be able to have that end-state customs arrangement in place at the very latest by December 2021, but our focus, obviously, is going to be on making sure that we get that agreement which we have all agreed -- and others are agreed -- is the best way to ensure that we get the right relationship between the U.K. and the EU for trading, " she said (The Guardian, 2018).
- (54) May's Conservative opponents could trigger a confidence vote against her if at least 48 MPs support it, but to actually force her from office 159 MPs would have to vote against her a figure hardliners may not be able to reach (The Times, 2018).

Example (52) indicates the method of Britain's exit from the EU is the most important factor. "Actually" is used to get the audience's attention on the way in which Britain leaves the EU. In example (53) and (54), the adjuncts "actually" are used to show that what the speakers say is true and the speakers' exactness. "Actually" in example (53) tries to convince the readers that the end-state customs arrangement will be reached by the end of the year 2021. The adjunct "actually" in example (54) tries to convey to audiences that the conservative opponents have no real power to defeat May.

To sum up, the high degree of intensity adjuncts in Chinese news reports mainly express the true thoughts of most British people, and the counter-expectation adjuncts

are used to emphasize that Britain is indeed greatly affected by Brexit. Chinese news reports use these intensity adjuncts to tell readers about some of the real situations of Brexit, such as public reactions, economic issues, and actual progress of Brexit, which reflects the objectivity of the report. Different from Chinese news reports, British news reports use intensity adjuncts to express the British government's responsible attitude towards the people and its strong opposition to the EU. Why they are doing so is not because they are responsible to their people but that they wish to achieve specific political goals, for example, getting support from voters. Additionally, the use of such kind of intensity adjuncts in British news reports may intensify the contradictions between the two sides. The UK expects the EU to make a concession accordingly.

### 4.2. Discussion for Comment Adjuncts

Zhang (2005) claims that there are three types of interpersonal function of comment adjuncts: engagement meaning, evaluation meaning, and epistemic meaning. Engagement meaning is realized by the following comment adjuncts: "frankly", "honestly", and "generally". Evaluation meaning is expressed by these comment adjuncts, namely, "fortunately", "surprisingly", and "of course". Epistemic meaning is constructed by these comment adjuncts, namely, "clearly", "inevitably", and "certainly".

Several typical examples of comment adjunct are picked out for this section. According to data distribution, it can be seen that British news reports use more comment adjuncts than those in Chinese news reports, which mainly contain the following three aspects: asseverative comment adjunct, factual comment adjuncts, and personal engagement comment adjuncts.

There are some examples of the asseverative adjunct "inevitably" and factual adjunct "of course" selected from Chinese news reports.

- (55) There will inevitably be a price and a cost for Britain. It's the choice they have made (China Daily, 2017).
- (56) "If that's not possible, we'll be calling upon the government then to join us in a public vote. It's difficult to judge each stage, but that's the sequence I think that we'll inevitably go through over this period (CGTN, 2018).
- (57) Aligning British rules with those of the United States would create divergences with the EU and inevitably create extra frictions at the UK-EU border, Holmes pointed out in his recent paper on the future of UK-US trade (Xinhua, 2019).

In example (55), the adjunct "inevitably" indicates the fact that Britain has to pay for Brexit if the UK wants to really leave the EU, and shows an asseverative tone in the problem of Brexit. In example (56), the adjunct "inevitably" indicates that people will face difficulties at every stage and continue to hold a referendum against Brexit. In example (57), the adjunct

"inevitably" presents an indisputable fact that the trade relations of the UK-US will harm the interests of the EU, and shows the speaker does not support the UK-US trade. (58)I would hope that this is an issue that we can look at an early stage in the negotiations, of course, there will be two years of negotiations (CGTN, 2019).

(59)Of course, May could postpone again -- though it wouldn't buy her much time. Due to government concessions earlier this year, there must be a debate on Brexit and a vote on other options for leaving the European Union within five working days of Jan. 21 (China daily, 2019).

(60) This is a further step, an important further step, in our negotiations with the European Union. "But of course we still have work to do with the EU in ensuring that we get to that end point in October. But this is good" she said (The Times, 2019).

In example (58), the adjunct "of course" indicates there will be negotiations between the UK and the EU. In example (59), the adjunct "of course" emphasizes that the Brexit negotiations with the EU will be put off. In example (60), the adjunct "of course" to some extent expresses Britain's a kind of concession to the EU although May doesn't want to admit it. The three examples of factual adjunct "of course" have two types of interpersonal meaning. One is the epistemic meaning, and the other is the concession of the speakers.

Compared with the asseverative adjunct "inevitably" selected from Chinese news reports, there are also some examples of personal engagement comment adjuncts "frankly" as well as the factual comment "really" selected from British news reports.

- (61) Asked in the House of Commons if there would be a vote, May only replied: "The idea that parliament somehow wasn't going to be able to discuss, debate, question issues around (Brexit) was frankly completely wrong" (The Guardian, 2016).
- (62) "Once this thing has been started by a referendum it can frankly only be finished by a fresh vote," he said (The Times, 2017).
- (63) This government proposal is frankly outrageous given the length and complexity of this bill, "Green Party MP Caroline Lucas said (The Daily Telegraph, 2019).

In example (61), the adjunct "frankly"shows that the speaker expresses her opinion in a truthful manner, and at the same time indicates the speaker's negative attitude towards the parliament. In example (62), the adjunct "frankly" shows his affirmative tone and emphasizes the impact of the second vote. In example (63), the speaker uses the adjunct "frankly" to express the true feelings about the government, which is the most disgusting attitude to the government. The three examples with the adjunct "frankly" indicate that the speakers communicate with listeners in a truthful manner and express the engagement meaning.

(64)If we're just going to merely be a vassal state of the European Union we're not really leaving the European Union and I think that will reflect very badly on the government and on the next election it will reflect very badly on the Conservative party (2018, The times).

(65) What is going on at the moment is that the issue of the Northern Irish border is being used quite a lot politically to try to keep the U.K. in the customs union, effectively the single market, so we cannot really leave the EU That is what is going on." (The Guardian, 2018)

(66) "I don't believe that, so far, this deal delivers on what the British people really voted for, " former Conservative leader Iain Duncan Smith told Sky News on Sunday (The Daily Telegraph, 2018).

Example (64) implies that the UK truly hopes to leave the EU, and pretending to leave the EU will cause a lot of trouble to the government and the Conservative party. In example (65), the adjunct "really" shows that the UK cannot leave the EU in deed because of the Northern Irish border problem. Example (66) implies that the vote does not represent the wishes of the majority, and it also expresses the Conservative Party's hostile attitude towards the Brexiters.

The adjuncts discussed above are all comments on the subject in the propositions. Furthermore, there are some comment adjuncts that express the speakers' comments on the whole proposition, which show their judgement and evaluation meaning to the proposition. (67)Let me recall that limiting the damage caused by Brexit is our shared interest. Unfortunately, a no deal scenario is still quite possible. But if we all act responsibly, we can avoid a catastrophe, "Tusk wrote (The guardian, 2018).

(68)Hopefully, as the political and economic situation becomes clearer, this will subside, but in the short term, there is a clear need for UK employers to do more to engage with their workforce about the likely effects of Brexit on their organization (The Times, 2016).

In example (67), the adjunct "unfortunately" indicates the process of Brexit is slow and there are many contradictions between the UK and the EU. This is undoubtedly a disaster for both sides. Example (68) expresses the speaker's wishes that the negative sentiment brought by Brexit to the public sector and workers can gradually disappear, and it is hoped that the political and economic instability caused by Brexit can be resolved.

In short, regarding the use of comment adjuncts, Chinese news reports use factual and asseverative comment adjuncts to express epistemic meaning and evaluation meaning, which show the objectivity and authenticity of Chinese news reports on Brexit. British news reports use more personal comment adjuncts to express the speakers' opinions and attitudes in a way of intervention. The use of this type of comment adjuncts not only indicates the speakers' engagement meaning but also presents the directness and subjectivity of news reports. The examples of British news reports express personal opinions in the conversation, and at the same time show the speaking style of speakers.

**5 CONCLUSIONS** 

From the discussion above, the interpersonal meanings of modal adjuncts resources between Sino-UK news reports are illustrated in more detail. With regard to the results, the primary findings are as follows. Firstly, in general, both Chinese and British news reports adopted more mood adjuncts attached to showing interpersonal function. However, Chinese news reports employ more mood adjuncts than British news reports, in terms of the frequencies and percentages. Furthermore, British news reports adopt more comment adjuncts than Chinese news reports do. The results reveal that Chinese news reports transmit more objectivity of news reports than the British do. Secondly, from the subsystems of mood adjuncts, Chinese news reports employ more temporality adjuncts to tell the time of issue and positive expectation to Brexit in a cautious way. In terms of using modality adjuncts, Chinese news agencies use a lot of high-valued modality adjuncts expressing probability to emphasize that the UK will undergo major changes. British news agencies adopt high-valued modality adjuncts expressing probability to describe the negations of the UK and the EU regarding Brexit. Chinese news reports used these intensity adjuncts to inform readers of some real situations in Brexit, such as public reactions, economic issues, and actual progress of Brexit, reflecting the objectivity of the reports. Different from the Chinese news reports, British news reports use intensity adjuncts to express the British government's responsible attitude towards the people and its strong opposition to the EU. Thirdly, as for the comment adjunct used in British and Chinese news reports, it is found that British groups prefer comment adjuncts to show their attitudes and tone to the issue. But there is a difference between them. British news reports employ more personal engagement than comment adjuncts to show prediction and personal interference on the process of Brexit, while Chinese news reports have adopted more asseverative and factual adjuncts to indicate evident attitudes towards some issues.

#### REFERENCES

- [1] Brown, P. & Levinson, S. (1987). Politeness: Some Universals in Language Usage. Cambridge: Cambridge University Press.
- [2] Coulthard, R. M. (1992). Advances in Spoken Discourse Analysis. London: Routledge and CRC Press. [3] Crystal, D. (2008). A Dictionary of Linguistics and Phonetics. London: Oxford Blackwell Publishing Ltd.
- [4] Eggins, S. (2004). An Introduction to Systemic Functional Linguistics. London: Continuum International Publishing Group.
- [5] Ernst, T. (2009). Speaker-oriented adverbs: Natural Language and Linguistic Theory. International Journal of Linguistics, (3) 497-544.
- [6] Fauconnier, G. (1994). Mental Spaces: Aspects of Meaning Construction in Natural Language. Cambridge: Cambridge University Press.
- [7] Fawcett, R. P. (1980). Cognitive Linguistics and Social Interaction. Beijing: Foreign Language Teaching and Research Press.

# Research on the Development Obstacles and Solutions of Green Supply Chain

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Abstract: As an innovative environmental management method, green supply chain management plays an important role in improving the green level of enterprise supply chains. Under the background of economic globalization, enterprises are gradually becoming internationalized. However, due to insufficient understanding of green supply chain management and insufficient internal motivation, the enthusiasm for integrating international operations into green supply chain management is relatively low. This article analyzes the relevant content of the international business strategy of enterprises under the green supply chain management.

Keywords: green supply chain; enterprise internationalization; development obstacles; countermeasures

#### I. INTRODUCTION

In the context of economic globalization, the international market environment is constantly changing. In order to gain good advantages and long-term development in the complex international market environment, enterprises need to first accurately understand the specific circumstances of the environment and effectively identify different risks in the process of international operation and management, and then carry out effective risk management on this basis. Especially in the context of green supply chain management, it is even more necessary to adopt effective international business strategies based on the specific circumstances of this type of management, so as to promote its own long-term and stable development.

### II\GREEN SUPPLY CHAIN MANAGEMENT PRACTICES

Due to the change of market environment and the improvement of productivity level, the management mode of enterprises is constantly changing in order to adapt to the market development. Specifically, enterprises have gradually changed from the initial independent operation to vertical integrated management and supply chain management. In the past, when the world's highest level was relatively low, the types of daily necessities and production tools needed by the society were relatively relative, and did not require excessive technological content. The social division of labor was simple, and some enterprises or manual workshops independently provided them. The relationship between consumers and producers was either a competitive relationship or an antagonistic

relationship. However, as the level of productivity has increased, the division of labor has become more refined. The daily necessities and production tools needed by the public are more diversified, and the level of science and technology is also higher. The division of labor in the industrial chain is also becoming more refined.In order to gain a good competitive advantage, some companies have integrated the upstream and downstream enterprises of the industrial chain by means of holding and equity participation, in order to seek coverage of different links such as product design, production, and sales, thereby effectively improving the ability to resist risks. But on the other hand, this change mainly occurs on the supply side, and the relationship between consumers and enterprises is still antagonistic or competitive.<sup>[1]</sup>

In the era of rapid development of information technology, Shunfeng estimates that consumers' needs have been further refined, and they are also more personalized and diversified, which further affects the uncertainty of the market. There are more and more problems in the management of the enterprise's vertical integration model. In response to the above situation, companies need to change the existing management model, so supply chain management came into being.Supply chain management attaches great importance to the entire life cycle of products, involving different links such as product design, production, circulation, sales, recycling, reuse, and processing. For the economic interests of producers, logistics providers, suppliers, designers, distributors and consumers in different links, the flow of information, value, capital, material and other different aspects in the management process makes the supply chain management form a very complex and huge network. On the other hand, the business model changes from supply-oriented to demand-oriented, and you also start to carry out production activities in accordance with consumer demand. The initial independent operation has been transformed into a collaborative upstream and downstream supply chain to further enhance the anti-risk ability of different links of the product. Supply chain management involves aspects, as shown in Table 1:

Table 1 Supply chain management

	Management	Brief description	
supply chain management	Strategic management	The implementation and operation of the supply chain need to be in line with the business strategy of the company.	
	Customer	The main purpose of supply	

ma	nnagement	chain management is to provide customers with high- quality services while saving resources to the greatest extent.
	lationship magement	Coordination of different nodes in the supply chain to ensure that node companies carry out transaction cooperation on the basis of cooperation italics.
1	Formation anagement	The construction of an information platform is the basis of information management, which can realize the integration and integration of the supply chain from the technical level.
	ventory anagement	Supply chain management applies advanced information technology to reduce demand forecast errors, and uses accurate and real-time information to control logistics.
Ris Ma	sk anagement	With the help of supply chain management, various risks that may occur at different nodes of the supply chain can be clarified in time, so as to effectively avoid risks.

In the past, when enterprises carried out supply chain management, they paid more attention to issues such as quality, safety and cost, and lacked thinking about the impact of resource management on the industrial chain. Against the background of increasingly severe resources and environment, the world has reached a consensus on green development. The country strengthens environmental supervision, and the experience also needs to combine social development trends and its own actual conditions, innovate corresponding management models, and reduce the impact of production on the ecological environment.In this context, the green supply chain came into being. Different from the traditional supply chain, which pursues profit maximization, the green supply chain is an important manifestation of the extended producer responsibility system. Based on social welfare, enterprises need to drive the upstream and downstream enterprises to effectively improve the production process and introduce energy-saving and environmental protection equipment, so as to effectively improve the supply level of green products. Since 2014, China has paid more and more attention to the green supply chain, and there have been more and more corresponding policies. China has successively promulgated a series of green supply chain standards, and carried out project pilot work in different industries, which has promoted some leading enterprises in the industry to build models of green supply chains, forming a good demonstration and leading role.

III\OBSTACLES TO THE DEVELOPMENT OF ENTERPRISES' INTERNATIONAL OPERATION UNDER GREEN SUPPLY CHAIN MANAGEMENT Under the management of green supply chain, there are deficiencies in the international operation of enterprises, such as enterprises not fully understanding the green supply chain correctly. In terms of domestic

enterprises as a whole, some enterprises still have a rather vague meaning of green supply chain, and do not know how to integrate green supply chain management into the production and development process of enterprises. Although some enterprises have the understanding, they also have some cognitive bias, believing that only large enterprises can integrate into green supply chain management, or that green supply chain management means green procurement. As far as the actual situation is concerned, whether it is a large enterprise or a small and medium-sized enterprise, there is a certain supply relationship with other enterprises. The purchasing power formed with other enterprises will affect the decision-making of related enterprises in the supply chain. Therefore, for small and medium-sized enterprises As far as enterprises are concerned, they also need to carry out green supply chain management. The main difference between small and medium-sized enterprises and large enterprises in green supply chain management is that large enterprises have more suppliers, greater industry influence and stronger initiative, so the spillover effect of green supply chain management is relatively large. On the other hand, there is a relationship between green procurement and green supply management, but there is also some difference between them. The subject of green procurement is relatively wide, which can be any enterprise, individual consumers, or government institutions. However, the subject of green supply chain is relatively single, mainly the enterprises up and down the supply chain, the stores where the products are sold at the end, or the providers.Green e-commerce supply management is more complicated than green procurement, and involves more platform management content. Generally, multiple departments are required to coordinate and organize, but green procurement is mainly responsible for the procurement department.It is not the lack of internal motivation, but also one of the important factors that affect the effectiveness of green supply chain management. Basically, the ultimate goal of all enterprises is to maximize profits. To do supply chain management and pay attention to the protection of the ecological environment makes the connotation of supply chain management richer, and changes the positioning of supply chain, which is sustainable<sup>[2]</sup>.Many companies do not strong consciousness of green supply chain, because under the green supply chain management, they also need to optimize process, to upgrade the processing equipment of environmental protection, environmental protection level of their own so as to realize the greening level of supply chain, but the process will lead to enterprise's operation cost increase, and the impact on downstream of supply chain enterprise, lead to the terminal product sales price. As far as green products are concerned, due to their high input costs and relatively high prices, it is difficult to obtain a good competitive advantage, which will further affect the integration of green supply chain management in enterprises.

IV\ENTERPRISE OPERATION STRATEGY UNDER GREEN SUPPLY CHAIN MANAGEMENT (I)Promote the establishment of a long-term mechanism

Effectively eliminate the factors that affect green consumption and green production, and promote the establishment of a long-term mechanism that meets the requirements of green development, which will help guide more enterprises to carry out green supply chain management. As far as green production is concerned, relevant departments should strengthen legislation related to green development. On this basis, we will strengthen judicial and law enforcement work, strictly implement relevant provisions, severely crack down on enterprise environmental violations, strengthen the punishment of illegal enterprises, eliminate enterprise illegal behaviors, effectively reverse the situation that bad money drives out good money, and promote a more fair and good competition environment. In addition, the state also needs to effectively improve the positive incentive mechanism of the market, increase the implementation of policies such as tax exemptions and financial incentives for green supply management enterprises, and promote enterprises to gain benefits in green development, so as to promote more enterprises to actively participate in green supply chain management.

(II)Enhance the company's ability to integrate resources

In the context of the new era, Chinese companies need to further effectively improve their global manpower, land, resources and other resource integration capabilities in order to promote their own international business development. With the maturity of different information technologies, Chinese companies need to effectively integrate global resources, promote the construction of new international business models, and fully release the potential of different industries. The

integration of green supply chain management into international operation and management, and the application of different information technologies to promote the upgrading and transformation of the industrial chain are conducive to promoting the improvement of the synergy efficiency of the industrial chain. On this basis, companies also need to pay attention to the effective integration of their own corporate culture and strengthen the concept of green supply chain management. On this basis, we will train supplier partners of investment destinations, fully understand customer needs and market response efficiency, and fully integrate the concept of green supply chain management to seek greater development space<sup>[3]</sup>.

#### V\CONCLUSION

In summary, green supply chain management plays a very important role in the development of international business operations, and it is also of great significance to environmental protection. Therefore, for enterprises, it is necessary to effectively integrate into green supply chain management on the basis of a full and correct understanding of green supply chain management.

#### REFERENCES

- [1] Mao Tao. The progress, dilemmas and countermeasures of green supply chain management practice[J]. Environmental Protection, 2021, 49(2):61-65
- [2] Xia Yuan. Research on the relationship between green supply chain management and green innovation [J]. Technology and Innovation Management, 2020, 41(2):148-153, 166.
- [3] Yu Qijun. Talking about the current strategic choice of Chinese enterprises' international operation[J]. China Science and Technology, 2019(20):204-205.

# Research on the Focal Point of Private Colleges and Universities To Promote The Ideological And Political Courses

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Abstract: We can understand the "curriculum ideological and political" of private colleges and universities as the fundamental task of establishing morality, aligning public courses, general education courses, professional courses and practical courses with ideological and political theory courses in the same direction, building a full staff, The full-course, full-course "three-level" education system forms an education concept with a full range of collaborative education effects. From the ideological and political curriculum to the curriculum ideological and political in private colleges, it is by no means a simple order of words. From the perspective of educational philosophy or curriculum theory, it is completely two concepts different orientations and connotations. The difference between the two is that the ideological and political curriculum is a combination of courses in ideological and political theory education, while the curriculum ideological and political is a kind of curriculum education system or a kind of education system.

Keywords: private colleges and universities; curriculum ideological and political; three-quanity education; big ideological and political

# 1. CONNOTATION OF "CURRICULUM IDEOLOGICAL AND POLITICAL"

At the National Conference on Ideological and Political Work in Colleges and Universities, General Secretary XI emphasized that the ideological and political work of colleges and universities should adhere to the central link of morality and cultivating people. A new situation in the development of my country's higher education. Colleges and universities should give full play to the political education in the classroom to implement the work of "three holistic education" and realize the transformation from ideological and political. It can be seen that the construction and reform of "curriculum ideological and political" in private colleges and universities is the general trend.

The term "curriculum ideological and political" was first proposed by the Shanghai Municipal Party Committee and Municipal Government in 2014. It is an educational concept that integrates ideological and political education into all aspects

of college curriculum teaching and teaching reform, so as to achieve morality, cultivate people and moisturize things silent. Based on the experience of Shanghai, we can understand the "curriculum ideology" of private colleges and universities as the fundamental task of establishing morality, aligning public courses, general education courses, professional courses and practical courses with ideological and political theory courses in the same direction, and constructing a whole The "three holistic" education system of personnel, full process and full curriculum forms an education concept with an all-round collaborative education effect.

# 2. ANALYSIS OF THE FOCUS OF PRIVATE COLLEGES AND UNIVERSITIES TO PROMOTE "CURRICULUM IDEOLOGICAL AND POLITICAL"

2.1.From top to bottom, strengthen the thinking of "curriculum ideological and political" and "professional ideological and political"

The implementation of curriculum ideology and politics in private colleges and universities focuses on top-level design. It is necessary to carry out an overall design from the aspects of curriculum system, teaching objectives, teaching content, teaching evaluation, etc., with systematic thinking, combined with talent training programs.

# 2.1.1. In the construction of the curriculum system, the soul of ideology and politics must lead

Explore the forms and methods of organically integrating ideological and political education and professional education, and form an educating pattern that closely combines professional and ideological and political education and works in the same direction. Establish an ideological and political teaching system integrating courses, majors, and disciplines, and integrate ideological and political education into the teaching of each course. In formulating professional talent training programs, it reflects the implementation of the party's educational policy, adheres to the central link in talent training, and integrates XI's new era of socialism with Chinese characteristics, socialist core values, and craftsmanship into the whole process of education and teaching.

#### 2.1.2. In terms of teaching goals, the rigidity of

### ideological and political affairs must be adhered to

The breakthrough of curriculum ideological and political education at the level of educational concepts is mainly reflected in the improvement of the educational nature of the curriculum to the height of ideological and political education, indicating that the primary goal of curriculum teaching is the cultivation of a correct world outlook, outlook on life and values. In the course of curriculum implementation in private colleges and universities, in accordance with the new requirements of curriculum ideology, while learning knowledge and skills, it is necessary to organically integrate personal ideals with social responsibility, so that public courses, professional courses, and practical courses must carry the correct professional outlook, Talent view.

# 2.1.3. In terms of teaching content, the freshness of ideological and political activities should be enlarged

The teaching content of professional courses in private universities is a combination of knowledge and skills, and the "ideological and political" function of professional teaching has been greatly weakened. The core of talent training in private colleges and universities is the curriculum, and the main front of the curriculum implementation is in the classroom. Teachers must use the curriculum standards to handle the teaching materials with the correct education concept, introduce the positive energy content with the sense of the times into the classroom, and amplify the ideological and political work. Fresh and active, pay attention to preaching while teaching, and guide students to become talents.

# 2.2. Follow the teaching rules and explore the appropriate ways to integrate "curriculum ideology and politics"

The key to implementing the curriculum ideological and political is to find the combination of professional knowledge and relevant ideological and political elements, and choose the appropriate way of integration. It can start from the three aspects of "learning knowledge points, digging integration points, and practicing integration points", and gradually deepen it from point to line to surface.

#### 2.2.1. Learn knowledge points

Strengthen the ideological and political teaching ability of professional course teachers. Teachers who implement the curriculum ideological and political are required to not only "strike iron but also need their own hard" professional theories and skills, personal noble moral sentiment, but also dabble in different knowledge systems to develop their own ideological and political education And apply it to their own curriculum ideology, and take on the important task of students' personal character and character

development.

#### 2.2.2. Exploring the junction

Professional courses have the characteristics of objectivity, professionalism and practicality. We should start from the working ability corresponding to the professional courses and combine the content of the ideological and political theory learned by the students to sort out and dig out the implied ideological and moral spirit and value pursuit., And transform it into a vivid material for the education of socialist core values, thereby organically combining knowledge orientation and value orientation.

#### 2.2.3. Practice integration points

A typical case is the most suitable entry point to integrate the ideological and political education elements of the curriculum. In the process of integrating ideological and political content, we can combine some professional examples to introduce the core values of socialism from different perspectives. Speak with the things around you, in the language of the students, to increase the vividness. To reach this state, one is to practice more, practice makes perfect; the other is to strengthen collective lesson preparation, gather the wisdom of everyone, and make teaching more accurate and effective.

# 2.3. Promote the construction of "curriculum ideological and political" with the construction of the teacher's party branch as the starting point

### 2.3.1. Grasp the construction of teacher ethics and style

The teacher's party branch must strengthen ideological and discipline building, and strictly educate and manage party members. Adhere to the education of teachers' ideals and beliefs and the construction of teacher ethics and style as the primary task of the education and management of teacher party members, form a normal mechanism for all teachers to combine teaching and selfcultivation, and highlight the all-round and fullprocess development of teacher ethics. The teacher party branch should guide the teacher party members to consciously pursue the high moral line, strictly observe the bottom line of discipline, and promote the normalization and long-term effect of the construction of the teacher's morality in the party branch. Deeply promote the construction of "curriculum ideological and political", so as to take the initiative in the integration of knowledge and action.

# 2.3.2. Strengthen political functions and enhance organizational power

The teacher's party branch must strengthen its political function and firmly grasp the political direction of the construction of "curriculum ideological and political". It is necessary to give full play to the advantages of the party's

organization, incorporate the requirements of "three holistic education" into the scope of the party branch's responsibilities, incorporate the fundamental tasks of Lide and foster people into the party branch's organizational life, and creatively implement the party's line, principles and policies, and implement Lide The Shurencentric work is integrated with the specific tasks of curriculum construction. By attracting non-party teachers to participate in the construction of "curriculum ideological and political" within the party, we will dig deep into the elements of ideological and political education, discuss the organic integration mechanism, and promote the realization of value guidance.

# 2.3.3. Give full play to the exemplary vanguard role of teacher party members

The teacher's party branch must adhere to the leadership of the party branch secretary and pilots with outstanding teacher party members, and strive to create demonstration courses to demonstrate benchmarking effects. It is necessary to improve the mechanism of incentives, care and assistance within the party, improve their own ability to carry out ideological and political work, actively carry out the construction of a learning community among all teachers, party members and the masses, give play to the role of advanced models, establish and improve the transmission and support mechanism, and integrate The results of the construction of "politics" are effectively implemented in every teacher's classroom.

# 2.4. Promote the reform and innovation of "curriculum ideological and political" and create a three-dimensional pattern of ideological and political

# 2.4.1. Explore the reform of the academy system and promote the spatial integration of education resources

The reform of the academy system is an active attempt to explore the "three holistic education", integrating ideological and political education into the daily life of students, and creating an all-round development of education pattern. Taking a college as an example, four colleges of Chongde, Shangxue, Jingyi and Duxing were opened, and students were included in the college system management to realize the parallelism of secondary colleges and academies. The former focuses on subject education and the latter focuses on fostering education. The development of students' morality, intelligence, physical beauty. The specific implementation methods are: through a series of humanistic quality lectures and education, the integration of experiential professional education and ideological and humanistic quality education is realized; the general education system supplemented by "first classroom" and "second classroom" is promoted to create The home-like "life base" provides a good carrier for the extension of ideological and political education to the student community; implements a full-staff mentor system to form a full-staff education mechanism; opens various types of studios to provide students with professional psychological counseling, employment and entrepreneurship guidance, etc. service.

# 2.4.2. Implement the "Dream-Building Pilotage" project to promote the systematic integration of education resources

The "Building Dreams and Piloting" project is centered on "Lide Cultivating People", focusing on cultivating and practicing the core values of socialism, and plans to carry out "ideal navigation", "practical aid navigation", "caring escort", and "model navigation". The project embodies the ten education systems of curriculum, scientific research, practice, culture, management, psychology, and funding into specific measures in these four projects, and implements them in a coordinated manner. Taking the "practical aid to navigation" project as an example, combining practical education, funding education and cultural education, organizing and carrying out employment and entrepreneurship, volunteer activities, corporate internships and other activities. Specifically, it is to carry out four employment and entrepreneurship competitions to promote innovation and entrepreneurship education for college students; to carry out indepth voluntary services and social practice activities, to systematically promote standardized construction of practical activities; to build a corporate practice platform, promote student employment internships, and strengthen alumni exchange activities.

#### 3. CONCLUSION

There is no mature paradigm for the implementation of "curriculum ideological and political". To carry out effective classroom construction, the key to implementing "curriculum ideological and political" is action. As long as the direction is right, we must try boldly, accumulate experience, and continuously improve. Ideological and political education is a systematic project that runs through the entire process of education and teaching. It is necessary to change the phenomenon of ideological and political teachers, counselors and professional teachers working alone; it is necessary to improve the construction of the education system from talent training programs to curriculum syllabuses to teaching cases. Solve the problems of "Curriculum Ideology and Politics" from the level of ideological understanding and practical operation; it is necessary to improve the moral education ability and awareness of professional course teachers, and build a "Curriculum Ideology and Politics" teaching team. Private colleges and

universities should start from the ideological and political courses, link up the "curriculum ideological and political", and create a three-dimensional ideological and political network of "all-round education, all-round education, and all-round education".

#### REFERENCES

[1] Shi Changqi. The way to reform the teaching of ideological and political courses in colleges and

- universities[J]. Heilongjiang Journal, 2014, (1).
- [2] Cao Xikang. Follow the law of curriculum ideological and political teaching. China Education News, 2017, (7).
- [3] Qu Chunfang. The improvement of teachers' teaching ability of ideological and political theory courses under the new media environment [J]. Heilongjiang Higher Education Research, 2013, (4).

# Experimental Research on the Cooperative Learning Model in the Specialized Teaching of Badminton in Colleges and Universities

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Abstract: The level of badminton competition in our country and the degree of socialization of sports have gradually developed and improved. The development of badminton in China is very extensive. With the increase in the degree of badminton sports, more and more students choose badminton specialization courses in college physical education departments. A good badminton teaching effect will be very important for cultivating the various abilities of these students. The main purpose of this article is to study the experiment of cooperative learning mode in the special teaching of badminton in ordinary colleges and universities. This article mainly collects, sorts out and reads relevant documents through the websites of HowNet and Weipu, and analyzes and researches the collected information. In this semester, the cooperative learning teaching model is used in the experiment, and the experimental results are analyzed theoretically to verify the different effects of the two groups in the teaching experiment of aerobics. This article conducted face-to-face interviews with badminton teaching and training professors, teachers, and youth sports school coaches, and consulted some researches on badminton teaching methods and techniques, in order to improve the application of cooperative learning mode in badminton teaching. The experimental research results show that the t-test results of the two dimensions of the learning interest level in the experimental group and the control group measured after the experiment are all less than 0.05, and the t-test results of the four dimensions in the cooperation ability are all less than 0.05, indicating the cooperative learning model has a significant effect on cultivating students' good learning interest and their cooperative learning ability.

**Keywords:** Cooperative Learning; Learning Mode; Colleges and Universities; Badminton Teaching

#### 1.INTRODUCTION

A good educational environment is an important boost to promote sustainable social and economic development [1]. In contemporary China, quality education is aimed at all students, with the concept and purpose of cultivating and improving the quality of the Chinese nation, and focusing on cultivating students' self-innovation spirit and comprehensive quality with practical ability [2-3]. At present, most schools in our

country mainly promote school education through the comprehensive use of competitive incentive mechanisms. To a certain extent, although these incentive mechanisms can mobilize and stimulate students' autonomy and learning motivation, they ignore the cultivation of the awareness of student team cooperation and non-cognitive skills not only severely affects the effectiveness of teaching, but also is not conducive to promoting the healthy growth of students [4-5]. In order to improve the above situation, the reform of the education classroom has been continuously carried out. Some new teaching methods and teaching models are gradually introduced into the classroom, and the cooperative learning method is one of them.

In order to develop education, many scholars have proposed a cooperative learning teaching model and conducted research and analysis on it. For example: David Kaufman and Elliott Sutow, etc., the crucial factors for the success of cooperative learning are: active interdependence, face-to-face verbal interaction, personal responsibility, social skills, group handling and appropriate grouping [6]. Ye Lei and Zhou Ting believe that cooperative learning has developed into a creative and effective teaching theory and strategy, which can not only stimulate the initiative and enthusiasm of students in learning, but also promote the interaction between teachers and students [7].

The research purpose of this project is to enrich the teaching content of badminton, improve its teaching quality, and enhance students' enthusiasm and interest in learning badminton by changing the traditional teaching mode. This article combines the teaching characteristics of college network badminton courses and the development law of the students' whole body and mind function, and compares and analyzes the influence of cooperative learning methods in colleges and universities badminton courses on students in all aspects of teaching, so as to improve my country's college badminton. Provide a basis for the construction of the teaching quality of the course. This article mainly attempts to use cooperative learning method to conduct experiments on students' badminton teaching, to operate cooperative learning method, scientifically and rationally use cooperative learning in high school students' badminton teaching, and to provide a practical

way to improve students' interest in learning.

# 2. EXPERIMENTAL STUDY OF COOPERATIVE LEARNING MODE IN THE SPECIAL TEACHING OF BADMINTON IN ORDINARY COLLEGES AND UNIVERSITIES

#### 2.1 Definition of Related Concepts

#### (1) Definition of cooperation

Cooperative activity is a joint activity between individuals and organizations, teams and the masses, individuals and masses, and teams and organizations to realize a common vision [8]. Long-term or short-term common goals, unified cognition and laws, common commitments and recognized application norms, mutual trust and supportive cooperation atmosphere are the foundation and necessary conditions for successful strategic partnership [9-10].

#### (2) Definition of teaching mode

The teaching mode is mainly an intermediary between teaching theory and other teaching practices. It is derived from teaching practice, has strong operability, and has certain teaching theory guidance. It is a summary of the extensive use of classroom teaching theories and other teaching practices. An important manifestation of teaching laws under special conditions or other teaching theories at a more specific level of knowledge or in the process of specific teaching activities [11-12].

#### (3) Definition of cooperative learning

Cooperative learning mainly refers to a learning activity in which individuals with different comprehensive abilities form a group in the form of cooperation and mutual assistance. Everyone in the group shared resources in the process of joint exploration and implementation of cooperative actions. The entire group takes the overall results of each group as the basis for assessment, and its common goal is to improve the efficiency of learning, cultivate good mental and psychological qualities, and master the skills of cooperation knowledge, and ultimately promote the individual's cognitive and emotional development, which is relatively fixed. The operating procedures and strategies of the teaching mode.

#### 2.2 Theoretical Analysis of Cooperative Learning

#### (1) Theoretical basis of cooperative learning

#### 1) Group dynamics theory

Group dynamics theory believes that a group is a dynamic whole composed of two or more interacting and dependent individuals for a specific goal. A cooperative learning group is actually a group composed of individuals with different personalities, knowledge structures, and ways of thinking for a common learning goal.

#### 2) Target structure theory

In group activities, the difference in rewards obtained after reaching the goal will lead to differences in the way individuals interact in the process of achieving the goal. Cooperative learning is mainly based on group performance. Students with different abilities in the group can contribute to the achievement of the group goal and experience the joy and pride of success. The

more capable members are more willing to provide help to the less capable partners, praise and encouragement.

#### 3) Motivation theory

The most effective way to stimulate the engine in cooperative learning is to help individuals in the group establish a community of interests, so that group members respect each other, share honor and disgrace, and share success together. Timely feedback of learning progress and learning results in the process of cooperation, and the appropriate use of rewards and punishments, are also conducive to stimulating students' interest in learning and desire for cooperation, so that students' cognition and emotions develop in a coordinated manner.

#### (2) Elements of cooperative learning

In constructing a cooperative learning model, the following elements need to be considered: positive interdependence, face-to-face facilitating interaction, individual responsibility, social interaction skills, and group self-processing.

#### (3) Cooperative learning principle

In constructing a cooperative learning model, the following principles must be followed: the principle of student subjectivity, the principle of comprehensiveness, the principle of appropriateness, and the principle of dynamics.

#### (4) Connotation of cooperative learning

In the process of joint learning, it is necessary to: take the group as the main organizational form and use the joint activities of the group members as the carrier; formulate rules for group activities so that each member can clarify his own responsibilities; take the group's achievements as the evaluation The main foundation.

#### 2.3 Cooperative Learning Design

(1) Determine cooperative learning goals Combined with the teaching objectives of the badminton course, the cooperative learning objectives mainly include the following aspects:

#### 1) Cognitive goals

Expand the basic theoretical knowledge related to the semester's teaching content, improve and perfect project technology, and improve sports performance; recognize the meaning and value of cooperative learning, clarify the common goals, individual responsibilities and obligations of cooperative learning, understand peer relationships, cooperative actions, and group development rule.

#### 2) Emotional goals

Experience the emotional promotion of achieving learning goals through cooperation; make students more satisfied with the classroom atmosphere, cooperative learning process and results; promote the formation of a good personality.

#### 3) Skill goals

Proficiency in the use of classroom teaching skills such as explanation, demonstration, teaching organization, observation and error correction, students from "learning" to "learning" to "teaching"; to cultivate students' sense of cooperation and cooperation skills, from cooperation groups to the entire teaching the team presents harmonious interpersonal relationships and high team cohesion.

#### (2) Teaching evaluation

A reasonable evaluation mechanism is the key to effective collaborative learning. The evaluation of collaborative learning uses group results as the main basis for reward or recognition, and uses a diversified evaluation method that combines process evaluation and final result evaluation in the evaluation stage. The staged process evaluation is based on the main evaluation basis of group performance. The final outcome evaluation is mainly based on personal performance as the evaluation standard. After the cooperation, complete the personal summary, group summary and teacher summary, collect opinions and suggestions, and accumulate materials for the next cooperative learning.

# 3. EXPERIMENTAL STUDY OF COOPERATIVE LEARNING MODE IN THE SPECIAL TEACHING OF BADMINTON IN ORDINARY COLLEGES AND UNIVERSITIES

3.1 Experiments on the Application of Cooperative Learning Mode to Badminton Special Teaching in Ordinary Colleges and Universities

#### (1) Subject

In the school's badminton special class, a teacher is selected, two students in the teacher's class are randomly selected as experimental subjects, and one is randomly selected as the experimental group, the other is the control group, the experimental group is 62 people, the control group 61 people.

#### (2) Experimental method

#### 1) Questionnaire survey

In the research process of this article, the two classes of the aerobics optional course were distributed to the two groups of students before and after the teaching experiment. The scale of interest in learning badminton and the scale of cooperation ability of college students were given to the two groups of students before and after the teaching experiment.

Reliability tests are performed on the two tables respectively, and the formula is:

$$\begin{split} \alpha &= (k/(k-1)) * (1 - (\sum Si^2)/ST^2) \\ r &= \frac{2r_{half}}{1 + r_{half}} \end{aligned} (2) \\ r &= 2\left(1 - \frac{\sigma_a^2 + \sigma_b^2}{\sigma^2}\right) \end{aligned} (3)$$

Tested by the reliability coefficient method and the half-reliability method, the reliability coefficients of the two tables are between 0.86-0.94, and the half-reliability is between 0.74-0.87, which meets the basic requirements of psychometrics. The internal of the table has good consistency and certain stability, which can be used as an evaluation tool.

#### 2) Mathematical Statistics

The data obtained in the experiment is tested and analyzed with SPSS software, mainly using the method of T test to test the significance of various indicators

before and after the experiment, providing a scientific basis for comparative analysis of the experimental process and results.

#### 3) Observation method

In this experiment, in the teaching of the control group, the classroom observation record form was used to record the classroom situation. The main contents of the record are: the performance of the students when the teacher leads the group study; the situation of the students after grouping; the results show the performance of each group; the performance of the students in the summary.

#### (3) Experimental variables

#### 1) Independent variable

The factors imposed during the experiment include that the experimental group adopts a cooperative learning teaching model, and the control group adopts a traditional teaching model.

#### 2) Dependent variable

The basic elements in the experiment include the student's badminton skill level and the changes of non-intellectual factors, including the student's badminton learning interest and college students' cooperation ability.

#### (4) Preliminary preparations for the experiment

#### 1) Teaching preparation

In order for the experimental group to implement the cooperative learning model well, teachers need to have a detailed understanding of cooperative teaching concepts, elements, methods, etc. before class, and familiarize teachers with the teaching plans of each class in advance, and communicate with other teachers after class. Insufficient classroom teaching and areas that need improvement will be improved in the next lesson plan.

#### 2) Related tests

Using the Badminton Learning Interest Scale, the Collaborative Ability Scale for College Students, and the Basic Badminton Level Test, the experimental group and the control group were used to test the badminton learning interest, college students' cooperative ability and basic badminton skills of the experimental group and the control group.

### (5) Testing of relevant indicators in the experiment

The content of the relevant index tests for the experimental group and the control group were practice time and average heart rate. Heart rate measurement is mainly aimed at the experimental group and the control group in the preparation part, the middle part, and the end part of the three stages randomly selected 31 students to measure the number of pulsations around the artery of the wrist by themselves, to understand and master the experimental group and the The change of the average heart rate in the classroom of the control group.

#### (6) Related tests after the test

In the last week of teaching, the technical level of the two groups of students will be tested based on the requirements of the school's badminton special course examination syllabus. Both groups allocate badminton learning interest rates to test students' interest in badminton learning. Send the student cooperation ability scale to the experimental group and the control group to test the correlation between the two groups of students' cooperation ability and perform statistical analysis.

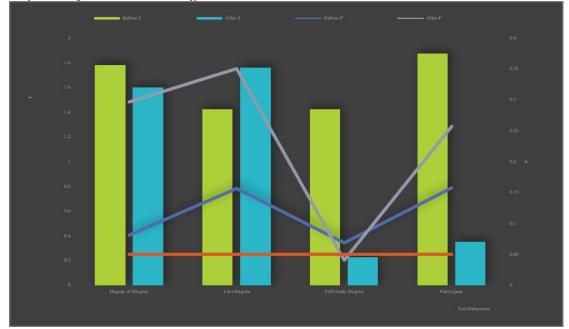
4. THE EXPERIMENTAL RESEARCH OF COOPERATIVE LEARNING MODE IN THE SPECIAL TEACHING OF BADMINTON IN ORDINARY COLLEGES AND UNIVERSITIES

4.1 Comparison of Badminton Learning Interests

Using SPSS statistical software, the test data of the Badminton Learning Interest Scale before and after the experiment were independently sampled T-test. The test results are compared in Table 1:

**Table1.** T Test of Badminton Learning Interest Before and After Experiment

	Before the Experiment		After the Experiment	
	T	P	T	P
Degree of Disgust	1.779	0.081	1.601	0.297
Like Degree	1.423	1.157	1.762	0.035<0.05
Self-study Degree	1.425	0.069	0.228	0.041<0.05
Participate	1.876	0.158	0.35	0.257



Figue1. T Test of Badminton Learning Interest Before and After Experiment

It can be seen from Figure 1 that the T test scores of the level of learning interest measured before the experiment are all greater than 0.05, indicating that there is no significant difference between the experimental group and the control group in the pre-experimental learning interest rate. After the experiment, the T test results in the two dimensions of the learning interest level are less than 0.05, which shows that the use of cooperative teaching mode in badminton sports has an important impact on cultivating students' interest in badminton.

4.2 Comparison of Students' Cooperation Ability The SPSS statistical software is used to conduct independent sample T test on the test data of the Collaborative Ability Scale for College Students, and the test results are compared in Table 2:

**Table2.** T Test of Students' Cooperative Ability Before and After Experiment

	Before Experim	the ent	After Experin	the nent
	T	P	T	P
Cooperative awareness	0.704	0.487	0.610	0.321
Cooperation intention	-0.321	0.714	0.594	0.024
Cooperative emotion	-0.839	0.753	0.781	0.037
Interpersonal interaction	-1.756	0.061	1.985	0.047
Conflict management	0.039	0.972	0.078	0.029
Emotional control	-1.517	0.118	- 1.549	0.433
Organizational leadership	0.351	0.726	0.254	0.568

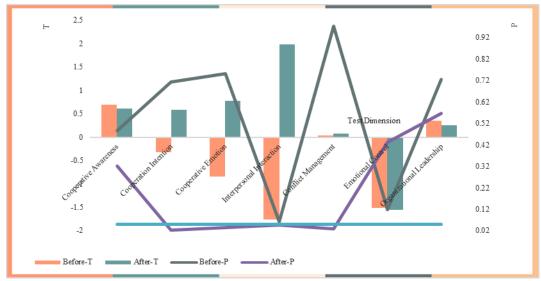


Figure 2. T Test of Students' Cooperative Ability Before and After Experiment

As shown in Figure 2, the T test results of all dimensions of the students' cooperative ability measured before the experiment are all greater than 0.05, indicating that there is no significant difference in the students' cooperative ability before the experiment. After the experiment, the measured T test results of cooperation ability P were all less than 0.05, indicating that the overall level of cooperation awareness and cooperation skills of the experimental team has also been greatly improved.

#### **5.CONCLUSIONS**

In the application practice of the cooperative learning model of badminton professional courses in ordinary colleges and universities, it is found that the cooperative ability evaluation of the experimental group is better than that of the control group, and the experimental group is more interested in badminton learning. Cooperative learning combines personal goals with group goals, and uses group results as necessary evaluations and rewards to establish a positive and interdependent collaborative environment. The cooperative learning model provides a platform for students to demonstrate their skills, while students with different abilities are in an autonomous environment. Cooperative learning helps to give full play to personal skills and cultivate a positive and enterprising spirit. Returning to society after graduation may be more suitable for collective life.

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#### REFERENCES

- [1] Kim, Hyekyung. A Study on the Teaching Method for College English Reading Class through Small group-oriented Cooperative Learning[J]. Korean Journal of General Education, 2016(4):209-236.
- [2] Howe T H, Sheu C F, Hinojosa J. Teaching Theory in Occupational Therapy Using a Cooperative Learning: A Mixed-Methods Study[J]. Journal of allied health, 2018, 47(1):66-71.
- [3] Devi A P, Musthafa B, Gustine G . Using Cooperative Learning In Teaching Critical Thinking In Reading[J]. English Review Journal of English Education, 2016, 4(1):1.
- [4] Bashir M F, Nisar M, Gul M A . Teachers' Perceptions and Practices of Cooperative Learning and Its Influence on Classroom Learning[J]. Sir Syed Journal of Education & Social Research (SJESR), 2020, 3(2):278-289.
- [5] Al G V E . A Review of Studies on Cooperative Learning Strategy to Improve ESL Students' Speaking Skills[J]. Turkish Journal of Computer and Mathematics Education (TURCOMAT), 2021, 12(3):63-68.
- [6] Kaufman D, Sutow E, Dunn K. Three Approaches to Cooperative Learning in Higher Education.[J]. Canadian Journal of Higher Education, 2017, 27(2):37-66
- [7] Ye Lei, Zhou Ting. The Application of Cooperative Learning in College English Teaching[J]. Overseas English, 2017(23):107-108.
- [8] Hutagaol K, Saija L, Panjaitan M. THE ING NGARSA SUNG TULADHA COOPERATIVE LEARNING MODEL AND STUDENTS' PROBLEM SOLVING ABILITIES[J]. JOHME Journal of Holistic Mathematics Education, 2020, 3(2):118.
- [9] Al J S E . The Effectiveness of the Cooperative Problem-Based Learning Model in Learning Statics in Vocational Education[J]. Turkish Journal of Computer and Mathematics Education (TURCOMAT), 2021, 12(3):3020-3027.
- [10] Yoon S. Effects of Cooperative Learning on High

School Students' English Reading Ability and the Key Competencies of the 2015 Revised National Curriculum[J]. The Journal of Mirae English Language and Literature, 2019, 24(2):295-317.

[11] Nakamura S, Kuroda K, Morimoto M, et al. Lecture Module Incorporating Cooperative Learning to Cultivate the Engineer in the Basic Science Education[J]. Journal of JSEE, 2018, 66(4):4\_31-4\_37. [12] Jung-Sook, Kim. Development of Teaching & Learning Instruction by TAI Cooperative Learning: focused on'Scalp & Hair Care and Customer Service'[J]. Korean Journal of Cosmetics and Beauty, 2016, 6(2):151-161.

# Talent Cultivation of Artificial Intelligence Sports Equipment Technology

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Abstract: In the era of artificial intelligence, sports also flourish in the general environment and occupy an unshakable position, and have a profound impact on the new era. Sports equipment technology has gradually matured, and higher requirements have been put forward for sports equipment technical personnel. At the same time, the demand for related talents is also increasing. Therefore, cultivating high-quality, highlevel sports equipment technical personnel has also become a current research focus. The purpose of this article is to study the training of artificial intelligence equipment technical personnel. In the context of artificial intelligence, this article first introduces related smart sports equipment, mainly from two aspects of pedometer and exercise status monitor. Secondly, this article analyzes the current problems in the cultivation of relevant talents from different angles. Finally, it puts forward optimization suggestions for the training of relevant talents, changes the old training ideas in the past, strengthens the construction of humanities education, improves the rationality of project settings, and strengthens the training system of coaches, so as to ensure the quality of talent training and improve the athletic ability of reserve talents and learning ability. Scientific arrangement of talent training and emphasis on the learning of cultural knowledge is the guideline of policy support and specific measures. The experimental research results show that in terms of talent training, ideology and morality accounted for the largest proportion at 34.16%, followed by cultural knowledge at 33.75%, and finally management mechanism at 32.09%. All in all, the importance of the various training indicators is not much different. It is necessary to further improve the training model in a comprehensive manner, so as to cultivate a large number of relevant talents.

Keywords: Sports; Smart Devices; Talents; Training

#### 1.INTRODUCTION

In the era of artificial intelligence, sports also flourish in the general environment and occupy an unshakable position, and have a profound impact on the new era [1-2]. Sports equipment technology has gradually matured, and higher requirements have been put forward for sports equipment technical talents, and the demand for related talents has also increased [3-4]. Therefore, cultivating high-quality and high-level sports equipment technical personnel has also become a current research hotspot [5-6]. Relevant sports colleges have also implemented various methods for talent training in many years of practical exploration.

At present, there are continuous innovations in the talent training model and system, and they are gradually being improved [7-8].

In the research on artificial intelligence sports equipment technology talent training, many domestic and foreign scholars have conducted research on it and achieved good results. Umek and Kos pointed out that the "combination of sports and education" or "combination of sports and education" frequently discussed in recent years It is not a combination of sports and education in the true sense. Its essence is the combination of sports management and education management and the combination of athlete training and culture in the process of training high-level athletes in my country [9-10]. Barbosa and Prihatini believe that although the current talent transfer rate in sports colleges is lower than that of the "national system", the diversified mode of reserve talent training is the future development trend, and school sports is an important

In the context of artificial intelligence, this article first introduces related smart sports equipment, mainly from two aspects of pedometer and exercise status monitor. Secondly, this article analyzes the current problems in the cultivation of relevant talents from different angles. Finally, it puts forward optimization suggestions for the training of relevant talents, changes the old training ideas in the past, strengthens the construction of humanities education, improves the rationality of project settings, and strengthens the training system of coaches, so as to ensure the quality of talent training and improve the athletic ability of reserve talents and learning ability. Scientific arrangement of talent training and emphasis on the learning of cultural knowledge is the guideline of policy support and specific measures.

# 2. RESEARCH ON TALENT CULTIVATION OF ARTIFICIAL INTELLIGENCE SPORTS EQUIPMENT TECHNOLOGY

2.1 Smart Sports Equipment

(1) Pedometer

At present, many products are not fully considered in design, resulting in high power consumption, large volume, and high cost. Many solutions only consider the sensor power consumption and ignore the processor power consumption in the power consumption design. As a result, the mobile phone processor with high performance and high power consumption is selected as the main processor; in the algorithm implementation, only high performance is considered and complexity is ignored. As a result, it must rely on an advanced

processor environment to run; the software implementation is overly pursuing flashy functions such as the UI interface and information notification, while ignoring the accuracy of the step-counting algorithm. A mature hardware design needs to consider the sensor, storage, processor, memory, battery, etc., combined with power consumption and portability requirements to achieve solution convergence; in software design, it is necessary to consider the characteristics of wrist movement and gait switching, and combine Signal filtering, signal classification and other technologies have finally completed the system design with comprehensive consideration of multiple aspects. In the hardware design, many factors such as device roadmaps, current consumption, cost factors, memory requirements, and availability considered, and related parameter settings were carried out at the same time. In software design, the overall framework is first systematically designed, and the overall framework is divided into four parts: sensor data acquisition, sensor data preprocessing, data value selection, data modeling, identification analysis. At the same time, mathematics of feature value selection is established.

#### (2) Movement status monitor

The human body behavior recognition method based on the acceleration sensor has obvious advantages. It is adaptively adjusted according to the actual situation of the user. When the user is exercising, the battery power consumption is basically close to 5% power per hour. When the user stops moving Sometimes or when the phone is left alone, the battery power consumption will be reduced to about 1.5% per hour. The original battery life is only 20 hours, and it can be increased to 48 hours. which is closely related to the actual situation. The user's motion is monitored based on the acceleration sensor, and the user's motion trajectory is also monitored. There is no GPS motion track tracking function, which records the user's outdoor motion track and saves the daily motion track. At the same time, users can share their trajectories with other communication or processing platforms via the Internet. Since a map is needed to browse the motion trajectory, this article uses Baidu Maps SDK to provide offline map API to download offline maps, which can save users more network traffic. Wake up when the user exercises, which may save more power. Moreover, the sharing function is only limited to the sharing of motion trajectories, and it is not a self-developed independent sharing platform. In the future, a network back-end server supporting this application can be established, allowing the application to upload data, share sports data, or perform functions such as national ranking of sports data.

#### 2.2 Problems in the Training of Relevant Talents

#### (1) Teaching issues

Sports colleges are generally not doing well in this regard. In order to improve sports performance quickly, leaders and coaches pay great attention to sports training and use methods such as increasing the amount

of training hours invested in funds. In addition, individual colleges and universities are competing to reduce or exempt the study of cultural courses as one of the means to motivate students to improve their athletic performance. Of course, many coaches are guided by various economic interests and disregard the students' academic performance in cultural courses. Long-term suspension of training, and even the suspension time of some students can be calculated in years. As a result, some athletes have not even completed their most basic education. At the same time, people's value orientation and ideological concepts have changed, and some ideas of individualism and selflessness have arisen. In the field of sports, there are some people who have lower quality and lack the concept of the legal system. They are more likely to be infected by the so-called bad ethos.

#### (2) Teacher issues

Since most coaches in the sports academy are retired professional athletes, the coaches' own education and scientific research capabilities are not high. In order to better improve the training effect, it is necessary to improve the scientific research ability of the coaches so that the coaches can train the students scientifically. At the same time, corresponding policies and measures should be introduced to enable coaches to obtain certain training opportunities to improve their own cultural level and scientific research capabilities. Most students in sports schools like training. Although most students are aware of the importance of cultural learning, when there is a conflict between learning and training, the vast majority of students will choose sports training. This understanding is inseparable from the current environmental impacts. Moreover, compared with sports training, the academic performance of cultural courses is slow and lagging, and it cannot attract students. In addition, there are few or no material rewards for cultural courses at present. All of the above reasons are destined to cause the students' learning motivation to be generally weak.

#### (3) Students' own problems

The physical education college does not impose restrictions on age and region when recruiting students. It is the coaches who find promising students in various schools or county and city-level sports schools. Students come from various provinces and regions across the country. The study time, content, and foundation are different, and there are differences in the attitudes and methods of learning culture courses after entering the sports school. Such student sources are quite different on the basis of culture courses. In addition, the students' special projects are different, and the training time and location are also very different, which affects the continuity and systemicity of students' learning culture. It is difficult to implement a completely unified teaching and management of students' cultural courses, and it is necessary to adopt diversified teaching methods and teaching forms.

- 2.3 Relevant talent training suggestions
- (1) Teaching mode combining education and sports

The proposal and implementation of the combination of education and sports is to gradually move sports closer to education. However, the combination of education and sports without excellent athletic performance cannot meet the needs of the current development of sports in China. The improvement of Olympic performance and overall sports level will still be a long time for China in the future. It is the biggest contradiction between learning and training while vigorously tending to learn cultural knowledge without affecting physical training. It is also the fundamental factor that affects the smooth progress of the combination of education and sports. The training of sports talents has initially realized the return of sports to education, and has also initially realized the "combined" development of sports and education, and has achieved initial results among talents at all levels. It is mainly manifested in the increasingly strong school sports culture, the close connection between the education system and the sports system, the outstanding achievements of student athletes in provincial and municipal competitions, the parents strongly support children to participate in training, the win-win development of teaching and sports, and the continuous promotion of education and sports more closely integrated. The continuous advancement of the combination of education and sports will promote the continuous and in-depth integration of education and sports.

#### (2) Strengthen humanistic education

People-oriented is the core of the good development of sports talents and the fundamental guarantee for the healthy training of sports school students. The first factor that must be considered in the cultivation of talents in sports colleges is to put the growth of students in the first place, so as to completely change the phenomenon that sports schools pay attention to students' sports skills and ignore comprehensive cultural quality education. At the same time, we will work hard to achieve the sound development of comprehensive cultural quality and continuous improvement of social adaptability for the students of physical education colleges. This kind of education not only emphasizes the cultural heritage from the outside to the inside, but also emphasizes the students' selfunderstanding and spiritual level. That is to say, it can enable students to continuously understand and value the joy of learning and the meaning of life, and give more humanistic care to students, schools and society, and fundamentally reflect the humanistic education and care of sports colleges.

#### (3) Establish a reasonable management system

With the continuous development of my country's economic system and the development of sports itself, the current sports system has many drawbacks: excessive government management power has blocked the channels of participation to a certain extent, inhibited the enthusiasm of participation, and restricted the development of sports itself. At present, after years of exploration and practice in the training of sports talents in various sports colleges in our country, a set of training systems with their own advantages and characteristics, a good training environment and advanced training equipment have been formed, plus the advantages of the school's cultural atmosphere rendering and other advantages play an irreplaceable and huge role in the cultivation of talents in sports colleges. The new model of the sports system will fully activate the vitality of talent training in sports colleges, so as to create a better development of sports talents and form the fundamental driving force for the rapid development of sports talent training models in sports colleges.

2.4 Software Algorithms to Overcome Gross Errors Gross error refers to the error formed by the measured value clearly deviating from the actual value under certain measurement conditions. Gross errors obviously distort the measurement results and should be eliminated. When the number of measurements is large, the gross error in the measurement result should be judged by the Wright criterion; when the number of measurements is not enough, the Grubbs criterion should be used. After the system error is compensated, we can take the following measures for the gross error in the measurement:

Find the average of the measured values:

$$\bar{x} = \frac{1}{N} \sum_{i=1}^{N} x_i(1)$$

 $\bar{x} = \frac{1}{N} \sum_{i=1}^{N} x_i(1)$ Find the remaining error of each item:

$$v_i = x_i - \bar{x}(2)$$

Find the standard deviation:

$$\sigma = \sqrt{\frac{_1}{_{N-1}}\textstyle\sum_{i=1}^N v_i^2}(3)$$

#### 3. EXPERIMENTAL RESEARCH ON TALENT **CULTIVATION** OF ARTIFICIAL INTELLIGENCE **SPORTS EQUIPMENT** TECHNOLOGY

#### 3.1 Experimental Subjects and Methods

This experiment uses the main indicators of smart sports equipment and talent training as the experimental objects. Through actual investigation methods, various functions of the smart sports equipment are analyzed, including data collection, data processing, and data storage. Explains the importance of talent training in ideological and moral, cultural knowledge and management mechanism.

#### 3.2 Data Collection

In this experiment, a group investigation was conducted and tasks were assigned to each group. Each group then continued to collect and process various data by means of actual tests according to the task, and finally obtained the experimental data.

#### **EXPERIMENTAL** RESEARCH **AND** ANALYSIS OF TALENT CULTIVATION OF **ARTIFICIAL** INTELLIGENCE **SPORTS EQUIPMENT TECHNOLOGY**

4.1 Experimental Analysis of Smart Sports Equipment This experiment uses smart sports equipment as the research object, and mainly compares and analyzes the functions of pedometers and exercise status monitors. The experimental research results are shown in Table 1:

**Table 1** Comparative analysis of functions of smart sports equipment

Pedometer

Data collection	93.72%	91.36%
Data processing	87.41%	94.18%
Data storage	89.07%	90.85%

		*Pedometer **Motion monitor	
200.00%			
180.00%			:
160.00%			
140.00%	91.36%	94.18%	90.85%
120.00%			
Percentage			
80.00%			
60.00%			
40.00%	93.72%	87.41%	89.07%
20.00%			
0.00%	Data collection	Data processing	Data storage
	Data conection	Features	Data Storage

Motion monitor

Figure 1 Comparative analysis of functions of smart sports equipment

As shown in Figure 1, in the data collection function, the pedometer is 2.36% more than the exercise status monitor, and in the data processing and data storage functions, the exercise status monitor is 6.77% and 1.78% more than the pedometer. In general, the function of the exercise status monitor is better than that of the pedometer, but there is still room for improvement in all aspects.

4.2 Experimental Analysis of Talent Training
This experiment conducted experimental research

on various indicators of talent training and analyzed its effectiveness in talent training, mainly from three perspectives: ideological and moral, cultural knowledge, and management mechanism. The experimental results are shown in Table 2:

**Table 2** Analysis of the importance of talent training indicators

	Effectiveness
Moral	34.16%
Cultural knowledge	33.75%
Management mechanism	32.09%

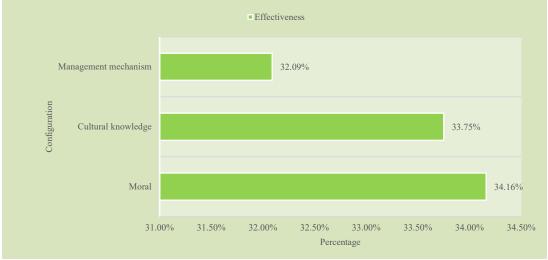


Figure 2 Analysis of the importance of talent training indicators

As shown in Figure 2, in terms of talent training, ideology and morality accounted for the largest proportion at 34.16%, followed by cultural knowledge at 33.75%, and finally management mechanism at 32.09%. All in all, the importance of the various training indicators is not much

different. It is necessary to further improve the training model in a comprehensive manner, so as to cultivate a large number of relevant talents.

#### 5.CONCLUSION

In the era of artificial intelligence, sports also flourish in the general environment and occupy an unshakable position, and have a profound impact on the new era. Sports colleges have trained a large number of outstanding sports talents for the country for more than 30 years, but there are still certain problems. There is a general lack of on-thejob training in the teaching staff, the coaches themselves need to be further improved, and the cultural teachers and coaches have insufficient management of the students; on their own, some students have poor cognitive attitudes and are bored with learning, plus training fatigue results in poor learning effects, and it is difficult to meet the learning requirements of courses. The training model of "combination of sports and education" has not been implemented. The contradiction between learning and training is still the main factor affecting the training of talents. It is embodied in the following aspects of cultural education: training goals emphasize training and neglect ideological and moral education, training neglect cultural curriculum learning, low cultural teaching objectives, lack of unity between training programs and syllabuses, and the inconsistency of curriculum settings with the actual situation of students, etc.; Insufficient scientific research awareness of coaches and lack of corresponding teacher training and other aspects of the teaching team; insufficient motivation of students to learn, poor implementation of supplementary lessons after the game and other aspects of athletes' learning, imbalanced sports event settings, and insufficient investment in training funds.

#### **ACKNOWLEDGEMENTS**

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#### REFERENCE

[1] Dai X, Li S. Application Analysis of Wearable Technology and Equipment Based on Artificial Intelligence in Volleyball[J]. Mathematical Problems in Engineering, 2021, 2021(2):1-10.
[2] Chu C C, Shih C, Chou W Y, et al. Artificial Intelligence of Things in Sports Science: Weight

Training as an Example[J]. Computer, 2019,

52(11):52-61.

[3] Hua F. Analysis on the Construction of Artificial Intelligence Subject from the Perspective of Talent Cultivation-Take Beihang University as an Example[J]. Advances in Education, 2019, 09(5):534-539.

[4] Lin B, Meng Q, Zhang C . Research on Improving the Talent Incentive Mechanism of Artificial Intelligence Industry in China[J]. Open Journal of Social Sciences, 2018, 06(4):135-142. [5] Zhao Z . Research on English Translation Skills and Problems By Using Computer Technology[J]. Journal of Physics Conference Series, 2021, 1744(4):042111.

[6] Gong X, Lin S. Construction of evaluation system of sports talent training scheme based on data mining[J]. International journal of reasoning-based intelligent systems, 2018, 10(2):128-133.

[7] Yu Q, Liu B, Zang J, et al. THE REFORM OF SUPPLY OF PUBLIC HEALTH SERVICES LEADING THE TRAINING OF SPORTS PROFESSIONALS IN LOCAL COLLEGES AND UNIVERSITIES IN THE BACKGROUND OF HEALTHY CHINA[J]. Revista Brasileira de Medicina do Esporte, 2021, 27(spe):101-104.

[8] Martins A O, Soares P M, Daniel W, et al. Dermatoglification Analysis for Selection and Training of Sports Talents[J]. IOSR Journal of Pharmacy and Biological Sciences, 2017, 12(1):79-83.

[9] Umek A, Zhang Y, Tomai S, et al. Suitability of Strain Gage Sensors for Integration into Smart Sport Equipment: A Golf Club Example[J]. Sensors, 2017, 17(4):916.

[10] Kos A, Umek A . Smart sport equipment: SmartSki prototype for biofeedback applications in skiing[J]. Personal and Ubiquitous Computing, 2018, 22(3):535-544.

[11] Barbosa T M . Smart sport equipment: reshaping the sports landscape[J]. Motricidade, 2018, 14(2-3):1-2.

[12] Prihatini Y O, Hidayatullah T . Building Sports Equipment among Students through Media as a Trend[J]. IOP Conference Series: Materials Science and Engineering, 2019, 662(3):032069 (6pp).

# Research on the Blended Teaching Model of "Principles of Computer Organization"

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Abstract: In order to further push the establishment of undergraduate of computer, implement the reform planning of talent training mode. This essay puts forward a kind of blended teaching mode based on Small Private Online Course(SPOC) and flipped classroom aiming at the Principles of Computer Organization(PCO), realize the transformation from traditional "interpretation of knowledge point" to "problem-focused", and transform from traditional "instilled" teaching to "active experience study" to combine theory with practice.

Keywords: SPOC; Blended Teaching Model; Flipped Classroom

#### 1.INTRODUCTION

In today's high speed of information technology, online education gets the wide application and appear the new mode of MOOC, flipped classroom, bisection classroom and SPOC. Under this large background, college's classroom is no longer the teaching of unified model as main, how to apply new type of information technology, develop Blended teaching and the whole process of innovative teaching has become important content of teaching study in recent stage.

PCO is one of core courses of computer science and technical major. Through the study of this course, students can understand the organized structure of computer system and composition and working principle of each function parts to establish the concept of whole machine of computer so as to have the ability of design simplicity of computer system preliminary. This course has stronger engineering, practical, technical and emphasize on training students to open and innovate sense and practical skills. It is the most difficult to teach and study computer science. For computer, new knowledge, new skills and new application are endless and cultivate student's selflearning ability and teamwork coordination spirit are especially important. How to reform teaching mode, improve teaching quality becomes the key problem of college and teachers. In view of, during the practical progress of reform of PCO course, the course group adopts SPOC online and adopts flipped classroom teaching model offline to develop the exploration and practice of Blended teaching reform.

#### 2.CURRENT ANALYSIS OF PCO TEACHING

### 2.1 Abstract course content and no easy to understand

The main content of PCO course is at the inside the computer system and explore its internal circuit and

working principle to analyze its realization of technology. However, the internal circuit realizes most of IC, which cannot see and touch, for example, it shows very abstract. Compared with other visualized program design course of computer, its content shows more bored which makes students lower the studying activity and hard to master the teaching content of course

#### 2.2 Single teaching means and inflexible method

With the wide usage of multi-media, improve the teaching means of teacher, and help students quickly and high effectively understand new knowledge. Limited by teaching condition, some classroom has only projection, teacher cannot depend on content on the blackboard to develop. Limited by the making level of teacher's courseware, some teachers cannot make the perfect courseware. Although teaching information makes class-teaching efficiency upgrade largely, but therefore, the knowledge points of single course among the teaching are too much and hard to digest and absorb and lack of thoughts and reduce the bilateral activity of teacher and students, which leads to the lowering of studying activity and is not favorable to cultivation of students to self-study.

# 3.PCO COURSE BLENDED TEACHING MODE DESIGN

#### 3.1 The whole planning of teaching model

The Blended teaching is based on audiovisual technology, multi-media technology and network technology, fully develops the advantage of traditional classroom teaching and online teaching, adjust many kinds of teaching form to serve for teaching and studying. SPOC(Small Private Online Course) is the small-scale limited online courses put forward by Professor Armand Fox from University of California, Berkeley. It gets the wide application based on the Blended teaching mode based on SPOC.

The PCO Blended teaching reform that course group develops abide by the priniciple of "take student as core, and take teacher as guide", design a kind of PCO teaching new mode. This mode adopts SPOC mode online and use flipped classroom mode offline. This mode can be divided into three stages, before class, middle class and after class.

#### 3.1.1 Before class stage

according to the demand of syllabus and training program, teachers want to make the teaching design. Firstly, make the micro-class video. When making, we need to pay attention to the scientific of content, systematic of professional knowledge and interests of

language; it can embody modern education thoughts to conform to scientific, advanced and universal law of education teaching and upload to shared platform of network, and then record the studying condition of students through assigning tasks point, and lastly inspect studying effect before class through online testing mode and analyze students to have the main problems. The student firstly studies the online video, sort out studying notes, records the question of studying to be as the question in class.

#### 3.1.2 Class stage

teacher succinct on key and difficult knowledge and answer the question that students put forward. Post online, TBL teaching method organizes group of studying and let students discuss the question and score the comment for students to discuss condition. The student realizes online communication through teamwork studying to interact with classmate, asking a question, answering the question and interact with teachers and sending post and comment with students. 3.1.3 After-class stage

teacher assigns homework of after-class and develop studying task and make the individual coaching and correct the homework of students with online form. The students complete homework and take the photos

#### 3.2 Make the rational assignment of course hours

to network platform and then develop studying.

When PCO theoretical teaching reaches 40 hours, and classroom teaching is 32 hours, and online studying is 8 hours, the class hours allocation of main content of course see table 1.

Table 1 The class hours allocation of course in PCO Blended teaching

Serial no	Main content of course	Classroom teaching hours	Online studying hours
1	Computer system introduction	1	1
2	Data information representation and Instruction system	6	2
3	Calculation method and calculator	8	1
4	Multilevel memorizer	8	2
5	CPU	6	1
6	Bus system	3	1
7	Input/Output system	4	1
8	Peripheral equipment	2	1
total		38	10

### 3.3 Establish multi-dimension course assessment method

Change the traditional assessment method, especially emphasizing on the evaluation of studying progress, which is not only evaluation what students learn but also the measure for students to keep continuous efforts. The students' submitted condition each time, correct rate condition, speech condition of classroom discussion, condition of practice on the classroom and after-class homework condition are the evaluation basis of studying progress. PCO Blended teaching course assessment see table 2.

Table 2 PCO blended teaching assessment type and its ratio

Serial no	Assessment type	Score ratio(%)	remarks
1	Online average score	20	unit testing, online watching progress and online interactive condition etc.
2	Offline average score	10	attendance, homework and classroom performance etc.
3	Offline experiment score	20	experiment completion condition and experiment report quality etc.
4	Offline final grade	50	

#### 4.CONCLUSION

Aiming at the analysis of current situation of "PCO" course, put forward Blended teaching mode and implementation plan, it has overturned the framework of "Teach first and then learn to teach" of traditional classroom teaching, fasten the developing pace of professional course establishment, push online and offline studying, the deep combination of teacher's teaching and students' self-studying, in-class and extracurricular learning and group individual autonomy and collaborative learning to simulate the consciousness and innovation for students to study, increase the discussion and communication between teachers and students. This model has already been implemented during the process of computer science and "PCO"course of technical major to implement and improve the teaching quality of class and provide more diverse thoughts for latter comprehensively developing the teaching reform of computer science.

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#### REFERENCE

- [1] Ma Xiaodan, Gao Yunli, Cao Hongjun, Zhu Jingfu, Gao Jun. Discussion on the hybrid teaching model of "Computer Organization Principle" courses[J].Jiangsu Science & Technology Information, 2019.1.
- [2] FENG Yongliang. Teaching research of internet of things technology based on SPOC and TBL[J]. The Guide of Science & Education, 2019.11.
- [3] Xie Pengshou et al. The blended teaching reform of principles of computer organization[J]. Computer Education, 2019.12.
- [4] Song Huiying. The exploration and practice of the Blended gold course of principles of computer organization. The Blended Teaching reform of Principles of Computer Organization. Journal of Shengli College China University of Petroleum, 2019.6.

# Design of Vacuum Die Casting Mould Based On A356 Aluminum Alloy Non-Solid Forming

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ABSTRACT: The A356 aluminum alloy die casting with uneven wall thickness is difficult to ensure the consistency of product quality in the production process, and it is easy to produce air holes and sand holes in the inner part of its wall thickness, which greatly reduces the compactness of the product, in this paper, the vacuum die casting technology is used to solve the above problems by using the casting of A356 aluminum alloy. The design theory, technology and main points of the vacuum die casting die are introduced in detail.

Key words: A356 Aluminum Alloy; Uneven Wall thickness; fully sealed vacuum Die Casting; vacuum vent tank; Vacuum Vent Block

#### 1\INTRODUCTION

With the development of the high-end automobile industry, the requirements for the compactness of automobile castings are getting higher and higher. Automobile castings generally use A356 aluminum alloy material, which can meet the strength and hardness requirements of automotive die casting. For automotive die casting parts with uneven wall thickness, innovation of die casting die design technology is needed to meet the demand.

#### 2\PRODUCT ANALYSIS

Dimensions of die-casting product: 230×170×80 (mm), weight: 0.9KG; material is A356 aluminum alloy.A356 is an aluminum alloy developed by the United States in the 1970s. It is a typical Al-Si-Mg ternary alloy with excellent comprehensive properties. Especially for casting performance, it can cast thin-walled and complex-shaped parts, and after the corresponding heat treatment, the strength can be greatly improved, and the plasticity and impact toughness can also be correspondingly improved. This alloy is not prone to thermal cracking due to its better fluidity, and its shrinkage rate is relatively low.And after some modification treatments and solid solution aging strengthening, the mechanical properties, corrosion resistance and processing properties of the material have been greatly improved. Therefore, the application range of the aluminum alloy in the industrial field is increasing. There should be no cold material on the surface of the product, and no pores or sand holes on the processed surface and inside; adopt side feed, fully sealed vacuum die-casting, in order to ensure the quality of products. The shape of the die-casting product is shown in Figure 1.



Figure 1 The shape of the die-casting product 3\STRUCTURE DESIGN OF FULL VACUUM DIE CASTING MOULD

#### 3.1Runner, feed port, slag discharge design

According to the shape and structural characteristics of the die casting to design:a. The product is relatively regular, and there is no big drop step, so the "T"-shaped runner is designed, which is simple and conducive to the smooth flow of the metal soup; b. Feeding on the flat side, and the design of 4 feeding ports is conducive to the uniform filling and forming of the metal soup, which is convenient for machining, grinding, and dewatering;c.A slag bag is arranged at the end of the feed flow to facilitate the collection of cold material and exhaust at the end. Set up a slag bag at the return point of the material flow, which is conducive to collecting the backflow vortex material and exhaust gas. A slag bag is set on the top of the cylinder to help collect the cold material at the end. The top view of the product is shown in Figure 2, and the

positive triaxial view of the product is shown in Figure 3.

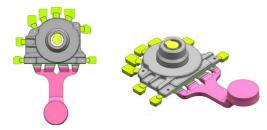


Figure 2 Product top view Figure 3 Product positive three-axis diagram 3.2Vacuum exhaust groove design

The vacuum exhaust groove is used to connect the slag bag and the exhaust channel of the vacuum exhaust block. It not only has the function of assisting vacuum exhaust, it also has the function of storing cold material. The design of vacuum exhaust groove should be conducive to exhaust, prevent cold material from blocking the exhaust port prematurely, and prevent the loss of casting pressure caused by cold material outflow. The vacuum exhaust groove is divided into two parts: the front mold vacuum exhaust groove and the rear mold vacuum exhaust groove, which help increase the difficulty of cold material exhaust and indirectly inevitably lose the casting pressure. If all the vacuum exhaust grooves are designed on the rear mold, it will increase the sticking force, and the cold strips of the vacuum exhaust groove will easily break when they are ejected, which increases the risk of mold repair.

A protruding buffer material level is designed at the lap part of the vacuum exhaust groove of the front die and the vacuum exhaust groove of the back die to slow down the direct discharge of cold material and prevent pressure loss.

Try to ensure that the length between each slag bag and the vacuum exhaust block is consistent, avoid exhausting a certain slag bag and filling the surface exhaust groove too fast, which will affect the exhaust and slag discharge of other slag bags. Therefore, the front mold vacuum exhaust groove is designed with curved and linear exhaust grooves. In this way, adjust and balance the length of the exhaust slot of each slag bag. The schematic diagram of the exhaust slot is shown in Figure 4.

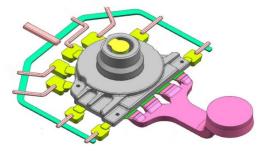


Figure 4 Schematic diagram of exhaust slot 3.3 Vacuum exhaust block design

3.3.1Front mold vacuum exhaust block design

The vacuum exhaust block of the front die is fixed on the A plate of the front die and used together with the vacuum exhaust block of the back die. Its inner side is connected with the mold core, and the outer side is butted with the vacuum suction pipe, which acts as a vacuum exhaust connector from the inside to the outside.

The vacuum exhaust block of the front mold is designed with a small exhaust groove, which is used to connect the vacuum exhaust groove of the die core and the vacuum exhaust block of the back mold. The exhaust hole and the suction tooth vent hole are designed to exhaust and connect the vacuum suction pipe tooth vent respectively.

3.3.2Design of vacuum exhaust block for rear mold The rear mold vacuum exhaust block is fixed on the rear mold B plate and used together with the front mold vacuum exhaust block. The inner side of it is connected with the mold core, and the buffer stop groove is designed to prevent pressure loss and prevent the metal flow from being sucked into the vacuum tube, which plays a role of buffering and stopping the metal flow.

Two thimbles are designed on the buffer stopper to push out the cold metal material in the buffer stopper. 3.3.3 Vacuum exhaust block design

When the mold is closed, the front and rear mold vacuum exhaust blocks are combined to form a vacuum exhaust valve for pumping out the exhaust body; it is connected with the exhaust groove of the die core, and the outer is connected with the vacuum suction pipe, and then the gas is extracted through the vacuum machine, the mold cavity forms a vacuum in a short time

3.4Front mold design

3.4.1Design of front mold sealing surface

A convex ring with A width of 40mm and A height of 0.2mm is designed on the A plate of the front die as the sealing surface of the front die. If the surface of the front die A plate is directly used as the sealing surface, it is difficult to ensure the overall flatness and sealing performance of the sealing surface. Setting the convex ring as the sealing surface of the front mold is easy to match the mold, and it can ensure the sealing performance of the sealing surface. A schematic diagram of the front mold sealing surface is shown in Figure 5.

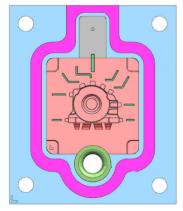


Figure 5 Schematic diagram of the front mold sealing surface

3.4.3Sealed cooling design

Because the front mold part has a material tube, In order to prevent the front die temperature is too high (up to 230 degrees), resulting in the sealing ring failure or melting;Design a cooling pipe at the corresponding position of the sealing ring to cool down(Guarantee about 200 degrees, the sealing ring can withstand high temperature of 327 degrees);ensure that the sealing ring works within the normal temperature range.

3.5Back mold design

3.5.1Design of the sealing surface of the back mold A convex ring with a width of 40mm and a height of 0.3mm is designed on the B plate of the rear mold as the sealing surface of the front mold. If the surface of the back mold B plate is directly used as the sealing surface, it is difficult to ensure the overall flatness and overall sealing performance of the sealing surface. Set convex ring as the rear die sealing surface easy to match the mold, it can ensure the sealing performance of the sealing surface.

A seal groove with a width of 6.5mm and a depth of 3.5mm is designed in the middle of the sealing surface of the (convex ring) mold to install the seal ring. The schematic diagram of the sealing surface of the back mold is shown in Figure 6.

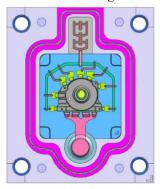


Figure 6 Schematic diagram of the sealing surface of the rear mold

3.5.2Leakage prevention design of rear die

Sealing rings are designed in the gap between the mold core and the mold base, the screw through hole and the gap between the screws. The thimble sealing ring and the sealing ring fixing plate are designed in the gap between the thimble through hole and the thimble. First, put the sealing ring in the sealing groove, lightly prelock the fixing plate, and then gradually lock the fixing plate after the thimble is installed, and press the sealing ring to hold the thimble tightly to achieve the sealing effect; effectively prevent the outside gas from leaking into the cavity and ensure a good vacuum effect in the cavity.

#### 3.5.3Sealed cooling design

Cooling pipes are designed at the corresponding position of the sealing ring on the parting face of the rear die to cool down (ensure about 200 degrees);to prevent the excessive temperature of the back mold from causing the parting seal ring to fail or melt, so as to ensure that the seal ring works within the normal temperature range.

#### 4\WORKING PRINCIPLE

The working principle of vacuum die casting mold:

- 1.Clamp the mold and prepare for die casting;
- 2. The metal soup is poured into the soup pipe, and the punch begins to advance 30 to 50mm, sealing the soup inlet;
- 3. The vacuum machine immediately pumps the gas, and the mold cavity has reached the vacuum state for 0.2 seconds to 0.5 seconds;
- 4. The vacuum machine continues to vacuum and die casting. First, the flow passage and inner gate are filled at low speed and low pressure, then the mold cavity is filled at high speed. After filling the slag bag on the surface, the vacuum is stopped, the exhaust groove is filled to stop filling, and the pressure is increased and maintained.
- 5. Cooling metal castings (the sealing ring cooling pipe has been cooling down);
- 6. Open the mold and eject the casting;
- 7.Clean up metal edges and impurities, and wait for the

next mold closing production. The front and back mold diagrams are shown in Figures 7 and 8.

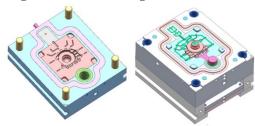


Figure 7 Front model Figure 8 Rear model diagram

#### **6CONCLUSION**

A356 aluminum alloy die-casting parts with uneven wall thickness are prone to produce pores and sand holes in the thickness of the wall, which greatly reduces the compactness of the product. This article uses vacuum die-casting technology to solve the abovementioned problems, by designing parting surface sealing, screw hole sealing, and thimble hole sealing to achieve a fully sealed vacuum effect. The fully sealed vacuum die-casting mold can form a 90% vacuum environment state, and the A356 aluminum alloy soup is filled and formed in this state. First, there is no gas infiltration inside the casting, effectively reducing or completely avoiding the appearance of pores and sand holes inside the casting; second, it is conducive to the full filling of various parts of the cavity, which can improve the internal quality of the casting;third, there will be no gas trap, which can improve the appearance quality of the casting.

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#### REFERENCES

- [1] Li Chengkai. Die casting process and mold design[M]. Hua University Press: Li Chengkai, 2014: 47-99.
- [2] Deng Ming. Concise Handbook of Practical Mould Design[M]. Machinery Industry Press: Deng Ming, 2006: 152-195.
- [3] Wang Chunfang, Wang Kaikun et al. Numerical simulation of flexible thixotropic extrusion of A356 aluminum alloy [J]. Special Casting and Nonferrous Alloys, 2014.34(07):725-729.
- [4] Liu Yanhua, Xiong Hongmiao et al. Rheological Squash Casting Technology of Semi-solid A356 Aluminum Alloy [J]. Special Casting and Nonferrous Alloys, 2008.28(02):122-124.
- [5] Liu Zheng, Yu Fengbo.The evolution characteristics of semi-solid primary phase morphology of A356 aluminum alloy during isothermal holding in the solid-liquid zone[J]. Hot Working Technology. 2008(01):6-9.

# The Influence of Artificial Intelligence Technology on the Theory and Practice of New Education: The Transformation of Motivation for Learning Goals Achievement

Dan Long<sup>1</sup>, Yulu Xie<sup>1</sup>, \*, Jiayue Long<sup>2</sup>

Abstract: Artificial intelligence technology brings new opportunities for the reform of new education. This paper discusses the dynamic mechanism to achieve the learning goals of the educated. It compares the differences between traditional classrooms and artificial intelligence technology contexts. The paper explores the impact of artificial intelligence technology on new educational theory and practice. Keywords: Artificial intelligence; New education; the achievement of learning goals

#### 1. INTRODUCTION

Artificial intelligence technology (AI) became the technological starting point for human society to empower the machine society. Machine replaced manpower after Watt invented the steam engine. Machine went through four industrial revolutions in its historical process. AI technology emerged with the iteration of emerging technologies such as cloud computing, big data, machine learning and deep learning. Artificial intelligence technology found a wide range of application scenarios in modern social life [1]. And the reform of education is one of its most important application scenarios. Modern neuroscience and brain science understand the mechanisms of memory, learning and innovation more deeply. This provides interdisciplinary support for leading scientific communities and innovative enterprises to manufacture human-machine interfaces and brainmachine interfaces. Internet technology emerged in the 1990s. It gradually developed into Internet of things technology in the fields of vehicle networking, video networking, industrial Internet of things, etc. In this context, we can combine 5g, sensor equipment, consumption level medical consumables, neuroscience and brain science. We can further study the process of human learning and constructing new knowledge. We can also explore how to shorten cognitive cycles and diverge learning paths. This becomes an important tool for building an innovative society and learning nation. 2. THE MOTIVATION MECHANISM FOR THE EDUCATED TO ACHIEVE LEARNING GOALS THE TRADIIONAL EDUCATION UNDER **THEORY** 

Under the modern education theory, one of main goals is to achieve the learning goals for the educated. Traditional classrooms simulate complex intelligence activities through teacher teaching, teacher-student interaction, hands-on experiments, and calculation exercises. Traditional classrooms construct a new causal logic through learning and practice. The educated can use this logic to participate in solving practical problems. The educated can improve the ability of systematic thinking, targeted thinking, and the effectiveness of logical reasoning. Generally, school education is the main field of science education and formal education [2]. Schools train students through serious and rigorous concept introduction, logical derivation, thinking development, and scenario application. Students can use the knowledge and principles flexibly to propose, analyze and solve complex problems. Therefore, traditional education includes concept introduction, logical reasoning, mathematical calculation, experimental design, causal inference, case analysis, induction and summary, etc. The learning goals of the educated are set by the knowledge structure and conceptual system. These goals are measured by the degree of mastery and application of knowledge, principles, rules and other useful information. Goals can be adjusted by the improvement of abilities and changes in learning expectations. In this process, the educated are motivated cognitive development psychological development under the interaction of subjective and objective factors. Specifically, the educated firstly search existing knowledge and conceptual common-sense to combine, sort, integrate and match relevant information pieces. The educated build a three-dimensional, rich and comprehensive perceptual knowledge in individual consciousness. The educated are more willing to use the knowledge structure flexibly and accurately. The educated accept fresh knowledge clues and complete the whole learning process. At the same time, educators use the existing psychological cognitive theory to encourage and expect the educated. This can maintain the learning concentration of the educated, modify their learning behavior, and protect their learning

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motivation mechanism. The maturity of the learner's self-psychological cognitive development also affects the educators' adjustment [3]. The educated use existing knowledge to construct learning cognition and master new knowledge. The path for the educated to achieve the learning goal mainly depends on the amount of existing knowledge. The learning process of the educated has certain passivity and periodicity. The dynamic mechanism to achieve the learning goal is unstable. Maintaining the learning concentration, intensity and continuity of the educated is difficult.

3. THE INFLUENCE OF ARTIFICIAL INTELLIGENCE TECHNOLOGY ON THE DYNAMIC MECHANISM CHANGE OF LEARNING GOAL ACHIEVEMENT

The development of artificial intelligence technology provides possible clues for the change of cognitive dynamic mechanism in the education field. Artificial intelligence is supported by big data technology. It simulates human thinking process and intelligent behavior, and has an impact on individual learning motivation mechanism. AI technology models the neural network in the cognitive process of human brain under the background of big data. Through ingesting nanometre microelectronic particles, AI technology can track the path, direction, strength and duration of nerve pulse in the process of thinking [4]. A single core concept initiates nerve impulse responses in multiple directions, and this can construct association and imagination. AI technology outlines the central concept, logical order and cognitive boundary of each meaning group. Through the front-end technology of edge computing and parallel computing, it can capture the structural holes in new streams of consciousness. It can improve the innovation efficiency, shorten the innovation cycle and improve the innovation intensity. This technology route is widely used in the rehabilitation medical engineering with mechanical signal access such as neural arm. It is realized in the brain computer interface and other advanced experiments of Tesla and other technology multinational companies.

From the perspective of statistics, different individuals respond to the same incentive in different directions, degrees, speeds, and levels. The same individual has a stable psychological mechanism and response mechanism in the underlying cognitive structure. American computer scientists realized cross-border calls to big data on the underlying structure. This can ensure the security of individual privacy data and the integration of the underlying structure of big data at the same time. Even among the people with unified culture, language, values and other background, there are highfrequency flash stream of consciousness reaction fragments across the individual level. Therefore, educators can use passive incentive technology and microelectronic intervention technology to stimulate the conceptual targeting precisely. The conceptual targeting is constructed by specific neuron structure [5]. The educated can avoid the randomness of moving from listening to internal thinking. The educated can

directly enter the reaction stage in the process of cognition. Educators can weaken the key role of interest when the educated utilize subjective initiative. The scientific training becomes more efficient and standardized. The education fairness across the background of growth is promoted. A cohesive learning dynamic cycle mechanism is formed.

In a word, AI technology can collect the learning behavior, expression, gesture, voice, image and other information of the educated. It can track and model the individual knowledge. Through simulating the neural network of the educated, it accurately stimulates the learning neurons and improves the learning effectiveness. The process of passive search and mastering new knowledge turns to self driven learning. The educated form a lasting learning dynamic cycle. The change of dynamic mechanism also provides a guarantee for the educated to better achieve their learning goals.

4. THE INFLUENCE OF ARTIFICIAL INTELLIGENCE TECHNOLOGY ON NEW EDUCATION DEVELOPMENT

The global educational theory has a long history and brilliant results. However, the systematic and theoretical construction of educational theories lacks empirical, universal, repeatable and characteristic. As an important branch of data science, the development and application of artificial intelligence technology provides new support for the construction of computational education theory. Artificial intelligence can be applied to several branches of new education. The applications of practical are as followed. First, digital education scene and interactive teaching equipment provide new challenges to traditional education, which mainly focus on paper textbooks, teachers' individual cognition and teaching style. It promotes the construction of digital classroom in some regions. Then it can provide visual feedback for classroom teaching in time [6]. Second, artificial intelligence can explore the mean and median of group learning curve under big data. It is helpful to identify the individual uniqueness among the educated. It can accelerate the effective cognitive process and improve the talent selection mechanism. Third, the structure and characteristic of learning history at the individual level provide experience. It can help promote individualized teaching, classified teaching, blended teaching and research-based teaching. The learning experience of the educated at the individual level can be diversified. The educated can make full use of strengths so they can achieve the leaping development on learning. The educators can avoid "one size fits all" and rigid stepby-step teaching. Fourth, artificial intelligence technology, along with multimedia interface, presents dynamic, three-dimensional, rich and perceptual cognitive objects and evolutionary process. The presentation can replace physical teaching aids and case analysis. It can provide more associative space and trigger factors for heuristic learning. The educated can obtain more familiar facts and details. They can

construct and internalize new knowledge [7]. Fifth, artificial intelligence technology builds a digital database on computers and other learning devices. It improves the number and interest of the educated in completing computational academic training per unit time. It is also adopted in reading digital libraries, 3D animated museums, exhibition halls, and problemsolving "sitcom" under massive application scenarios. Sixth, artificial intelligence technology can collect allround data of the educated. It can provide methods for the emotional perception of the educated through analyzing facial expressions, detecting postures, tracking eye movement data, etc. It can evaluate individual learning mode, predict learning efficiency and so on [8]. Educational practice is a dynamic changing process. Educators can use artificial intelligence technology to collect data and code. Educators can build behavior analysis indicators in the process of educational practice. Educators can analyze the learning behavior, emotion perception and learning cognition of the educated. The real-time educational diagnosis can be formed. Educators can construct the student model, teaching model and teacher model more comprehensively. It is helpful for the construction of new intelligent education system.

The influence of artificial intelligence technology on the educational theory are as followed. First, the traditional consistent construction theory lacks subject factors of the educated in the internalized knowledge. Artificial intelligence technology can provide a complementary perspective and possible solutions. Educators pay attention to the external environment and track learning behavior of the educated. Second, artificial intelligence technology provides technical solutions and technical support. It helps traditional technology management, R & D management and innovation management reform the innovation efficiency, collaboration and openness of team [9]. Third, artificial intelligence technology provides a cross-border search perspective under big data for traditional scientific problem refinement and new knowledge discovery. Scientific researcher are the main body to condense scientific problem and discover new knowledge. It breaks through the boundaries of schools, classes and disciplines. It provides more extensive ideas for solving new problems from the perspective of interdisciplinary. Fourth, artificial intelligence technology provides a novel, personalized and tension oriented auxiliary means for the traditional basic education. The main body of the basic education is normative, unified and standardized classroom. Artificial intelligence technology actively perceives the classroom teaching contexts, provides adaptive learning resources, and constructs a three-dimensional comprehensive education scene. Fifth, artificial intelligence technology provides new perspective, new technologies, new opportunities and new paradigms for the development of traditional cognitive psychology. Some emotion information, such as expressions and gestures, are less concerned in the traditional teaching system. Artificial intelligence

technology can make them enter the vision of the new intelligent education system. It provides a more practical and reliable basis for the development of learning cognition [10]. Sixth, artificial intelligence technology provides a new perspective, new thinking and new discovery for the traditional role theory of learner and educator. Artificial intelligence technology can perceive and regulate the learning process of the educated. The educated transform from knowledge consumers to knowledge creators and educators transform from traditional teachers to coaches. It presents a new interaction mode between learner and educator.

#### 5. CONCLUSION

Artificial intelligence technology is widely used in various scenarios all over the world. The field of education is important to the national economy and life quality of people. It is the main field of advanced ideas and new technology applications. Therefore, it has historical trend, realistic urgency and future feasibility for artificial intelligence to enter campus. Artificial intelligence subverts the existing imagination of human society for the change of productivity. It is bound to have a profound impact on the human capital formation. It is necessary for policy makers to understand the value of artificial intelligence technology in education and make timely policy responses.

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#### REFERENCES

[1]Seren M, Ozcan ZE. Post Pandemic Education: Distance Education to Artificial Intelligence Based Education. International Journal of Curriculum and Instruction. 2021; 13(1): 212-225. Accessed June 7, 2021

[2]Elhajjar S, Karam S, Borna S. Artificial Intelligence in Marketing Education Programs. Marketing Education Review. 2021; 31(1): 2-13.

[3]Ma W, Zhao X, Guo Y. Improving the effectiveness of traditional education based on computer artificial intelligence and neural network system. Journal of Intelligent & Fuzzy Systems. August 2020: 1-11.

[4]Bonami B, Piazentini L, Dala-Possa A. Education, Big Data and Artificial Intelligence: Mixed Methods in Digital Platforms. Comunicar: Media Education Research Journal. 2020; 28(65):43-51. Accessed June 7, 2021.

[5]Taneri GU, University of California BC for S in HE. Artificial Intelligence & Higher Education: Towards Customized Teaching and Learning, and Skills for an AI World of Work. Research & Occasional Paper Series: CSHE.6.2020. Center for Studies in Higher Education; 2020.

[6]Aldosari SAM. The Future of Higher Education in the Light of Artificial Intelligence Transformations. International Journal of Higher Education. 2020; 9(3): 145-151.

[7]Moyan Li, Yawen Su. Evaluation of Online Teaching Quality of Basic Education Based on Artificial Intelligence. International Journal of Engineering Pedagogy. 2020; 15(16):147-161.
[8]Chatterjee S, Bhattacharjee KK. Adoption of Artificial Intelligence in Higher Education: A Quantitative Analysis Using Structural Equation Modelling. Education and Information Technologies. 2020; 25(5): 3443-3463.

[9]Lang J, Repp H. Artificial intelligence in medical education and the meaning of interaction with natural intelligence — an interdisciplinary approach. GMS Journal for Medical Education. 2020; 37(6): 1-6. [10]Kulikov SB, Shirokova AV. Artificial intelligence, culture and education. AI & Society. 2021; 36(1): 305-318.

# On the Importance of Virtual Simulation Experiment Teaching System in Science Experiment Teaching of Junior High Schools

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Abstract: With the extensive application of computer technology in the field of education, virtual simulation experiment teaching has been gradually applied to experiment teaching in secondary schools, because the virtual simulation experiment can better simulate the real experiment situation of science in junior high school, facilitate students to better understand the teaching content, combine the actual situation with the actual situation, and promote the reform of experiment teaching and improve the teaching quality of science in junior high school.

Keywords: Virtual simulation experiment teaching system; Science in junior high school; Experiment teaching

#### 1. INTRODUCTION

With the rapid development of science and technology and economic globalization in the 21st century, new requirements are put forward for human quality in the future society. In the programmatic document of the basic requirements of the country for the future national quality, the requirements for the quality of students in various disciplines or fields have become the core part of the curriculum standards, and science plays an important role in junior high school teaching and is also a necessary subject for the high school entrance examination. Under the new curriculum standard, junior high school science teaching has new goals and requirements, especially scientific inquiry and experiment teaching [1]. On the one hand, students must learn the necessary scientific knowledge for life and gradually understand the nature of science to conform to the requirements of the times. On the other hand, they must experience the process of scientific inquiry and learn certain scientific thinking methods to solve the problems encountered in their study, life, work and social decision-making, so as to lay the foundation for life-long development and provide support for the sustainable development of society. However, there are many problems in the traditional experiment teaching methods, which make it difficult to adapt to the development of modern education, so it is urgent to introduce new teaching methods. The virtual simulation experiment teaching system, as a new experiment teaching tool, can meet the requirements of educational reform and achieve satisfactory teaching results when applied to science

experiment teaching in junior high school.

# 2. OVERVIEW OF VIRTUAL SIMULATION EXPERIMENT

Virtual reality technology, the current research hotspot, can well simulate the real experimental conditions when used in virtual experiments, making the experiments more intuitive and realistic. Virtual simulation experiment is a simulated experiment with advanced computer technology, so as to reduce costs and improve efficiency. It assists teachers in experiment teaching, breaks the traditional experiment teaching process, makes experiments no longer restricted by time and space, solves the problem that many schools cannot carry out experiments due to lack of equipment, and plays an important role in ensuring the quality of education [2]. For some experiments with greater difficulty, more operation steps, and low safety, the virtual simulation experiment can be used to help students understand the experimental principle, digest the experimental content, and consolidate the experimental knowledge, which helps students to deepen the impression of the experiment and avoid some potential safety hazards in the process of real experiments.

### 3. IMPORTANCE OF VIRTUAL SIMULATION EXPERIMENT

#### 3.1 For All the Students

The experiment teaching of most middle school teachers is exam-oriented, which ignores the students' main role, leading to the students' low initiative to participate in the experiment. Teachers only instill some experimental related contents into students intellectually, so that students lack independent thinking and innovative ability, which leads to no way to answer the experimental inquiry questions during the examination. In addition, due to the limitation of experimental materials and equipment, experiment teaching in middle schools is usually carried out in groups, and students may only focus on completing the corresponding learning tasks, which makes it difficult to understand the experiments deeply and master scientific knowledge thoroughly. The virtual simulation experiment is for all students. The school only needs to build more computer rooms to ensure that every student in the class has a computer so that after the teacher demonstrates, they can register their own accounts and log in to operate the computer to complete the

corresponding virtual simulation experiment. Each student completes the corresponding simulation experiment by himself after the teacher's operation demonstration, which is beneficial to cultivate the students' ability of hands-on, brain-moving and independent thinking. For example, the complex process of smelting iron ore into iron, which is often tested in exams as a knowledge point that students often make mistakes in writing chemical equations and describing reaction phenomena. If the teacher can, on the basis of describing the experimental principle of the experiment, simulate the process and steps of reducing iron from iron ore with reducing agent through virtual simulation technology, let the students know the reasons for each step, and show the reaction phenomenon clearly and clearly in front of them, so as to deepen the students' learning impression, it will be easier for students to forget than those hard words that make them memorize by rote.

#### 3.2 Students Development-Oriented

Students' interest in exploring nature is the most direct and lasting internal motivation to learn science, which is crucial for their future development. Starting from the students' reality, the virtual simulation experiment selects the basic knowledge, skills and methods, creates good conditions and environment for students to learn science, and makes students' scientific literacy develop in the process of actively learning science [3]. The virtual simulation experiment is beneficial to cultivate students' practical ability and scientific accomplishment. Replacing the real experiment with virtual experiment can make up for the failure of opening a real experiment to some extent, which is based on the traditional experiment teaching mode. It not only inherits the advantages of traditional experiment teaching mode, but also gives full play to the advantages of computer technology in experiment teaching, and gradually cultivates students' experimental and practical abilities based on students' development. For example, when simulating the relationship between the brightness and darkness of small bulbs and the size of sliding rheostat, the experimental results (as shown in Figure 1 and 2) can be clearly displayed in front of students. If the connection is wrong during the circuit connection virtual experiment, the virtual experiment system will give a warning and prompt that the connection needs to be reconnected, and the next step can be carried out only if the circuit connection is correct, thus enabling the students to have clear experimental ideas, which shortens the time for real experiments, and improves the teaching efficiency [4], and avoids the consequences of instrument damage caused by blind operation during the process of doing real experiments. The virtual simulation experiment can be carried out continuously for many times, and if an error occurs, the experiment can be started again with one click, without causing any economic loss, and without the problem of wasting experimental materials, which is

simple and convenient. Students can conduct many experiments to figure out which section is the effective resistance of a sliding rheostat and gradually realize the experimental principle and explain the reasons for this phenomenon.



Figure 1 The brightest bulb with the smallest resistance value of sliding rheostat



Figure 2 Dimming of bulb with decreasing resistance of sliding rheostat

3.3 Guiding Students to Gradually Understand the Nature of Science

Understanding the nature of science helps to promote the development of students' scientific cognition, scientific inquiry ability and scientific emotion, attitude and values, so as to improve students' scientific literacy [5]. On the one hand, as lifelong learners of science, students' understanding of the nature of science is helpful to understand the formation and development of scientific knowledge and the interrelation between knowledge in different fields, so as to better understand the achievements, methods and limitations of science; On the other hand, as citizens in the future, they need to know and grasp the science and technology and related processes encountered in daily life, understand the social problems related to science, participate in the decision-making process, understand that science is an important part of contemporary culture, and understand the basic rules of the scientific community, which are important aspects of the nature of science [6]. In the virtual simulation experiment, the related experiments of junior high school science courses are simulated, such as putting burning candles into glass, and verifying that CO2 is heavier than air through the phenomenon that candles are extinguished. After the experiment, students can know the reason why the candle went out by pressing the "Explain the reason" option. In this way, students can learn about carbon dioxide, be encouraged to conduct experiments independently, and be guided to carefully observe the

experimental process to obtain relevant scientific knowledge so as to gradually understand the nature of science.

#### 3.4 Embodying the Spirit of Scientific Inquiry

Virtual simulation experiment teaching, a brand-new teaching mode, provides a new idea for the experiment renewal and experiment teaching reform of science subjects [7]. First of all, it strongly impacts the traditional experiment teaching model, which is a mechanical model that attaches importance to the existing conclusions, in which the teacher demonstrates the experiment and the students sit quietly to observe and finish the verification experiment in a boring way. Secondly, it creates conditions for students to actively learn and "do" experiments in a lively way, making experiments easy and allowing students to experience the real situation of scientific experiments. Therefore, it can change the situation that the classic and routine boring experiments have dominated the science classroom for a long time, guide students to feel the atmosphere of the new and high-tech era, and enhance their curiosity and motivation to explore scientific issues. Finally, through typical experiments, especially the integration of interdisciplinary knowledge and inquiry skills, it is conducive to the cultivation of process skills, prompting students to integrate scientific knowledge with learning strategies at a high level, and improving learning efficiency [8]. Therefore, virtual simulation experiment can enable students to have a deeper understanding of scientific knowledge and better grasp of scientific methods, to personally experience the essence of scientific spirit and cultivate scientific emotions, attitudes and values, so as to improve their scientific literacy more effectively, and to experience the process of scientific inquiry while learning scientific knowledge, such as asking questions through observation and thinking, and cultivating their ability to think and solve problems independently through hands and brains, which embodies the spirit of scientific inquiry and is the orientation of scientific education.

3.5 Reflecting Contemporary Scientific Achievements Science is continuously developing and has distinct characteristics of the times. To develop science curriculum, it is important to value the excellent tradition of the foundation and more appropriately reflect contemporary scientific outputs and new scientific ideas [9]. Students should be made aware of something about the novel achievements of modern technology, and virtual simulation experiment is an advanced teaching method accompanied by the development of science and technology. The application of virtual simulation experiment teaching system in scientific experiment teaching can eliminate the drawbacks of traditional teaching which are abstract and difficult to understand and tedious, visually demonstrate the experimental operation process with abundant pictures and texts, as well as

video recordings to stimulate students' interest in learning, thus improving the experiment teaching level [10]. As a contemporary scientific achievement, virtual simulation experimental system builds highly simulated virtual experimental environment and objects through animation and computer simulation. The virtual simulation experiment teaching is expected to realize the experiment teaching functions of talent cultivation, scientific research, social service and cultural inheritance while reducing the risk and cost of experiment safety. Therefore, the virtual simulation experiment teaching, on the one hand, is beneficial to guide students to feel the atmosphere of the new and high-tech era and enhance their curiosity and motivation to explore scientific issues, on the other hand is beneficial to enable students to realize the close relationship between science and their own and social development and to aspire to learn science well and serve the society.

### 4. PROSPECT OF VIRTUAL SIMULATION EXPERIMENT TEACHING

Improving the scientific literacy of every student is the core idea of the scientific curriculum, and the importance of virtual simulation experiment teaching is the perfect interpretation of students to improve scientific literacy. The virtual simulation experiment teaching system, relying on virtual reality, humancomputer interaction and network communication technologies, enables students to perform experiments in a highly simulated virtual environment to reduce the danger in experiment teaching, enables students to participate in experiments while ensuring their safety, and enhances the intuition of teaching by vividly describing abstract contents, greatly increases students' interest, involvement and satisfaction, improves cognitive effect and learning efficiency [11], and can effectively improve the quality of experiment teaching through the combination of virtual and actual conditions in the teaching process. Therefore, the virtual simulation experiment will definitely occupy an important position in the experiment teaching in the 21st century, and the application and development of the virtual experiment will undoubtedly play a vital role in cultivating innovative talents, accelerating the reform of experiment teaching, and promoting the change of educational concepts. However, in order for the virtual experiment teaching system to be truly promoted and applied, in addition to the innovative spirit and ability, there should be a scientific investment concept. In the construction and development of the laboratory, full consideration should be given to the benefit of investment to build a modern laboratory. Furthermore, a high-quality experimental team should be trained to continuously update knowledge, strengthen learning, attach importance to the collection, processing and application of information, understand and master the latest technology, and promote the development of experiment teaching.

#### REFERENCES

[1]Xu Xinchun, Reform and innovation of scientific experiment in junior middle school under the new curriculum standard, Contemporary Family Education, 2020, 25(18): 135.

[2]Jia Zhilin, Application of virtual simulation experiment in physics experiment teaching of middle school, Physics of Middle School, 2010, 28(12): 31-32.

[3]Li Ziyun, Strategies for exploring problem refinement design in junior middle school science experiment link, Love Science (Teaching and Research), 2021, 3(02): 172.

[4]Feng Liang, Liu Gaofu, Comparative study of traditional physical experiments and virtual simulation experiments, The Science Education Article Collects (Mid-term Journal), 2020, 6(07): 79-80.

[5]Hu Qingxia, Development of junior middle school science learning objectives based on curriculum standards, Hangzhou Normal University, 2019, 8(01): 1-2.

[6] Wang Ying, Examples of effective evidence acquisition in junior middle school science disciplines, Research on Curriculum and Teaching, 2018, 9(04):

50-53.

[7]Mao Jize, Qu Jia, Xia Peixiu, Research and development of SHPB virtual simulation experiment teaching project, Experimental Technology and Management, 2021, 38(01): 187-190.

[8]Ruan Hong, Li Yuqi, Wang Chunxia, Huang Xiaohua. On the importance of virtual simulation experiment in experiment teaching, Course Education Research, 2019, 7(43): 252-253.

[9] Sun Meili, Zeng Peifeng, Chang Yong, Design and implementation of virtual simulation experiment system based on IdeaVR, Journal of Xi'an University (Natural Science Edition), 2021, 24(01): 34-41.

[10]Ye Xinglin, Cui Tao, Yu Guozhen, Yin Jianmei, Wang Jianguo, Experiment teaching reform of organic chemistry based on on on-line and off-line and virtual simulation experiment technology, Guangdong Chemical Industry, 2021, 48(02): 174-177.

[11] Wang Haiying, Liu Wenyan, Ba Zaihua, Lin Na, Bai Bo, Application of virtual simulation experiment teaching system in experiment teaching of physiology, Medical Education Research and Practice, 2018, 26(05): 841-844.

# Application of "Four Styles" Teaching Model in Junior Middle School Science Teaching in the Context of New Curriculum Reform

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Abstract: Curriculum reform aims to boost student development under multiple established curriculum goals towards knowledge and skills, process and methods, emotional attitudes and values. Enhancing the awareness of curriculum goals is a common trend in curriculum reforms in all countries. Under the new curriculum reform, it is necessary to focus on student development and change the discipline standard; pay more attention to scientific inquiry and advocate diversified learning methods. This paper considers the requirements of the new curriculum reform for teachers and students and results of predecessors, comprehensively explores the four teaching methods of heuristic, inquiry, discussion and participatory styles, which will actually improve the learning initiative of middle school students and cultivate their practical and innovative capabilities.

Keywords: New Curriculum Reform; Heuristic; Inquiry; Discussion; Participatory; Junior Middle School Science Teaching

#### 1. INTRODUCTION

Junior middle school stage is a critical period for the development of students' scientific literacy. Basic scientific literacy is a requirement for qualified citizens in modern society and also a necessary foundation for students' lifelong development. Scientific literacy covers many aspects, which generally refers to literacy of understanding necessary scientific and technological knowledge, mastering basic scientific methods, building scientific thoughts, advocating scientific spirit, and possessing certain ability to deal with practical problems and participate in public affairs. The traditional teaching model has difficulty in adapting to science teaching under the new curriculum reform, and the "National Medium and Long-term Educational Reform and Development Plan Outline (2010-2020)" also specifically proposes the necessity to focus on the combination of learning and thinking, advocate heuristic, inquiry, discussion and participatory style teaching to help students learn how to study, stimulate students' curiosity, cultivate students' hobbies, and create a good environment for independent thinking, free exploration, and innovation [1]. The so-called "four styles" in this paper refer to the four methods of heuristic, inquiry, discussion and participatory teaching. These four methods play an important role in junior middle school science teaching in the context of the new curriculum reform.

#### 2. HEURISTIC TEACHING

Heuristic teaching is a "democratic and scientific" teaching method model. It requires teachers to accurately grasp the internal connection law between teacher's teaching and students' learning in the classroom, and instruct students to proactively, positively and consciously master scientific knowledge. The teaching mode led by teachers with students as the main body can effectively inspire students to think independently, and improve students' logical thinking ability and independent problem-solving ability [2]. The course "Science" is rich in content, wide in scope, and highly exploratory, which is suitable for heuristic teaching. Next, we take the lesson "The Generation and Transmission of Sound" as an example to further explain the heuristic teaching method. Heuristic teaching-as the implies, emphasizes name enlightenment and guidance. Teaching should encourage students to think positively, dare to ask questions, and ask good questions. Students may feel unfamiliar with new knowledge. Teachers need divide a large learning goal into several small goals, and then direct students to reach the goal step by step [3].

2.1 Introduce A New Lesson and Create A Scenario First of all, when introducing new lessons, teachers can create an exploratory scenario. The class bell rings and the teacher enters the classroom. The teacher asks: Why do you stand up? The students reply: We heard the teacher say "class begins". Teacher: It is your response to the "sound" made by the teacher. So, what is the basis for teachers to give a class on time? Students: Class bell. Teacher: What is the basis for our daily class? Students: Class bell. Through Q&A between teachers and students, the theme is introduced: Can any student tell us what do the series of our previous activities have relation with? Students: Sound. Teacher: By the way, our daily life is inseparable from sounds. There are sounds everywhere, such as leaves rustling, birds chirping, and running water jingle. No matter where we go, we can hear all kinds of sounds. Do you know how sound is created? In classroom teaching, by setting up problem situations, it creates a kind of inconsistency between the text book content and students' curiosity, thus bringing students into a process of asking questions, analyzing problems, and solving problems.

The principles in creating problem situations include 1) The problem should be small and specific; 2) the problem should be new and interesting; 3 the problem should be of appropriate difficulty; 4 the problem should be enlightening; ⑤ the problem should be related to students' existing experience. On the basis of careful analysis of the textbook content. the teacher should combine the students' existing knowledge and experience in view of the knowledge points that the students desire to understand, and ask questions to link the new and the old knowledge, so that the students are in a physiological state of incomprehension despite desire to learn and helplessness despite desire to express. In this way, students develop a strong interest in learning and concentrate on learning [4].

# 2.2 Give New Courses Based on Experimental Teaching

Then, let students further learn the reasons for sound production through experiments. The experimental apparatus is prepared before class, and there are several rubber bands. Student experiment: Two classmates work together. One classmate tightens the rubber band with two pens, and the other classmate stirs it with hands. To guide students' thinking, the teacher asks: When you stir the rubber band, do you hear the sound? The student replies: There is sound. Teacher: What kind of exercise is the rubber band doing? Student: Vibration. Teacher: When is there no sound? Student: When the rubber band does not move. Teacher: So, what makes the sound? Student: Sound is produced by vibration. After the experiment, the teacher instructs the students to analyze, and then draw a conclusion: the object that is making a sound is called sound source, and the sound is created by vibration of the object. Students personally experience the experimental process, draw conclusions through experimental results, and solve problems, so that students can not only acquire relevant scientific knowledge, but also learn the methods to analyze and solve related scientific problems [4].

Through the above teaching examples, we can clearly see that heuristic teaching focuses on guidance, which mainly raises questions to let students make analysis and exploration on their own to find answers. When students cannot get answers, teachers can give appropriate hints to reduce the difficulty of the problem. Heuristic teaching helps inspire students to understand the purpose and meaning of learning, thereby increasing the initiative of learning. Also, it inspires students to associate, imagine, analyze, compare, summarize and deduct, stimulates students to think actively, and guides students to problems analysis and solution. Moreover, it stimulates students' emotions, aesthetic appeal, and enriches students' thoughts and feelings.

#### 3. INQUIRY TEACHING

The "National Science Education Standards" has a description of inquiry: Scientific inquiry refers to the diverse different ways for scientists to study the natural world and propose various explanations based on the evidence derived from such research. Scientific inquiry also refers to the various activities through which students acquire knowledge, comprehend scientific ideas, and understand the methods used by scientists to study the natural world. In the BSCS textbooks, inquiry is regarded as the core of active learning. The principle of inquiry teaching is to "let students come up with concepts by themselves, rather than instill them in students [5]." Inquiry teaching is a teaching mode in which teacher guides students to independent inquiry. Inquiry teaching means that when students learn concepts and principals, teachers only give them some examples and questions, and guide students to independent explorations through reading, observation, experiment, thinking and discussion, etc., so that students discover and master the corresponding principles and conclusions [6]. Next, a teaching example will be used to explain inquiry teaching in depth.

#### 3.1 The First Stage

This stage is to induce students' curiosity and raise questions from the existing knowledge background. For example, on an autumn morning, Xiao Ming, a grade one student of junior middle school, leads the teacher to the classroom window and points to the three trees side by side: one tree has fallen out of leaves, and the middle tree is variegated, mainly with yellow leaves, while the third tree is still lush. The student asks: "Why are these three trees different? They were the same before?" At this time, the teacher does not give the answer immediately, because the teacher knows that the students will learn botanical knowledge this semester, and considers it as a good opportunity to instruct students to ask questions and conduct investigations and researches to draw conclusions by themselves. At this time, the teacher lets the students go back to his seat and comes to the podium. "Let us enumerate possible explanations for the condition of the three trees outside."

#### 3.2 The Second Stage

At this stage, a preliminary explanation or hypothesis is proposed. In response to the teacher's question, the students raise their hands. The students' answers are as follows: ①This may be related to sunlight; ②It may be because there is too much water; ③It may be because there is insufficient water; ④It may be due to seasonal changes, some trees have leaves fallen earlier than others; ⑤The soil is poisonous; ⑥The trees have different age; ⑦Insects are corroding leaves; ⑧One of the trees is older than the others.

#### 3.3 The Third Stage

This stage is to develop a preliminary exploration plan. After the students put forward their thoughts, the teacher encourages them to think about which of the above explanations is worth of exploration and description. Then, the teacher invites each student to pick one possibly correct explanation. According to students' choices, students are divided into "water group", "age group", "seasonal group" and "insect

group". The teacher asks each group to develop a simple exploration plan and look for evidence to support their explanations. The teacher thoroughly understands each group and carefully listens to the students' speeches during the planning process. Then, each group is invited to report the plan of the group to the whole class, and listen to other group students' evaluations of the group's plan, so that the group plan is more perfect.

#### 3.4 The Fourth Stage

At this stage, various explanations or hypotheses are discussed. After each group presents a report, the whole class learns that some observations and collected data cannot explain the observed phenomenon, and the exploratory activities of some groups are only partially supported by evidence. Through exchanges between the groups, the students feel that the most reasonable explanation is given by the water group, which does not conflict with the observations of other groups, and coincides with the knowledge gained by the students from other sources. Therefore, after three weeks of efforts, the students think that they have found the answer to their satisfaction. Under the teacher's recommendation, the students compose a report of their findings and submit it to the school's academic affairs office. The head of the Academic Affairs Office comes to the class to express gratitude and informs the students that improvements have been made to lawn sprinkling measures. The teacher then asks the students: "How can we prove that our explanation is correct?"

#### 3.5 The Fifth Stage

This stage is to test hypotheses or explanations. After discussion, the students say that they will have to wait until next year to see if these trees can grow normally after the improvement in sprinkling measures. In the same month of the second year, the teacher and students see that the three trees are all green and luxuriant. The students are more convinced that the explanation made last year is credible and effective.

Therefore, the characteristics of inquiry teaching can be summarized as follows: ① Students proactively study natural objects and phenomena, and grasp scientific knowledge by exploring the nature; 2 It develops required exploration ability in students so that they study nature; ③It effectively form scientific concepts for understanding nature; 4 It develops a positive attitude towards exploring the unknown nature; ⑤ The knowledge learned through inquiry activities is scientific concepts rather than print knowledge [7]. Inquiry teaching helps to stimulate students' curiosity, so that students can solve or answer questions through their own efforts. By letting students participate in activities that require high-level cognition and skills, it helps to form a positive attitude towards science and develop higher scientific literacy. 4. DISCUSSION TEACHING

Discussion teaching is a teaching method in which the whole class or group members discuss the designated issues and express their own opinions under the teacher's guidance, thereby learning from each other. In the teaching process, teacher puts forward enlightening and thoughtful discussion questions based on the teaching content characteristics and the students' actual situation, and organize students to start discussion. It can let students brainstorm and inspire each other, deepen understanding and raise awareness, which helps cultivate abilities of exploration, discovery, reasoning, imagination, and analysis [8]. The process of discussion teaching method generally adopts the form of group discussion, whole class discussion or a combination of the two. Group discussion is based on groups of 2~4 people; whole class discussion is organized by teacher to discuss some common issues or disagreements on the basis of group discussion [9]. For example, when teaching "Factors Affecting Friction Size", the teacher designs four related discussion questions: (1) Is friction size related to pressure? (2) Is friction size related to roughness of the contact surface? (3) Is friction size related to size of the contact surface? (4) Is friction size related to movement speed of the object? Four adjacent students have discussion as a group. After the discussion, the teacher carries out relevant experimental demonstrations. Afterwards, students are grouped for confirmatory experiments. After the experiment is over, representative of each team reports the results to the teacher. After the discussion on the above issues and completion of the confirmatory experiment, the teacher will draw conclusions so that the students gain a deeper understanding of the factors affecting friction size. It is also possible to further analyze the causes of friction, so as to achieve effects for single lectures and teacher impossible demonstrations. By organizing students to have discussions, discussion teaching well stimulates students' thinking. In the whole class, the teacher only acts as the guide who gives instructions at critical moments, which changes the previous classroom atmosphere where "teacher talks endlessly while students are drowsy", gives the initiative of learning to students, and turns the mode in which "learning is the result of teaching" into "teaching serves learning", thus truly reflecting students' subjectivity and achieving many effects difficult to achieve in traditional teaching models [10].

#### 5. PARTICIPATORY TEACHING

Participatory teaching is a teaching method with students as the core and characterized by self-consciousness and selectivity, in which teacher guides students to practice based on students' actual needs and desires, so that knowledge and theory are internalized into ability. In classroom teaching activities, teacher respects students' subjectivity, so that students truly feel the joy of learning knowledge together with teacher and classmates as the master of classroom learning [11]. This teaching method pays more attention to student participation and teaching-learning interaction. With student as the center, it fully applies flexible, diverse and vivid teaching methods, and encourages students to actively participate in the teaching process. Students

are the main body of learning, whose participation is the need for students' psychological and knowledge development. Students' learning effect and teaching success depend to a large extent on student participation [12]. For example, in the lecture of "The Structure of Water Molecules", some examples can be used to represent the abstract model of water molecules. For example, it is possible to use an orange (relatively large) to represent an oxygen atom, and use two grapes (relatively small) to represent a hydrogen atom, so that students can build a water molecule model based on free combination of existing materials. Furthermore, six students can take the stage for demonstration. Two students hang a plate written with oxygen atoms on the necks, while the remaining four students hang a plate written with hydrogen atoms on the necks. Then through free combination, a water molecule is formed. In this way, students are deeply impressed by the model of water molecule and its structure. In participatory teaching activities, students' knowledge acquisition and knowledge application can be synchronized. Participatory teaching embodies the student-based educational philosophy, encourages students to actively participate in classroom teaching via scientific teaching methods, so that students can acquire knowledge, use knowledge, receive education and make improvement [13].

#### 6. CONCLUSION

Under the new curriculum reform, teaching process is an important way to achieve the curriculum goals. It emphasizes the cultivation of students' innovative consciousness and practical ability with students as the center. Teachers, as organizers and guides in the teaching process, need fully consider students' learning motivation to improve their scientific literacy, so it is particularly critical to adopt appropriate teaching methods. By combining learning and thinking, the four classroom teaching modes of heuristic, inquiry, discussion, and participatory styles can adapt to the teaching requirements under the new curriculum reform. It can not only fully reflect student's dominant role in the learning process, but also give full play to teacher's leading role in the teaching process. These four teaching methods can stimulate students' enthusiasm in learning and improve their ability to learn and apply knowledge. However, they do not conflict with other teaching methods as traditional teaching methods, exercise methods, and practice methods are still indispensable in classroom teaching [14]. There are methods for teaching, but methods are not fixed. Teachers should choose appropriate teaching methods according to respective teaching objectives, teaching content and student characteristics to improve teaching quality. Moreover, teachers need constantly sum up teaching experience, explore new teaching models, and adopt the teaching methods most suitable for students to stimulate students' interest and find ways to improve teaching efficiency. In this way, it will effectively help students develop positive learning attitude and scientific spirit

of inquiry while focusing on students' emotional experience and formation of values, thus achieving comprehensive development in "knowledge and skills", "process and methods", "emotions, attitudes and values".

#### REFERENCES

[1]Lu Weiping, A Preliminary Study on the "Four Styles" Teaching Method for Effective Unit Teaching, Extracurricular Chinese, 2017(10): 73.

[2]Fan Zhaoxia, Some suggestions on heuristic teaching of elementary school mathematics, Reference for Elementary Teaching, 2021, 7(02):39-40.

[3] Liu Aiqin, GuoHongyan, Application of heuristic teaching in online English courses for elementary school students--Taking Pathways Phonics as an example, Science & Technology Vision, 2020, 25(36): 17-20

[4]Fu Kaiqing, Advocating heuristic teaching and cultivating students' scientific quality, Journal of Yulin College, 2001, 9(02): 74-76.

[5]XuXihong, Development strategy of inquiry teaching in high school chemistry experiment, Exam Weekly.

[6]Xu Min, Setting up suspense and constructing an inquiry-based history classroom, Liberal Arts Guidance (First Ten-Day Issue), 2021, 36(02): 47-56.

[7] Wang Hongmei, Application of Inquiry Learning in English Reading Teaching in Senior High Schools, Knowledge Library, 2021, 14(02): 148-149.

[8] Yang Zhuanbin, On the construction of discussionstyle teaching in junior middle school science classroom, New Writing (Education and Teaching Research), 2011, 7(06): 24-25

[9]Wang Chen, Application Strategy of Discussion Teaching Method in Primary School Mathematics Classroom, Comparative Study Of Cultural Innovation, 2020, 4(36): 92-94.

[10]Zhao Xiuhong, Application of discussion teaching method in high school history teaching, Course Education Research, 2020(47): 104-105.

[11]Zhao Haijun, Measures to apply participatory teaching method in junior middle school biology teaching, Learning Weekly, 2021(06): 119-120.

[12]Yin Saihua, Strategies toapply participatory teaching in high school Chinese teaching, Liberal Arts Fans (education and teaching), 2020(06): 86-87.

[13] Teng Jun, Participatory Concept Teaching in Junior Middle School Science Classroom, New Course (intermediate), 2017, 8(05): 25.

[14] Weng Qiang, Han Yingying, Yuan Zhengrong, Zhang Haolin, Application of "Four Styles" Teaching Models in "Animal Physiology" Teaching, Biology Teaching in University (Electronic Edition), 2020, 10(02): 28-31.

## Study on the Trinity Training Mechanism of "Potential Incentive-Process Examination-Practice Examination" for Professional Degree Postgraduates

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Abstract: With the expansion of the scale of postgraduate education in China, the problems in the training mode of professional postgraduate students have become increasingly prominent. Accelerating the improvement of the training mechanism postgraduate education and promoting the innovation of the training mode have become the focus of the development of higher education in China. This paper first expounds the existing problems in the training mechanism of professional master postgraduate, and then puts forward the training mechanism of "potential incentive-process examination-practice examination" in a trinity. "potential incentive-process examinationpractice examination" trinity professional master postgraduate training plan system to cultivate highlevel application-oriented, composite as the main target, especially emphasizes the characteristics of professional master postgraduate, different from the traditional education mode, it is to develop all-round professional master postgraduate, the student's overall quality will be improved, to meet the needs of enterprises for application-oriented talents.

Key words: Potential incentive process examination; Practice examination; Professional master postgraduate

#### 1. INTRODUCTION

In recent years, benefiting from the rapid development of China's economy, China's professional postgraduate education has expanded rapidly in scale, enabling more people to receive better education and more and more people to join the ranks of the postgraduate entrance examination, which is the benefit brought by China's economic development. However, compared with the graduate education and training mode in developed countries and regions, China's graduate education is still very weak, not enough to support the current social demand for talents in China, nor can it train international and modern talents for the motherland in today's globalization. This paper aims at cultivating high-level and composite applicationoriented talents, and puts forward a trinity training model for professional master graduates, so that colleges and universities can better provide all-round talents for the society.

- 2. THE EXISTING PROBLEMS OF THE TRAINING MECHANISM OF PROFESSIONAL MASTER STUDENTS
- 2.1 Single Mode of Postgraduate Education and Training

In the traditional education and teaching concept, the main task of the school is to impart knowledge. Most of the professional master graduates spend two years, and one year in the study of pure theoretical knowledge, which seriously affects the development of the experiment and the cultivation of the innovation ability of the students in the later stage. The existing training mode of professional master postgraduate is lack of characteristics and can not well stimulate students' interest in learning. Some postgraduate students study for the purpose of obtaining diplomas, but ignore the real meaning of learning. Students' own potential is buried, and they are accustomed to the cramming teaching of teachers, and there are problems of emphasizing academic and neglecting application [11]

2.2 The Teaching Method is Monotonous and Students' Independent Learning Ability is Poor

The teaching method of the existing postgraduate education training mode is monotonous, and the students lack the ability of independent learning. At present, teaching methods for professional master students are still dominated by teachers, with little participation from students, and they still follow the learning model of undergraduate students. In terms of course arrangement and content setting, most of them are the repetition of undergraduate courses. The lack of effective supervision mechanism, the proportion of specialized courses and practical courses is unreasonable, and the proportion of practical courses is too small. Moreover, there is a lack of internal logical relationship and content connection between some professional courses. The enthusiasm of students in learning cannot be fully mobilized. Students' basic skills are weak and their scientific research ability is declining.

2.3 Single Assessment Method Neglects Process Assessment

At present, most of the assessment methods for graduate students in colleges and universities are final closed-book examination, and some subjects may take the form of course paper. The method of assessment is fixed, and the assessment is mostly carried out at the end of the term, ignoring the process assessment and practical assessment of students. This single assessment method will lead to students' one-sided focus on the ability to take the exam, the pursuit of the assessment goal is too single, emphasis on the assessment results. It manifests itself as emphasizing theory over practice, textbooks over ability, and results over process. This way of assessment is not conducive to the cultivation of students' comprehensive ability to analyze and solve problems and the formation of innovative thinking, and is not conducive to the development and construction of the curriculum itself, thus directly affecting the quality of talent training in colleges and universities.

2.4 College Personnel Training is Not Enough to Meet the Needs of Society

Nowadays, difficult employment has become a common phenomenon. Postgraduates of colleges can not find suitable jobs, and enterprises are short of talents and can not recruit suitable workers. The reason for this situation is the derailment between schools and society. The rapid development of social economy produces new economic forms and demands, which makes the subject setup and assessment mechanism in the existing training mode not be able to timely match the talent needs of the society, and the lack of training for the application and practice ability of professional master graduates [2], which will lead to the professional master graduates' high vision and low ability, and the decline of social practice ability. The theoretical knowledge learned at school cannot solve practical problems at work.

3. CONSTRUCTION OF THE TRINITY TRAINING MECHANISM OF "POTENTIAL INCENTIVE-PROCESS EXAMINATION- PRACTICE EXAMINATION" FOR PROFESSIONAL POSTGRADUATES

3.1 "Potential Incentive" Innovation of Teaching Methods

At present, the teaching method of postgraduate courses is still based on lecturing, supplemented by other teaching methods such as discussion or heuristic, and the teaching method is relatively simple. In the current training mode, students lack the right to speak, and they are gradually accustomed to obey but poor at making decisions, and tutors still play an absolutely dominant role in academic guidance. The tutor's education should be based on stimulating the graduate students' learning autonomy, stimulating the students' learning potential and exploring their self-learning consciousness. By changing the class model and implementing the teacher-student interactive discussion teaching model, students are given enough space to express their own thoughts and opinions, encouraged to put forward new ideas, and stimulate their thinking, innovation, communication, cooperation and other abilities.<sup>[3]</sup> Secondly clarify the responsibilities of tutors should be "boot" students learn to "study" and be good at "research", the teacher should be according to their aptitude, according to the situation of the students, guide students to discover their own advantages, provide students with some subject, analyzing social problems independently, gradually cultivate the students' independent and innovative.<sup>[4]</sup>

3.2 "Process Examination" to Improve the Assessment Mechanism

The examination of graduate students should not be based solely on the examination results, and the examination time should not be fixed only at the end of the term. The examination of the learning effect of the master students should accompany the learning process of the graduate students, and should pay attention to the process assessment and practice assessment. Postgraduate students should not take examinations as the purpose. They should try to reduce the way that grades are determined only by the results of final exams, and the usual course learning results should also be reflected in the assessment. Assessment methods can increase oral examination, writing course papers, submitting experimental reports, literature reading reports, investigation reports and other ways to strengthen the importance of learning process assessment. At the same time, it is necessary to strengthen the investigation of students' practical ability. Schools can connect with enterprises, establish practice bases, strengthen training for students, and examine students' practical ability by completing internship tasks.

3.3 Construction of "Practice Examination" Training System

As far as the current mode of postgraduate education and training is concerned, we should not only pay attention to the expansion of quantity and scale, but also accelerate the quality construction. The cultivation of application ability and practice ability of graduate students is still a weak link. The theoretical knowledge that the professional master postgraduate learns in school cannot be applied to the work practice, the school and the enterprise are seriously derailed. Therefore, it is necessary to rely on the schoolenterprise joint training mode, take employment as the orientation, colleges and universities choose suitable enterprises to cooperate, establish school-enterprise joint training base, and clarify the training responsibilities of schools and enterprises. Set up the "double tutor" system of school tutors and enterprise tutors. The two tutors should play a role in guiding graduate students to complete on-campus learning and practical tasks of enterprises, encouraging students to actively participate in competitions and internship activities, etc., testing the awards, published papers, scientific research projects and professional learning of graduate students and measuring their practical ability. Seize the opportunity of enterprise talent demand, cultivate talents for enterprises.

- 4. ADVANTAGES OF THE TRINITY PROFESSIONAL POSTGRADUATE TRAINING MECHANISM
- 4.1 Enhance Professional Master Postgraduates' Satisfaction with the Training Mode

Improving professional master's degree of satisfaction with the training mode is beneficial to stimulate the interest of professional master's degree of independent learning. Trinity cultivation model innovates the traditional assessment mechanism, strengthens the process assessment and practice test, and focuses on training the thinking mode, logical reasoning and language expression ability of professional master postgraduates. In addition, the trinity cultivation mechanism tests the results of the cultivation methods from multiple dimensions, with both theoretical precipitation and practical sublimation.

4.2 Cultivate High-Level Interdisciplinary Talents Professional master postgraduates trained by the trinity cultivation model usually have the following characteristics: First, they are interested in exploring unknown problems and have the ability of innovation; Secondly, they have the ability of mobilizing and applying the existing knowledge and language communication, so that they can put what they have learned into practice. In addition, they not only have the ability to analyze and summarize the theory, but also have the ability to practice, etc., all of which are necessary skills to become high-level compound talents. [5] The trinity cultivation model cultivates highlevel interdisciplinary talents, who are committed to contributing responsibility, wisdom and strength to the development of the country.

4.3 Enhance Social Recognition of Professional Master Postgraduate

Trinity cultivation model can adjust different training models according to different characteristics of professional master postgraduate. Based on the needs of enterprises, the university and enterprise joint training will be carried out to cultivate high-level talents needed by enterprises and improve the social

recognition of professional master postgraduate. The strategic layout of the construction of a high-level research-oriented university of the standard university is committed to improving the training level of professional master graduates. The Trinity Training Mechanism focuses on the general trend of the development of the Party and the country, trains new postgraduates who serve the people and socialism, and realizes the high-level development of the training of professional postgraduates in the school.

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#### REFERENCES

[1]Jiang Fengxing, Lu Yingmei, Xu Jingkun. Improving the Self-learning Ability of Postgraduate Students Based on the Cultivation Mode of "Potential Incentive": A Case Study of Jiangxi Normal University of Science and Technology. Academic Degrees and Graduate Education, 2017(12):22-26.

[2] Luo Jun, Shi Baoyu. Analysis on the training mode of professional degree graduate students with practical ability as the core. Heilongjiang Education (Higher Education Research and Evaluation), 2020(02):63-65.
[3] Du Yong, Yang Haitang, Zhang Lijun, Liu Shuhong, Tang Qiping. Research on the training mode of graduate students' innovation ability: A case study of Sino-German joint laboratory of Central South University. Modern University Education, 2017(05):95-101.

[4]Zhai Pei. Research on Training Mode of Finance and Economics Postgraduates Based on Improving Innovation Ability. Shanxi University of Finance and Economics, 2018.

[5]Du Yong, Yang Haitang, Zhang Lijun, Liu Shuhong, Tang Qiping. Research on the training mode of graduate students' innovation ability: A case study of Sino-German joint laboratory of Central South University. Modern University Education, 2017(05):95-101.

## Core Competencies Development for Graduate Education of M Ed.in the Field of Technical and Vocational Education: A Case Study of Beijing Union University (Tourism service)

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Abstract: The purpose of training Master of Education (M Ed.) in the Field of Vocational and Technical Education (VTE) is to improve academic qualifications and teaching quality of the teacher in a secondary vocational school. It is of great significance to improve the technical knowledge, teaching skill, and research capabilities of M Ed.in the Field of VTE after understanding the current situation, existing problems, and causes.

Keywords: Technical and vocational education; Master of education; Core competencies

In 2015, the Academic Degrees Committee of the State

Council approved the addition of "M Ed.in the Field of

Technical and Vocational Education (TVE)" under the

#### 1. INTRODUCTION

Master of Education, with the purpose of training teachers, improving teachers' academic qualifications and raising teaching quality in secondary vocational education. Subsequently, since 2016, M Ed.in the Field of TVE has carried out the recruitment and training of graduate students. In 2018, the National Education Steering Committee for Master of Education has surveyed the first batch of graduates of M Ed.in the Field of TVE, who graduated this year. The committee puts forward some suggestions on course systems, practical teaching and structure of the faculty [1]. Guidelines on the cultivation of M Ed.in the Field of TVE clearly states that high-quality full-time teachers in secondary vocational schools shall possess modern educational theories, the ability to put ideas into practice, professional knowledge and research skill [2]. Therefore, in the process of training M Ed.in the Field of TVE, it is necessary to pay attention to raising student's core competencies such as technical knowledge, teaching skill and research capabilities [3]. Technical knowledge refers to professional knowledge and ability which is the foundation for students to engage in secondary vocational in the future. The

college should cultivate students with educational

knowledge and teaching ability. According to the teaching objectives of secondary vocational schools,

the graduate students need to design teaching programs and carry out teaching activities. During the

teaching practice in secondary vocational school, the

students need to cultivate the ability to find, analyze and solve problems, and to reveal the educational law by understanding the educational phenomenon.

Beijing Union University is one of the four national excellent training institutions for M Ed.in the Field of TVE. Since 2016, 99 students in the Field of TVE have been enrolled, including 41 students in the direction of tourism service, most of the graduates engaged in education and teaching.

- 2. COMMON PROBLEMS IN THE PROCESS OF CORE COMPETENCE TRAINING FOR M ED.IN THE FIELD OF TVE
- 2.1 No much advantage on technical knowledge
- 2.1.1 Specialties

On the basis of career planning, the students who got an M Ed.in the field of TVE will be a teacher in secondary vocational schools. The application-oriented talents positioning of M Ed.in the field of TVE, that is, to cultivate a student who can master the necessary scientific knowledge, professional skills and research interest.

The courses set up by secondary vocational schools were in a complete classification and wide coverage, the tourism category of 7401 includes Hospitality and Service Management, Tour Guide Service, Leisure Tourism Service, Hospitality Management, Tea Art and Tea Marketing, Exhibition Service; the food category of 7402 includes Cuisine and Pastry Production. Although different secondary vocational schools have their own targets, and the admissions of tourism management are poor in recent years. The current curriculum offered by the pilot scheme far from enough to cultivate M Ed's technical knowledge which is an urgent need in secondary vocational schools.

#### 2.1.2 Conjunction

The student who majors in field of TVE are undergraduates with technical knowledge from non-teaching majors. During the post-graduate program, colleges and universities focus on the subject of TVE, including Pedagogy Principles, Vocational Pedagogy Principles, Vocational and Technical Education Curriculum and Teaching Theory Development, Comparative Study of Vocational Education between China and Foreign, Educational Research Methods, etc.

Some pedagogical curriculums are offered by colleges and universities based on their characteristics, which do not combine with TVE closely. Some colleges and universities offer curriculums both in expertise and TVE, but in poor conjunction. Professional disciplines and TVE disciplines are independent systems, it is difficult for graduate students to form professional ability on teaching and researching without integrating both in the learning process.

#### 2.1.3 Practice in business

Postgraduate is required to conduct practice during their studies. The specific job and responsibilities offered by internship enterprises must be consistent with the major. The duration of the internship shall not be less than 3 months which can be segmented or centralized. The pilot colleges and universities are required to establish stable practice bases on-campus and off-campus, and a group of tutors and mentors from inside and outside school are also needed. At present, there are some difficulties for postgraduate student conduct practice in tourism enterprises for the following reasons: 1) Non-competitive. Travel agencies, hotels and scenic spots are tending to recruit students from secondary or senior vocational schools who have stronger practical abilities but in a lower payment, and these trainees have more chances to remain after the internship. As a result, the competitiveness of postgraduate students is weak when they are in an internship.2) Security. Fewer schools arrange intensive internships regard for student's safety.3) Covid-19. The tourism industry is suffering great losses due to the pandemic, with massive unemployment. Therefore, the overall picture for postgraduate students takes part in enterprise practice is not good.

- 2.2 Professional teaching ability has yet to be improved
- 2.2.1 The design and exploitation of the courses in specialty

The realization of teaching ability of postgraduate student of M Ed.in the field of TVE requires the combination of knowledge, abilities and qualities, which is embodied in the teaching activities, during these processes, the support from the curriculum, teaching materials and practice is an urgent need. At present, the teaching quality of "Course Development and Teaching Material" and "Instructional Design and Case Analysis" is poor due to the lack of general subject materials and teaching cases system for M Ed.in the field of TVE. Therefore, less experience in improving students' professional skills in course design and exploitation [4].

#### 2.2.2 Non-cooperative between tutor group

Tutor groups for M Ed.in the field of TVE are mainly composed of in-school tutors (teacher major in education subjects or specialized courses) and off-campus tutors (experts from enterprises and vocational schools). However, due to no effective communication and cooperation mechanism between different types of

tutors, and there are differences in methods in guiding students, it is difficult to form joint forces.

2.2.3 Internship in secondary vocational school in a hurry

Internships are usually arranged in the first semester of the second year of postgraduate study, and students are required to put them into practice immediately after the completion of the academic course. In some secondary vocational schools where are badly off for teachers, students are required to teach immediately. Due to the lack of experience, students do not have a deep understanding of teaching in this sudden role shift, which might not easy to achieve good results.

#### 2.3 Low level in research ability

The research ability of postgraduate in the field of TVE can be analyzed from the following aspects, namely the academic training from the tutor, the individual characteristics of the students and the research experience.

#### 2.3.1 Academic training

When guiding academic graduate students, the tutors always have a higher requirement, however, there are some differences in guiding postgraduate in the field of TVE. The tutors are easy to get stuck in some conventional thinking, especially in the topic selection and writing a thesis, which will deviate from the teaching practice of secondary vocational school if pay more attention to academic research.

#### 2.3.2 Individual characteristics

Students in uneven levels due to their different motivations and research experiences. Taking Beijing Union University as an example, during the postgraduate re-examinations in 2021, the teacher made a preliminary survey on the research ability of the candidate in tourism service. Only 2 students could tell the names of well-known academic journals related to tourism accurately, 6 have been read literature reviews related to tourism, and 4 had applied certain methods in their undergraduate thesis among the 14 candidates. None of them had published an academic paper during their undergraduate period.

#### 2.3.3 Inexperienced

The thesis is not innovative enough in topic selection, content, research method and form of results. Besides, the time is too short to participate in the teacher's project for a postgraduate who has only a year in school.

- 3. DISCUSSION
- 3.1 A start-up disciplines
- 3.1.1 Weak awareness

The establishment of the discipline is not too long, with the insufficient enrollment propaganda in these years. Due to the lack of communication with the human resources and social security departments of the government, educational administrative departments and employers (secondary vocational schools), this major has not attracted widespread social attention. Few schools take the initiative to participate in career talks to recruiting students. Many candidates

do not understand the talent cultivation target of the M Ed.in the field of TVE, and some of them deluded into thinking that the training cycle is shorter than the academic type. What's more, the candidates who got a bachelor's degree in tourism management or hospitality management can easily get a job and with a great payment, which leads to the low willingness for them to apply for postgraduate study.

#### 3.1.2 Misunderstand

The candidates in some colleges and universities are mainly based on adjustment, and the students do not know the target at the beginning of enrollment. Some students only think that a master's degree is more competitive than a bachelor's degree in employment, or do not understand the difference between the academic type and application type of the training mode of postgraduates. There are also students who plan to pursue doctoral degrees that don't care too much on this subject and some students might think that the prospect of employment in enterprises is more attractive. These thoughts obviously deviate from the goal of talents training of M Ed.in the field of TVE.

#### 3.1.3 Mixed

The candidates from different sources [5]. The candidates who have the work experience need extra time to get used to campus life. The candidates have a different academic background. Some of the students came from the college education that focused on theoretical research. The courses such as Management, Marketing, The Economics of Tourism, and Planning were offered by these colleges. Some of the students came from the junior college that pays more attention to skills training. Course settings are specialized in Tour-guide principle and operations, Travel agency operation and so on. Both of them have their own emphasis on core competence cultivation.

#### 3.2 Unsound implementation mechanism

#### 3.2.1 Time-squeeze and shortage of resources

Due to the lack of experience and reference, the training of M Ed.in the field of TVE still learns from others subjects. The requirements for the academic type and application type are basically the same that give postgraduates some academic stress. Due to the lack of teaching materials and cases system for M Ed.in the field of TVE that increase the difficulties for teaching, which can't highlight the specialty in the field of TVE.

#### 3.2.2 Different subjects

M Ed.in the field of TVE (tourism service) requires the candidates got a bachelor degree in tourism management or similar. Candidates in English majors have advantages in tourism activities; therefore, these candidates have also considered in the scope of acceptance for M Ed.in the field of TVE. However, since English majors' candidates have not received systematic training in tourism management courses during their undergraduate period, there are gaps in certificate certification. Students need to learn some tourism-related courses by themselves when the

courses need to be design and case analyzed after the entrance. The student's logical structure is needed to be rebuilt makes the tutoring becoming difficult too.

#### 4. RECOMMENDATION

The law of teachers' growth and the law of talents training should be followed when exploring the core competencies development for the graduate education of M Ed.in the field of TVE.

4.1 Technical knowledge needs to be improved

#### 4.1.1 Education and practice

Establish the cooperative education mechanism outside and inside the school, and carry out the cooperation with the outstanding secondary vocational schools, famous enterprises, and authoritative vocational education research institutions actively. The practice activities in secondary vocational schools and enterprises should be carried out in a standardized way. The students will be more productive in course development after they integrate technical knowledge into practice teaching on these bases.

#### 4.1.2 "1+X" certificate system

1 is for the Master's degree, X is for a teaching certificate in secondary vocational schools or other licenses. Postgraduates are encouraged to obtain as many licenses as they can that consistent with the direction of their major.

4.2 Improve the student's basic teaching ability

#### 4.2.1 Collaboration between tutors

Set up a tutor group which invites experts from secondary vocational schools, enterprises and educational institutions to work together with the mentor in school to cultivate candidates. Tutors on campus provide in-depth theoretic education, and provide effective guidance for their dissertations; tutors from secondary vocational schools are responsible for the instruction on teaching practice, and reviews, revises and instructs the candidate's thesis; tutors from enterprises give technical guidance and demands the candidates to keep pace with the times. Educational experts hold special lectures on education from time to time to grasp the situation of research, topic selection, proposal, external examination and defense.

4.2.2 Teaching practice can be divided into two stages The teaching practice in secondary vocational schools might consist of educational practice and teaching practice. At the end of the first semester, it is suggested to arrange a two-week internship in secondary vocational school, which can help the graduate students to build an understanding of teaching, class management, methods and operation mode, and generate teaching thinking. Then, the next six months of teaching practice might be arranged at the end of all the courses. The students need to undertake the teaching job, classwork, correcting homework, mental-health education, career coaching, and so on.

4.3 Strengthen the research capacity

#### 4.3.1 Graduation thesis

Ensure that the thesis topic selection and training

objectives are consistent, which must the teaching problems relate to the secondary vocational school. 4.3.2 Scientific activity

First, students are encouraged to participate in the research program by their tutors and academic activities. The publication of research papers and applications for patents are also encouraged. Second, students need to focus on the iterative upgrading of research methods. Candidates are encouraged to use the latest methods to solve disciplinary problems.

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#### REFERENCES

[1]Working Group of the National Education Steering Committee for Master of Education, "Survey of the graduate education of M Ed.in the field of vocational and technical education," Academic Degrees & Graduate Education, vol. 7, pp. 13-19, 2019

[2] Liu Xinyu, Pan Haisheng, Wang Shibin, "Research on Current Situation, Problems and Countermeasures of Reform of Master of Education in Field of Vocational and Technical Education in China", Vocational and Technology Education, vol. 11, pp. 6-10, 2018.

[3]Li Xinfa, "Reflections on the Cultivation of Master of Education in Vocational and Technical Education", Vocational and Technology Education, vol. 37, pp. 41-44, 2016.

[4]Hu Maobo, You Zihuan, "Dilemma and Countermeasures of Achieving Setting Goals for Professional Master of Vocational Education", Vocational and Technology Education, vol. 27, pp. 37-41, 2019.

[5]Wang Xiaohong, Xue Xiaoxia, "Research on Cultivation of Teaching Ability of Masters in Vocational Technology Education Major", Vocational Technology, vol. 20, pp. 34-38, 2021.

# Analysis of Vocational Education Teaching Methods in the Intelligent Age

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Abstract: With the rapid development of information technology in the era of intelligence, the development of artificial intelligence has greatly changed the way of life and production of human beings, which has a great impact on the development of vocational education. Because the traditional teaching methods lag behind the development of the times and the talent training education can not meet the market, it is necessary to reform the teaching methods of vocational education, which is to change the inappropriate teaching methods to promote the transformation of teaching mode and talent training mode. This paper is devoted to the development of appropriate vocational education teaching methods in the age of intelligence through the analysis of the existing problems in the current vocational education teaching methods.

Key words: artificial intelligence; Vocational education; Teaching method

#### 1 INTRODUCTION

In 2014, Germans released the concept of "Industry 4.0". This industrial revolution will achieve a good integration of industrial technology and information technology, marking the arrival of the intelligent era, which represents the change of lifestyle and production mode [1]. Because society puts forward new requirements for skills talents, Vocational education, as the education to cultivate skilled professionals, should conform to the development of the times, that is, to change the traditional teaching methods, to use information teaching methods, optimizing the talent training model, and promoting the development of a regional economy. Besides, according to the market demand, school education and enterprises should be closely linked.

- 2 THE CHARACTERISTICS OF VOCATIONAL EDUCATION REFORM IN THE AGE OF INTELLIGENCE
- 2.1 The Impact of the Intelligent Age on the Reform of Vocational Education

In the era of artificial intelligence, artificial intelligence technology represented by virtual reality makes the application of information technology more possible. In recent years, the relationship between artificial intelligence and education has received great attention. The application of the new generation of artificial intelligence in the field of education can be called artificial intelligence 2.0 in Education<sup>[1]</sup>. It can

be summarized into two aspects. The first is the new requirements of the development of artificial intelligence for vocational education. With the development of artificial intelligence, some repetitive work that needs a lot of manual work and has no technical content is replaced by machines. The market puts forward higher demand for the professional knowledge and comprehensive quality of employees. The function of vocational education is to cultivate skilled talents according to the needs of the market, to promote the market economy. The change of talent demand has an impact on education, changing the direction of vocational education personnel training, and promoting the reform of vocational education. The second aspect is that artificial intelligence, as an information-based teaching method, participates in the teaching of vocational education, which changes the traditional teaching methods, teaching mode, teaching platform, and promotes the reform and development of vocational education.

2.2 Characteristics of Vocational Education Reform in the Age of Intelligence

Under the background of the intelligent era, to achieve self-regulated learning, students need to be able to select personalize the available tools and content, indicating the need for a more personal, social, and participatory teaching method [2]. Vocational education uses information-based teaching methods, and the new situation of "artificial intelligence + education" brings about a series of changes in vocational education. First of all, the training mode of vocational education has been changed by the development of artificial intelligence, which transforms traditional teaching technology into the training of innovative talents with high-quality skills. Compared with the traditional memorization of knowledge, it is more important to cultivate students' learning ability, comprehensive quality, and innovation ability. Secondly, due to the application of informationbased teaching methods, the forms of students' learning become more diversified and simple. In addition to learning anytime and anywhere, students can also experience interactive and immersive forms of learning, which opens a more convenient way for learning. Thirdly, intelligent learning methods provide students with a better learning experience, which makes students change from passive acceptance to active exploration. Students can realize personalized learning by intelligent analysis means. Finally, all kinds of learning

platforms enable learning resources to be shared, providing convenience for more people to learn, and promoting the development of lifelong learning.

3 PROBLEM IN TEACHING METHODS OF VACATIONAL EDUCATION IN THE INTELLIGENT AGE

Now the change of social environment and teaching environment brings about the change of social demand and market demand, and student's learning needs are more diversified. So the application of informationbased teaching methods can better assist teaching. However, the teaching methods in vocational education have the following problems. First, the application of information-based teaching methods in the teaching process is not perfect. Second, improper use of information technology teaching methods. Third, the quality control of information-based teaching methods is not perfect. The application of information-based teaching methods in teaching is to achieve a better teaching effect, if the use of information-based teaching methods regardless of the needs, can not achieve the role of promoting teaching effect. Everything has its advantages disadvantages. As a double-edged sword, informationbased teaching methods may be used as teaching support, but they may also hinder students' learning in

3.1 Vocational Education Information Technology Teaching Method is not Perfect

Nowadays, in school teaching, multimedia teaching equipment has almost reached full coverage, and multimedia teaching has become the most common teaching form at present [3]. Most teachers have been able to skillfully use multimedia courseware to achieve the effect of improving teaching. This is the first step of using information technology in teaching. However, the rapid development of information technology and the progress of artificial intelligence technology make teaching methods have more possibilities. If we stop exploring, then teaching will not keep up with the development of The Times.

At present, more than 80% of colleges and universities have an online course teaching platform. However, students do not make good use of these network courses. Although colleges and universities have joined the open course platform and promoted the development of information-based course teaching, this promotion is still unsatisfactory. Neither teachers nor students have much awareness of using this teaching platform at present.

In addition to the network teaching platform, there are also teaching software such as rain classroom, intelligent teaching assistant, and so on. Therefore, teachers have more teaching methods to choose and students' learning is not limited to time and class. However, such teaching methods still need to be improved constantly, such as the preset knowledge that students learn on the information platform and whether teachers need to repeat the explanation in

class. If teachers do not pay attention to the mastery of the situation to repeat the explanation, it will increase the learning burden of students, and cause waste of learning time. The reason for this kind of situation is that teachers use the information technology teaching method is not perfect.

Some vocational colleges have information platforms such as virtual simulation systems. For some dangerous practical operations, virtual simulation technology can enable students to experience the actual operation and improve their proficiency in operation. This kind of teaching method is beneficial to improve the teaching effect. However, due to the high price, the use of information platforms is limited to class, students can not freely use these platform resources. Some schools use virtual simulation platforms to meet the needs of teaching competitions. And the virtual simulation system has not been fully popularized, for the less developed areas, the popularization of this information platform needs to be solved.

3.2 Improper Use of Information Technology Teaching Methods

With the popularization of information technology, tools such as smartphones and tablet computers can be applied in the teaching process, and teaching methods such as flipped classrooms and mixed teaching have emerged. This teaching method improves the amount of learning knowledge of students, and such "information" can be permanently stored on the Internet, which is easy to preview and review. However, if such teaching methods are excessively used, they may have the opposite effect and promote "teaching control" [4]. The teaching content is handled too carefully, which deprives students of thinking space to some extent. Students only see the filtered knowledge and lack of thinking process. The excessive use of information software will increase the learning burden of students, students may have a perfunctory mood and reduce the learning effect due to too much workload, which deviates from the original intention of relying on software to learn. Finally, if teachers put too many teaching resources on the teaching platform for students to preview, likely, students will not be able to absorb too much knowledge due to too many teaching resources, resulting in the situation of lagging in learning.

The teaching method of using information technology is to promote the teaching effect. If the teaching method is improperly used in the teaching process, it is possible to make the teaching method that is beneficial become a burden. It is important to note that web instructional technologies can only serve as complementary tools in the facilitation of quality education and administration processes, which cannot replace the traditional learning approach [5]. Therefore, it is necessary to grasp the degree of an application when using information teaching means.

3.3 The Quality Control of Information Technology Teaching Method is not Perfect

With the popularization and use of information-based teaching methods in teaching, teachers can use the teaching platform to release learning resources and let students learn independently. However, whether it is the study of micro-course, teaching resources, or the online test conducted by using the information platform, the corresponding teaching quality evaluation standards need to be formulated. The purpose is to know the actual teaching effect, the situation of learning mastery, and the utilization of learning resources. At present, there are urgent problems to be solved, such as the lack of a teaching supervision system and the imperfection of an information-based teaching system [6]. Therefore, the evaluation system should be designed with the data collected from the information platform, and the corresponding supervision system should formulated. Nowadays, there are more and more teaching methods integrated with information technology, and the corresponding monitoring and evaluation system should be gradually improved.

## 4 COUNTERMEASURES FOR THE TRANSFORMATION OF TEACHING METHODS OF VOCATIONAL EDUCATION IN THE INTELLIGENT ERA

The purpose of using teaching methods in teaching is to achieve the teaching goal and ensure the better completion of teaching tasks. The teaching methods of vocational and technical education are complex and intersecting. At present, the teaching methods commonly used in vocational education can be divided into action-oriented teaching methods, informationbased teaching methods, traditional teaching methods, and practical training methods, etc. In order to improve the quality of teaching, vocational education is constantly exploring appropriate teaching methods. On the one hand, vocational education should change the situation of applying traditional teaching methods. On the other hand, it is necessary to adapt to the development of the current era, promote the development of vocational education by using the teaching methods of information technology, and make information technology become the driving force of vocational education teaching.

### 4.1 Accelerate Sharing and Create All-Round Information Interaction

The imperfections of teaching methods in vocational education include backward application of teaching methods, inadequate use of networked teaching platforms, imperfect application of information technology teaching methods, and low popularity of teaching practice bases.

In view of the backwardness of information-based teaching methods, regular training and teaching method exchange activities can be carried out for teachers, so that teachers can master the information-based teaching methods and improve their information-based teaching level.

At present, the use of teaching platforms is not sufficient. Schools should increase the use of information teaching platform resources, cultivate teachers' awareness of using the platform, promote the sharing of teaching content and resources, make dedicated resources public, and jointly build a large education resource platform. Through electronic learning platforms, students can obtain the

knowledge, theoretical and practical skills, plan, manage and control the learning, which may both enhance efficiency and reduce costs of the learning and teaching [7]. So that students can learn quality, new teaching content.

The information-based teaching platform should be jointly managed by multiple parties and integrate the strength of multiple parties. Through the cooperation of various colleges, enterprises, and governments, high-quality teaching resources should be collected, teaching resources and the latest information should be integrated, information barriers should be broken, and the co-construction and sharing of digital resources should be realized.

### 4.2 Optimize Personalized Learning and Develop Cooperative Education

The improper use of information-based teaching methods includes: teachers publish too much detailed learning content on the teaching platform, which reduces students' thinking space and aggravates their learning burden. This paper holds that information-based teaching methods can be used in the following aspects: First, information-based teaching methods can be used as statistical analysis of students' learning conditions, so that teachers can get more data support and promote the achievement of personalized teaching. Second, using the teaching platform to develop cooperation in education.

#### 4.2.1 Individualized instruction

Information-based learning platforms can reasonably calculate and recommend the most appropriate teaching resources for each student according to big data analysis, and use information-based means to analyze the weaknesses and frequent mistakes of students' learning, to achieve the optimal state of knowledge learning.

Teachers use the information learning platform to let students preview before class, classroom exercises, and review after class. Students take online studies and complete online tests. The system analyzes the test data and presents the test results. The use of information-based teaching methods to improve the statistical efficiency, so that teachers can intuitively understand the learning effect of students and the learning situation of the class, to avoid repeated learning of knowledge points and reduce the learning pressure of students. The details are shown in Table 1.

Table 1 personalized teaching

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	Preparation before class	Training in class	Review after class					
Teacher	According to the statistical data of the platform, prepare for	Release the test questions, and then understand	According to the students' learning situation, release the					
	class preparation and	the students'	corresponding					

	analyze the problems of students.	learning situation according to the data returned from the platform	review questions
Student	Learn from the teaching platform, and then complete the corresponding exercises	Complete the test issued by the teacher	Complete the review exercise and carry out the targeted review according to the platform data

#### 4.2.2 Cooperative education

With the development of artificial intelligence, mechanized production has reduced a lot of employment opportunities, and the market demand has changed from talents with one skill to quality-oriented talents with one specialty and multiple abilities [8]. With the continuous introduction of new technologies and new formats in the intelligent era, social services have become more diversified and personalized. Vocational and technical teaching is not only limited to the training of professional skills but also should consider the cultivation of creativity, learning ability, coordination ability, and other comprehensive qualities, which are the advantages of high-quality skilled talents that can not be replaced by artificial intelligence.

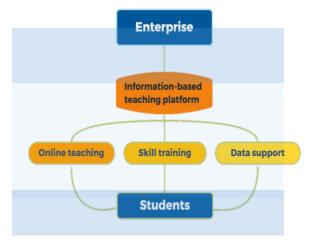


Figure 1 Cooperative education

Therefore, the personnel training of vocational education should be carried out through cooperation between schools, enterprises, and the government, to create a scene of a direct connection between talent training and the market, rather than being stuck in the skills training on campus. Adapting to the background of the intelligent era, enterprises should make full use of the information-based platform to collect the latest talent demand information from the recruitment platform of enterprises and the on-campus job fairs, to provide the best data support for talent training in vocational colleges. At the same time, through the online teaching of the information platform, the cooperation between schools and enterprises is strengthened, so that enterprises can participate in vocational education, and students can understand the actual enterprise market. After that, construct a schoolenterprise practice base, conduct skill training through the practice base, and use a virtual simulation platform to experience real work scenarios. Besides, while developing students' skills, they should cultivate students' comprehensive ability, cultivate their curiosity and enhance their interest in creating.

Enterprises through the information teaching platform for online teaching, training skills and provide data support to students. Forming a dual education model between enterprises and schools. The details are shown in Figure 1.

4.3 Diversified Evaluation to Ensure and Monitor Teaching Quality

The teaching evaluation of vocational education adopts the method of combination of process evaluation and summative evaluation, including multiple evaluation methods such as classroom tests, homework situations, self-evaluation, and mutual evaluation. Teachers use the teaching platform in class, which can record the learning data used by students in the teaching process, analyze students' learning behavior, learning situation, and learning performance through information technology, and obtain teaching evaluation. Through the results, students' problems in the teaching process can be found in time, to solve them as soon as possible. Because some teachers use too much information teaching methods in the classroom, which is not conducive to students' mastery of knowledge [9], it is necessary to monitor whether the teaching methods are beneficial to the classroom. The role of the information-based teaching method is to assist rather than control.

Therefore, in the process of information teaching, human control is essential. Teachers should pay attention to the actual learning situation and improve the teaching effect through multiple evaluations.

A comprehensive evaluation is formed to monitor the teaching quality by the instructional evaluation formed by the platform data, the procedural evaluation in the teaching process, and the final evaluation of the exam. The details are shown in Figure 2.

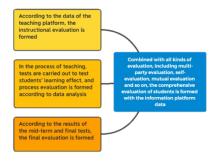


Figure 2 Comprehensive evaluation system 5. CONCLUSIONS

Under the background of the intelligent age, it is an inevitable result to apply information technology in teaching. Faced with the imperfection of current information-based teaching methods, teachers should explore more optimized information-based teaching methods, schools should make full use of the network teaching platform, and the state should speed up the popularization of information-based teaching facilities and establish training bases. At the same time, teachers

should adopt multiple evaluations to guide teaching, and establish a good teaching quality control system based on the analysis of the teaching platform data.

#### **ACKNOWLEDGMENTS**

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#### REFERENCES

- [1] Zhu Zhiping, "Intelligent unleashing: the impact and change on education in the age of artificial intelligence 2.0--to discuss meanwhile the artificial intelligence enabling higher vocational education," Chinese Vocational and Technical Education, 2021, (01):51-58.
- [2] McLoughlin, C. & Lee, M. J., 'Personalised and self-regulated learning in the Web 2.0 era: International exemplars of innovative pedagogy using social software', Australasian Journal of Educational Technology, 2010, 26(1): 28–43.
- [3] Yang Nanchang, Liu Yihui, Liu Xiaoyan, "Present Situation of Multimedia Instruction in Universities and Ways of Improving--A Survey Based on Teachers, Students, and Teaching Supervision," Education Research Monthly, 2015, (06): 99-105.

- [4] Zhang Guohong, "To take learning as the center: the ideal and reality of information-based teaching in secondary vocational schools," Chinese Vocational and Technical Education, 2018, (17): 31-36.
- [5] K. Ohei, & Brink, R, A framework development for the adoption of information and communication technology web technologies in higher education systems. SA Journal of Information Management, 2019, 21(1), 12 pages.
- [6] NIU Chao-qun, "An Analysis of the Information-based Teaching in Higher Vocational Colleges," Theory and Practice of Education, 2020, 40(15):24-26.
- [7] Hlib, Polianovskyi et al, "Utilization of Information Technologies in Higher Education." 2019 IEEE International Conference on Advanced Trends in Information Theory (ATIT), (2019): 349-354.
- [8] Liu Xiao Xu Zhenzhen, "The Obstacles of the Machine Substitution and the Development of Vocational Education," Research in Educational Development, 2015, 35(21):13-17.
- [9] HU Xiao-yong, ZHU Long, FENG Zhi-hui, ZHENG Xiao-dan, "The Development of ICT-Based Instructional Models and Methods: Trends and Directions," e-Education Research, 2016, 37(06): 12-19.

## The Impact of Video Captions on Japanese Autonomous Learning

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Abstract: Today, with the "Internet +" concept surging, it can better cater to the need of social development to cultivate students' autonomous learning ability. Video captions can promote learning, and there are many researches on the influence of video captions on foreign language audio-visual learning and vocabulary acquisition. However, it has been little examined that which form of captions has the best effect in autonomous learning. Current studies mainly focus on how to apply video captions in classroom teaching, and few studies combine video captions with autonomous learning. Hence, through exploring the impacts of different types of video captions and their presentation modes on Japanese autonomous learning, the article aims to offer some feasible suggestions on improving Japanese self-learning ability.

Keywords: Video caption; Questionnaire; Autonomous learning; Impact

#### 1. INTRODUCTION

So far, it has been widely recognized that video captioning can promote learning. Wan Jing conducted a meta-analysis of relevant empirical studies at home and abroad, and the results showed that subtitle videos had a significant promoting effect. However, while subtitle videos promoted intermediate learners' listening comprehension, they hindered elementary learners' listening comprehension [1]. Wang Wei studied the influence of subtitles on Chinese English majors' vocabulary acquisition and found that subtitles played an obvious role in promoting college students' vocabulary acquisition. English subtitles can better promote their word recognition and spelling, while Chinese subtitles can better improve their grasp of vocabulary meaning [2]. Garcia affirmed the effectiveness of bilingual subtitles for learners' incidental acquisition of vocabulary form, meaning and use [3]. By comparing three subtitle forms, Ma Ying pointed out that English dynamic keyword subtitles have a positive role in promoting learners' acquisition of productive vocabulary knowledge regardless of the real-time or delayed test [4].

It is interesting to use video captions to study Japanese autonomously, which can effectively improve learning efficiency and promote college students' autonomous learning ability. Based on the questionnaire survey, this article analyzes the impacts of Chinese translation, Japanese captions and bilingual captions on improving comprehensive language skills, argues that the choice

of different presentation modes concerning Japanese video captions should be suitable for learners at different Japanese levels, and also discusses how to use video captions to effectively improve Japanese self-learning ability of China's Applied Japanese majors.

2. AN INVESTIGATION OF STUDENTS UNSING VIDEO CAPTIONS FOR JAPANESE AUTONOMOUS LEARNING

2.1 Research Objects and Investigation Methods

This study adopts the method of questionnaire survey. A total of 102 valid questionnaires were collected from students majoring in Applied Japanese in Pinghu Normal School, Jiaxing University.

2.2 Analysis of Investigation Results

(1) Watch Japanese Captions for Self-study

The survey reveals: 64.71% of the learners choose to watch the original Japanese video captions for language learning, while 35.29% have other options.

(2)The influence of Japanese video captions on improving learners' comprehensive ability

75.49% of the respondents believe that by using Japanese video captions their listening has been improved during autonomous learning, 58.84% for speaking, 59.8% for reading and 64.71% for translation respectively. Undoubtedly, the improvement of learners' listening ability is the most obvious, translation ability is the second, followed by speaking ability and reading ability.

(3)The Influence of Chinese, Japanese and Bilingual Video Captions on Listening, Speaking, Reading and Translation

75.49% of the learners believe that speaking skills have improved through video captions, 64.94% believe that bilingual captions are more helpful to the improvement of listening ability, 28.57% for Chinese subtitles, only 6.49% for Japanese captions.71.19% think that bilingual captions are more conducive to the improvement of oral ability, 20.34% for Chinese subtitles and 8.47% for Japanese captions. As for improving reading ability, 80.33%, 10.03% and 1.64% of respondents argue for Chinese-Japanese bilingual captions, Chinese subtitles, and Japanese captions. For translation ability, Chinese-Japanese bilingual captions account for 83.33%, 13.64% for Chinese subtitles and 3.03% for Japanese subtitles.

(4) Impact of Chinese, Japanese and bilingual Video Captions on Learners at Different Levels

In this survey, the beginner level learners occupy 37.25%, 56.88% for intermediate level learners, and 5.88% for advanced level learners. In the whole, the higher the

level of Japanese learners, the lower the degree of dependence on Chinese captions. Advanced Japanese learners are more inclined to choose Japanese captions for independent learning, while intermediate and elementary learners are more ready to choose Chinese and Japanese bilingual captions or Chinese captions.

#### 3. SUGGESTIONS ON CHOOSING CAPTIONS

3.1 Different Captions improve listening, speaking, reading and translation ability

When watching videos, the learner obtains language and text information. At the same time, the visual and auditory senses are combined to better improve the learner's listening ability. Chinese and Japanese bilingual captions have Chinese translations and Japanese original texts. Learners can compare bilingually which video is more conducive to the learner's understanding of sentences. The promotion effect of Chinese and Japanese captions is slightly lower than that of Chinese and Japanese bilingual captions. Chinese translations can better help learners understand the content of the video, while Japanese captions can help learners become familiar with Japanese words. Combining Chinese and Japanese bilingual captions is the best solution for comprehensive learning. As for speaking ability, only through reading and practice can it be greatly improved. It is impossible to achieve better results just by watching the video. However, by listening to the Japanese pronunciation of the characters in the video to correct the learner's own pronunciation, coupled with a lot of immersion, oral skills can also be greatly improved. Due to the lack of Chinese translations, Japanese captions are difficult to understand, and there are many new words, which cannot play a positive role in independent learning. On the contrary, they might make learners feel bored and negative, and lose the fun of watching videos. Compared with Japanese captions, Chinese translations are easier for learners to understand the video content. But if there were no Japanese captions, it would be impossible to know the corresponding Japanese, and it would be impossible to directly input fully understandable content. The bilingual language vocabulary acquisition plays a more important role. Students can learn through comparative memory and understanding, which greatly promotes reading ability.

3.2 Selection of captions by learners at different levels (1)Beginner level learner

For elementary level learners, merely resorting to Japanese captions is completely useless, because they lack necessary accumulation and it would be very difficult to understand the video content without Chinese translation. Therefore, it is not recommended to use pure Japanese captions for independent learning. Chinese captions and Japanese and Chinese bilingual captions can help students understand the video content. However, in terms of independent learning, Chinese translations are still inferior to Japanese and Chinese bilingual captions.

(2)Intermediate level learner

For intermediate level learners, the choice of captions in autonomous learning should follow the pattern: Chinese and Japanese bilingual captions > Chinese captions > Japanese captions. In autonomous learning, with the improvement of Japanese level, learners can gradually understand the video content without Chinese translation. (3)Advanced level learner

Although the number of advanced level learners participating in the questionnaire is insufficient and the data is not comprehensive enough, it can be generally seen that advanced level learners have a low dependence on Chinese, and they usually choose Japanese captions for autonomous learning.

#### 4. CONCLUSION

To sum up, video captions has a positive effect on Japanese autonomous learning. It is an interesting, convenient, quick and efficient way of learning Japanese, through which most learners conduct autonomous learning. Self-learning with video captions can effectively improve learners' listening, speaking, reading and translation. Chinese and Japanese bilingual video captions are the most suitable for self-learning, because they can be learned, memorized and understood by means of both Chinese and Japanese. However, the higher the Japanese proficiency of learners at different levels, the less dependent they are on Chinese translation and the more choices they have on video captions. If the learners are at the elementary level, they should try to avoid choosing pure Japanese captions for independent learning, which may lead to frustration and boredom. Instead, they should make full use of the video to stimulate enthusiasm for learning. In the application of video captions, with a reasonable choice of presentation modes of Japanese video captions, students' autonomous learning efficiency will yield twice the result with half the effort.

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#### REFERENCES

- [1] Wan Jing, "Integrated Analysis of the Influence of Caption Videos on Listening Comprehension, " Chongqing University, 2015.
- [2] Wang, H., The influence of Captions on Concomitant Vocabulary Acquisition, Audio-visual Teaching of Foreign Languages, 2005, (2): 47-52.
- [3] Garcia B, "Bilingual Captions for Second-language Acquisition and Application to Engineering Education as Learning Pills, Computer Applications in Engineering Education, 2017, (3): 468-479.
- [4] Ma Ying, "The Impact of Dynamic Keyword Captions on Productive Vocabulary Acquisition," Journal of Xinyang Agriculture and Forestry University, 1st issue, 2017.

## Research on 1 + X Courses and Certificates Integration of Civil Aviation Freight Specialty in Higher Vocational Colleges under the Postpandemic Era

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Abstract: From the perspective of post-pandemic era, this paper puts forward the basic path of course certificate integration of higher vocational civil aviation freight specialty under the 1+X certificate system. Firstly, it establishes the education community for the implementation of the 1+X certificate system of higher vocational civil aviation freight, and then breaks through the docking obstacles between the certificate training standard and the professional teaching standard. On this basis, it constructs the course certificate integration mode of the 1+X certificate system of higher vocational civil aviation freight, finally, we should enhance the strength of the teaching and training team, so as to enhance the talent support of higher vocational colleges for the transformation and upgrading of civil aviation freight industry in the post-pandemic era.

Keywords: 1+X system; courses and certificates integration; civil aviation freight specialty; higher vocational college; the post-pandemic era

#### 1. INTRODUCTION

"The National Vocational Education Reform Implementation Plan"<sup>[1]</sup> proposes to implement the system of "Academic Certificate + Several Vocational Skill Level Certificates"(1+X Certificate System). In 2020, the China Air Transport Association conformed to the trend of the transformation and development of the civil aviation freight industry and the new demand for skilled talents under the influence of COVID-19, and formulated "Civil Aviation Freight Vocational Skills Level Standard", [2] which provides important standards and reference for the training of civil aviation freight talents in post-pandemic era. Since the outbreak of COVID-19, China's air logistics industry has provided important support for the efficient supply of pandemic prevention materials, but at the same time, the capability is short, and the industry enterprises have undergone severe tests. With the normalization of epidemic prevention and control and the advent of the post-pandemic era, the structure of air freight has changed significantly. Air freight is no longer only regarded as a mode of transportation, but integrated into the modern logistics service system [3]. Air logistics industry is accelerating transformation and

upgrading, constantly improving service system, and continuously generating new business areas. In this situation, it is urgent to cultivate new-type civil aviation freight talents. It is urgent for the related majors of civil aviation freight in higher vocational colleges to adapt to the talent demand of industry transformation and strive to cultivate and comprehensive skills for new business jobs. The 1 + Xcertificate system can provide an important guarantee for the quality of civil aviation freight talents training in higher vocational colleges in the post-pandemic era. 2. THE BASIC PATH OF 1 + X COURSE CERTIFICATE INTEGRATION OF AVIATION FREIGHT SPECIALTY IN HIGHER VOCATIONAL COLLEGES IN THE POST-PANDEMIC ERA

It is an innovative reform to organically integrate the training of higher vocational civil aviation freight talents in the post-pandemic era with the 1 + X certificate system, and the integration of courses and certificates is the top priority, which has a significant impact on the quality of personnel training. We must properly solve the problems existing in the above four paths, and deeply study how to take effective measures, so as to ensure the implementation effect of the course certificate integration. these measures mainly include: building an educational community for implementation of the 1 + X certificate system of higher vocational civil aviation freight, breaking the docking obstacles between certificate training standards and professional teaching standards, building a course certificate integration mode of the 1 + X certificate system of higher vocational civil aviation freight, and effectively improving the strength of the teaching and training team.

3. BUILDING AN EDUCATIONAL COMMUNITY FOR THE IMPLEMENTATION OF THE 1 + X CERTIFICATE SYSTEM OF HIGHER VOCATIONAL CIVIL AVIATION FREIGHT

The implementation of the 1 + X certificate system involves many stakeholders, including government departments, training and evaluation organizations, civil aviation freight related enterprises, vocational colleges, student groups and other subjects. All parties have their own interests. The government tries to

reverse the "two skins" between the demand side of civil aviation freight industry and the supply side of school personnel training, and effectively solve the difficult problems of recruitment and employment. The training and evaluation organization aims to develop and expand the service in the field of education and training through the implementation of civil aviation freight 1 + X certificate system, and to create a brand reputation and obtain certain benefits. The enterprise hopes that the high quality of talent supply, strong adaptability of students, quick business skills and sufficient development will be able to quickly competent for the basic level operation and management posts, and establish a long-term human resources partnership with higher vocational colleges. Vocational colleges are committed to training highquality talents with high skills, hoping that students can use, retain and develop in enterprises, and provide strong talent support for regional social and economic development and industrial enterprise transformation and upgrading. Students expect the school to have a good reputation, good social reputation, high quality of talent training and employment, and meet their personalized, differentiated and diversified education needs, effectively improve professional skills and professional quality, and enhance the comprehensive competitiveness of employment and entrepreneurship. In the process of implementing the 1+X certificate system of civil aviation freight transportation in higher vocational colleges, we should pay attention to the fact that any member who is too strong or unilateral selfinterest will have a negative impact on the quality of personnel training. Therefore, it is necessary to build an education community composed of all participants with the same interests, and establish a sharing education and training resources and normalized negotiation mechanism under the 1+X certificate system, in order to enhance the quality assurance of personnel training, we should cooperate to cultivate new high skilled personnel of civil aviation freight transportation. The main measures include three aspects: first, to build a platform for all members to participate in the interests of consultation and communication, so that all participants can fully express the concept of talent training and their own interests; secondly, a fair and transparent supervision mechanism should be established to ensure that the participation goals and interests of all members can be achieved together to a large extent; third, clarify the division of responsibilities of all participants, and stimulate the motivation and enthusiasm of all members to continuously participate in the training and training of civil aviation freight talents. The educational community of 1+X certificate system in higher vocational civil aviation freight transportation is shown in Figure 1.

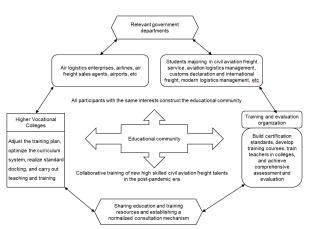


Figure 1. The educational community of the implementation of the 1+x certificate system of civil aviation freight in higher vocational colleges

#### 4. BREAKING THE BARRIER BETWEEN CERTIFICATE TRAINING STANDARD AND PROFESSIONAL TEACHING STANDARD

Higher vocational education has two attributes of serving regional economic and social development and cultivating high skilled and high-quality talents. Therefore, when formulating the training standards for civil aviation freight talents, the first thing for higher vocational colleges is to get rid of the docking obstacles between civil aviation freight vocational skills level standard and the teaching standards for civil aviation freight related majors in higher vocational colleges. One is to retain the content of certificate training in the relevant professional teaching standards, and transform it into curriculum modules or independent courses to integrate into the relevant professional teaching standards. The second is to integrate the requirements of work field, work task and vocational skills in the certificate into the relevant professional teaching standards. Third, in the professional curriculum system, the new modules, new courses or new training projects corresponding to the new business, new services, new posts, new processes and new skills generated by the transformation and upgrading of civil aviation freight industry in the post-pandemic era should be accurately supplemented; the fourth is to expand, transform and improve the relevant content of vocational skills training in the certificate, so as to improve the effectiveness of practical teaching. By breaking the barriers between certificate training standards and professional teaching standards, a distinctive talent training standard of civil aviation freight specialty in higher vocational colleges is formed. At present, under the background of high-level higher vocational schools and specialty construction plans with chinese characteristics, it is necessary to study the integration and docking of teaching standards of civil aviation freight related majors and civil aviation freight vocational skills level standard in higher vocational colleges, so as to serve the transformation and upgrading of civil aviation freight industry on the basis of serving regional economic and social development, so as to develop a regional and industry development characteristics of higher vocational civil aviation freight personnel training standards, so as to play the practical value of professional personnel training standards, give play to the professional characteristics of higher vocational civil aviation freight related majors, and cultivate a wide field of vision of new civil aviation freight high skilled and high-quality talents. 5 CONSTRUCTION OF 1 + X CERTIFICATE SYSTEM AND COURSE **CERTIFICATE** INTEGRATION MODE FOR CIVIL AVIATION TRANSPORTATION IN HIGHER **FREIGHT** VOCATIONAL COLLEGES

The course certificate integration is the key link in the process of promoting the 1 + X certificate system, which determines the effectiveness of the implementation of the system.<sup>[4]</sup> For the course certificate integration of 1+X certificate system of civil aviation freight transportation in higher vocational colleges, it is necessary to analyze the work field and task of X certificate of civil aviation freight transportation and the current situation of the courses of civil aviation freight transportation in higher vocational colleges, and reconstruct and optimize the original professional curriculum system. Due to the differences in content selection, number of courses and difficulty between the civil aviation freight x certificate training and the original curriculum system of civil aviation freight related majors in higher vocational colleges, four aspects should be paid attention to when reconstructing and optimizing the original curriculum system: first, new business, new service, new post, new service, new service, new service, new service, new service, etc the new process and new skills should be properly integrated into the original professional talent training program, optimize the curriculum and improve the teaching content, and carry out modular transformation of the curriculum group; second, based on the comprehensive skills of the new business field of civil aviation freight industry in the post-pandemic era and the "Civil Aviation Freight Transport Vocational Skills Level Standard", through the supplement, improvement, strengthening expansion of vocational skills training module, efforts should be made to develop new courses of course certificate integration, so as to maintain the working field of civil aviation freight X certificate training at the same time, it can also effectively improve the original professional curriculum system; third, in the process of implementation, we should not "favor one over the other". In order to avoid increasing the class hours of civil aviation freight x certificate training and reducing the class hours of professional teaching, we must take into account the essential characteristics between vocational education and vocational training.<sup>[4]</sup> we should also distinguish the essential differences between the two, so that the systematic vocational education can not become a simple

vocational training; fourth, we should actively explore the integration and transformation between the academic achievements of professional courses and the learning achievements of civil aviation freight x certificate training. At the present stage, the national "credit bank" pilot work of vocational education is being carried out, and the relevant implementation documents are gradually issued. Higher vocational colleges should deeply study the relevant provisions and implementation methods of credit transformation between vocational education and training learning achievements, and formulate feasible schemes, explore the establishment of relevant working mechanism, register and store the learning achievements reflected in the academic certificate and vocational skill level certificate, count them into the personal learning account, and try to identify, accumulate and transform the learning achievements.<sup>[5]</sup> Higher vocational civil aviation freight 1+X certificate system course certificate integration mode is shown in figure 2.

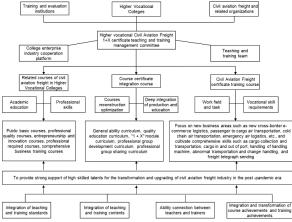


Figure 2. Higher vocational civil aviation freight 1 + x certificate system course certificate integration mode 6. IMPROVE THE OVERALL STRENGTH OF TEACHING AND TRAINING TEAM

To build a teaching and training team with noble morality, excellent skills and high level of education is the fundamental guarantee for the effective implementation of the 1 + X certificate system in the post-pandemic era. First, select and train suitable teachers, and strive to improve the training ability of X certificate. On the one hand, we should formulate the selection and training system for teachers with X certificate of civil aviation freight, focus on training teachers with enthusiasm, strong sense of responsibility and high teaching level, formulate promotion and incentive plans, help teachers' professional title promotion and career development, and continuously enhance the training ability, so as to create a positive and positive environment for the training team of X certificate. On the other hand, in close cooperation with air cargo x certificate training and evaluation organizations (China Air Transport Association and Beijing Xiangyu Education Consulting Co., Ltd.), key teachers are selected in batches at different levels (junior, middle and senior) to participate in the teacher training of civil aviation freight vocational skill level certificate. The teachers who have obtained the trainer qualification are managed at different levels, and the X certificate trainer echelon is constructed, At the same time, communicate with the training evaluation organization regularly to improve the training content and its selection, training methods and evaluation index system. Second, we should solidly promote the deep integration of production and education, and build a full-time and part-time teaching and training team with reasonable structure for civil aviation freight 1 + X certificate. Higher vocational colleges should invest sufficient resources and create sufficient conditions, select famous teachers, professional leaders and backbone teachers from relevant majors, hire experts from civil aviation freight industry, relevant enterprise skill backbone and business elites to participate in depth, and give full play to the advantages of teachers from "Master Skill Studio" and "Industrial College" and other institutions, and form a high-level teaching and training team with a combination of full-time and part-time work and a reasonable structure. Third, enhance the practical ability and international level of the 1 + X teaching and training team, and implement the "going out" strategy. Professional teachers should constantly improve their practical teaching ability and training ability. Instead of being a follower of new things, they should strive to be a companion or even a leader. On the one hand, it provides business training and technical services for industry enterprises, carries out horizontal research cooperation, and continuously improves the actual combat ability. On the other hand, to provide teachers with more abundant domestic high-quality resources for further study and create more foreign training opportunities, some higher vocational colleges that have carried out cooperative education abroad can regularly arrange teachers to teach or train abroad for training, so as to improve the comprehensive ability and quality of teachers, so as to promote the sustainable development of the team.

#### 7. CONCLUDING REMARKS

In the post-pandemic era, the transformation and upgrading of civil aviation freight industry is speeding up, and it is urgent for higher vocational colleges to reform related majors and strengthen talent support. The 1+X certificate system can provide an important guarantee for the quality of civil aviation freight personnel training in higher vocational colleges. This paper organically integrates the training of civil aviation freight talents and the 1+X certificate system in the post-pandemic era, determines the basic idea of integration, and puts forward the construction of the education community for the implementation of the 1+X certificate system of civil aviation freight, the breaking of the docking obstacles between the certificate training standard and professional teaching standard, the construction of the course certificate integration mode of the 1+X certificate system of civil

aviation freight in higher vocational colleges a series of reform measures, such as effectively improving the overall strength of the teaching and training team, are of great significance for higher vocational colleges to innovate the training mode of high skilled talents in civil aviation freight, alleviate the structural contradictions in employment of civil aviation freight related majors, promote the sustainable development of civil aviation freight related majors, bridge the academic education, skill training and lifelong vocational education of civil aviation freight, it has important theoretical value and practical significance.

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#### REFERENCE

- [1]Notice of the State Council on Printing and Distributing the National Vocational Education Reform Implementation Plan.(2019-02-13)[2021-03-31]. http://www.gov.cn/zhengce/ content/2019-02/13/content 5365341.htm.
- [2] Vocational Skill Level Standard for Civil Aviation Freight (Version 1.0, 2020). Beijing: China Air Transport Association, 2020.
- [3] Yan Zhiyong, Jiang Dayuan, Wu Quanquan. Governance Implication and Misunderstanding Avoidance of 1 + X Certificate system. Education and Vocation, 2019 (15): 5-12.
- [4] Ding Tianming. Thoughts on the Integration of Courses and Certificates in the Process of Promoting the 1 + X Certificate System of Logistics Management in Higher Vocational Colleges. Education and Vocation, 2020 (16): 42-47.
- [5] Dai Yong. Principles and methods of integration of 1 + X Courses and Certificates and Optimization of Professional talent Training Scheme. Vocational Education for Mechanical Industry, 2020 (02): 1-5.

## Cultivation Status Quo and Promotion Strategies of Core Accomplishment of High School Students' Physical Education Research

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Abstract: Purpose: Physical education in middle school is a critical period for high school students to form correct sports values, develop healthy sports habits and lifelong sports awareness. Establish a big health concept, advocate a healthy and civilized lifestyle, and a strong body is the foundation of good health. In recent years, the physical health of adolescents has been declining year by year, which has attracted people's attention. Through the investigation and analysis of the current situation of the cultivation of the core literacy of sports disciplines of high school students in Yangling District, Xianyang City, Shaanxi Province. Discover and explore the laws, analyze the specific problems in them, and put forward specific countermeasures and suggestions. Provide a basis for improving the core competence of high school students in physical education. It is helpful for relevant management departments to make correct, active and effective education strategies for school sports. Provide a theoretical basis for promoting the teaching reform of physical education in middle schools. Methods: Comprehensive use of literature data method, interview method, questionnaire survey method, mathematical statistics method, logical analysis method and other research methods. The status quo of the core literacy training of sports disciplines of 1474 high school students from 4 middle schools in Yangling District, Yangling District, Xianyang City, Shaanxi Province, Northwest A&F University Affiliated Middle School, Shaanxi Academy of Agricultural Sciences Children School, and Yangling District High-tech Middle School in Shaanxi Province are analyzed. At the same time, it discusses the promotion strategy of the core literacy of high school students in physical education. Results: The current status of core literacy cultivation of high school students in Yangling District, Xianyang City, Shaanxi Province is mainly manifested in: (1) Athletic ability: the number of skills to be mastered is insufficient, and physical fitness needs to be strengthened. The ability to formulate physical exercise plans, participate in and organize sports activities, and solve problems in sports practice is insufficient. (2) In terms of healthy behavior: High school students can arrange their time reasonably, help their peers develop good living habits, and form

correct and positive values. But there are also problems: poor awareness of physical exercise, lack of physical health knowledge and poor living and eating habits, at the same time, lack of sense of self-worth in sports, and poor ability to self-regulate emotions. (3) In terms of sports morality: the students have good sports morality. But there are also problems: lack of tenacious fighting, not afraid of difficulties sportsmanship, obedience to referees, and poor awareness of fair competition. Can not treat the concept of victory and defeat correctly, and have poor emotional experience in sports. Conclusion: From the four levels of school, family, individual, and society, the development strategy for the core literacy of high school students in Yangling District, Xianyang City, Shaanxi Province has been constructed. At the school level, improve teachers' professional skills and reform physical education. At the family level, cooperate with school sports work arrangements and establish students' daily life files, and parents develop the habit of leading their children to participate in physical exercise. At the personal level, cultivate one's own interest in sports and correctly understand the value of physical exercise. At the social level, provide physical exercise venues and encourage students to participate in social practice activities, and put forward strategies for cultivating the core literacy of high school students in physical education.

Keywords: core literacy of physical education; current situation of high school students' cultivation; promotion strategies

#### 1. INTRODUCTION

The health of young people is related to the happiness of every family, and it is also related to the future of the nation and the country[1-3]. In China's 13th Five-Year Plan, it is mentioned that residents' healthy life expectancy, national health, and adolescents' health are mentioned. This is already an important factor affecting the healthy and sustainable development of the country's society[4-5]. It is also a major issue about whether the Chinese dream can be realized and whether the Chinese nation can be rejuvenated. It can be seen from the above that the physical health of adolescents is highly valued by the state[6-7]. Adolescents refer to the age group of 13-18 years old. High school students are at this stage. Whether it is physical or psychological, it is in a period

of rapid development, so it is imperative to improve the physical health of high school students. The core literacy of physical education disciplines emphasizes physical fitness, sports skills and physical culture learning at the same time[8]. Incorporating health education methods and knowledge related to the learning and growth of students is very important for the cultivation of students' safety awareness and the formation of a healthy and civilized lifestyle[9-11]. So as to promote students to have a strong body, physical and mental health, and all-round development. Therefore, to improve the physical health of high school students, it is necessary to strengthen the cultivation of the core literacy of high school students in physical education, which can also further promote quality education in the school[12].

On July 8, 2019, the Chinese government issued the "Opinions on Deepening Education and Teaching Reform and Comprehensively Improving the Quality of Compulsory Education." There are a total of 26 opinions, making arrangements for deepening education and teaching reform and comprehensively improving the quality of compulsory education. Among them, in terms of sports, it is pointed out that physical exercise should be strengthened. Each student masters 1 to 2 motor skills. Scientifically arrange the exercise load of the physical education class. Widely carry out popular sports on campus. Athletic ability in the core literacy of physical education emphasizes that students learn to formulate physical exercise plans and lead their peers to participate in physical exercises, while healthy behavior emphasizes that students should develop good exercise habits.

With the progress and continuous development of society, the consciousness of lifelong learning has gradually become popular[13-15]. As a result, lifelong sports are getting more and more attention. In the development of school physical education, not only must we undertake the responsibility of enhancing students' physical health, but also the mission of fostering students' lifelong awareness of physical education. Cultivating students' awareness of lifelong sports conforms to the main purpose of China's sports development and indirectly promotes the health awareness of the whole people[16]. To strengthen the cultivation of students' lifelong sports awareness, it is necessary to cultivate students' sports interest, sports skills, sports and health knowledge[17-20]. Therefore, more attention should be paid to the cultivation and development of the core literacy of students' sports disciplines[21]. In summary, in order to enhance students' physical health and overall development, to strengthen students' physical exercise, and to lay a solid foundation for students' life-long sports awareness. Therefore, it is necessary to strengthen the cultivation of the core literacy of students' sports disciplines[22-23].

#### 2. LITERATURE REVIEW

In the current era, the core of competition among countries is the competition of talents. Correspondingly, "what kind of people to train" is the

ultimate goal and the best answer for the country to win the competition for talents[24-25]. All walks of life at home and abroad are also interpreting the core literacy in detail. Only a clear understanding of core literacy can better serve the country's education reform[26]. Meet the development needs of students under the new situation, and meet the country's demand for talents. At the beginning of the 21st century, the European Union was the first to propose a combination of development core literacy and lifelong learning on a global scale. As an important indicator for evaluating talents in the 21st century, it is proposed that the core literacy formed in the initial stage of education lays the foundation for personal lifelong learning[27-28]. When an individual comes to the adult stage, his lifelong learning attitude will prompt him to continuously improve his core literacy. It can be seen that the formation of core literacy is continuously improved along with lifelong development. It is not done overnight at a certain stage of the person. Under the guidance of the EU's core literacy knowledge, skills and attitudes as the main body. Member states have successively formulated educational policies to match them[29-30]. In 1997, the Organization for Economic Cooperation and Development launched the "Quality Definition and Selection, Theoretical and Conceptual Basis" project. After years of research, in 2005, he first proposed the "core literacy" structure model. To help solve "students entering the 21st century, in order to successfully integrate into the society in the future, and meet the needs of personal and social development, what core knowledge, abilities, attitudes and emotions should be mastered". After years of research, this conclusion is finally summarized as: literacy = (knowledge + ability) \* attitude. The special position of attitude in this equation deserves our attention. The British Education Union organization positions the core literacy as an individual's goal of satisfying self-development and promoting social development. The sum of the various knowledge, skills and attitudes that should be possessed, and the core literacy is incorporated into the national curriculum through legislation.

After 8 years of research, the Organization for Economic Cooperation and Development announced the core literacy framework to the world in 2005. The framework includes the ability to use tools interactively, to interact in heterogeneous social groups, and to act proactively. The tools used include language, symbols, and text. Interactions in heterogeneous groups include the ability to establish good relationships with others, control and resolve conflicts[31-33]. Active action includes the ability to formulate one's own life plan, maintain one's own legitimate rights and maintain the ability to act in a relatively complex environment[34]. The American 21st Century Skills Alliance emphasizes that core literacy mainly includes three aspects: learning and innovation skills, information media and technical skills, and knowledge and professional capabilities. It also emphasizes that the development of the core literacy of students requires the support of the corresponding curriculum and teaching and evaluation standards of the school[35-36]. The Singapore government believes that

core literacy is mainly composed of three parts. Core values (respect, integrity, care, harmony, responsibility). Social and emotional management (self-awareness, self-management, self-decisionsocial awareness and interpersonal relationship management). And new skills in the 21st century (communication, cooperation and information global awareness, and cross-cultural communication skills). Japan's core literacy framework is mainly divided into basic ability, thinking ability and practical ability[37]. Basic skills mainly include basic skills necessary for personal life such as language skills, mathematical skills, and information skills. Thinking ability mainly includes problem-solving ability, developing creativity and logical thinking ability. Practical ability mainly includes social participation, interpersonal ability and practical ability to promote the sustainable development of society[38-40].

The United States officially launched the 21st century core skills research project in 2002, creating the partnership for 21st century slills (P21). The core literacy emphasized by P21 mainly includes three aspects: "learning and innovation skills", "information, media and technical skills", and "life and professional skills". The physical education and health courses in the United States are set up in different regions of the country. The state and the government are not uniformly arranged. The entire process from elementary school to middle school to university is arranged and managed independently by each state[41]. The teaching goals of physical education in the United States are also focused on physical growth, physical fitness and skills, and mental health. Among them, the content of physical education in the school stage includes four aspects: lifelong physical education, physical activity, competitive physical education and fitness. Britain is the first country to put forward the concept of core literacy[42]. The British Continuing Education Union (FEU) positions the development of core literacy as "core literacy for lifelong learning". It is to promote the realization of self-development and integration into social life. There should be a number of necessary factors for skills, knowledge and attitudes. The core literacy circle is divided into 10 fields of experience and literacy. The physical education and health curriculum in Japan is a syllabus uniformly formulated by the government[43-44]. Then it will be implemented throughout the country. Japanese school physical education is based on the guiding ideology of "lifelong sports, happy sports", emphasizing the lifelong nature of sports and the fun of students engaging in sports. The specific goals involve sports ability and physical health, but also pay attention to the level of training students to exercise autonomously. The European Union, the United Nations Educational, Scientific and Cultural Organization, as well as some member states such as the United States, Japan, and the United Kingdom, regard physical education as an important part of school education. Establish the important

position and role of physical education in cultivating students' core literacy. The Spanish scholar Sameron's research shows that some scholars. Physical education is closely related to obtaining the best physical condition, social adaptation, and moral quality. It is a direct way to expand the core literacy of students. "2015 Education Development Agenda" and the "2013 Berlin Declaration" issued by the World Conference of Ministers of Sports Activities and other documents. All pointed out that physical education is the most effective way of school education. Provide children and young people with the skills, attitudes, values and knowledge needed for lifelong participation society[45-48]. in Comprehensively integrate the core literacy training of the World Economic Cooperation Organization, the European Union, the United States, the United Kingdom, Japan and other countries. The core literacy in foreign countries mostly reflects the ability of independent learning and innovation, the ability of social participation and practice, and consciousness and emotion.

The Ministry of Education of China organized more than 260 experts in various disciplines to clarify the core literacy of each discipline and revise the curriculum standards of each discipline at the general high school stage. It is clear that students should have the necessary qualities and acquire key abilities after learning through the course, which reflects that the goal of China's education is concrete in various disciplines[49-50]. Chinese sports scholars summarized the concept of core literacy of sports disciplines from different angles. For example, Sumei Yu pointed out in the article that the core literacy of physical education is the health knowledge and behavior, sports emotion and character, sports ability and habits that are necessary for the comprehensive development of students in the physical learning and lifelong sports. Chinese scholar Fuxue Zhao pointed out that the core literacy of physical education is the embodiment and result of the reform of physical education curriculum, which is that students run through the entire school period and continue to affect students' body and mind. The key athletic ability and qualities and necessary moral qualities formed in the study of physical education. Lipei Shang started from the goal of school physical education and based on the framework of "Chinese Students' Development Core Competence". Combining with the uniqueness of the physical education discipline, based on physical literacy, it is proposed that the first-level indicators of the core literacy of the physical education discipline are sports skills and habits, health knowledge and behavior, and sports morality and emotion. The secondary indicators are exercise habits, exercise skills, healthy behaviors, health knowledge, sports emotions, and sports morality. Ling Yan and others have shown in their research that the core literacy of physical education includes basic literacy and core literacy. The basic literacy refers to basic skills and basic knowledge. Its core literacy has three main aspects: the ability to integrate sportsmanship into life, the ability to maintain and deliver a healthy lifestyle, and the ability to participate in sports activities independently. They are dealing with the relationship between the individual and the self, the individual and the others, and the individual and the society. Scholars also researched the ways to cultivate the core literacy of sports disciplines. For example, Hongxiang Yuan believes that the implementation of the core literacy of the physical education subject must solve the problems in the understanding of the physical education curriculum, the problems of the physical education curriculum, and the "fault" problems in the implementation of the physical education curriculum. It is pointed out that to cultivate the core literacy of physical education disciplines, a complete supervision mechanism and top-level design should be established from physical education courses. Taking physical education as the goal, comprehensively promote the overall practice and school-based expression of the core literacy of the physical education discipline. Strengthen the relevant research on the core literacy of physical education and stimulate the spiritual realm of teachers. Yong Jiang and others believe that it effectively promotes the formation of students' core literacy in physical education. Teachers should create a teaching situation where the body is generated, create a teaching process of their own cognitive thinking, and establish a teaching concept based on the student's body. Xiuyun Lu indicated that the core competence of students in physical education should be cultivated[51]. First of all, teachers should pay attention to moral education in the physical education classroom. The second is to improve the professionalism of teachers themselves. Furthermore, cultivate the habit of independent exercise of students and form a lifelong awareness of physical education. Finally, it is necessary to improve the level of students' mental health and enhance their social adaptability.

The physical education teachers with rich experience in front-line teaching have the ways to cultivate the core literacy of the students in the physical education discipline at different stages. For example, Shuqin Chen believes that cultivating the core literacy of primary school students in physical education mainly includes three aspects: health promotion, sports practice, and the cultivation and guidance of sportsmanship. Yazhu Wang understands the current status of the implementation of the core literacy of physical education in junior and middle school, analyzes its influencing factors, and proposes effective training strategies. Cultivating the core literacy of middle school students' sports disciplines must first promote the equality of all disciplines and ensure campus health and harmlessness. Secondly, it is necessary to deepen the development of school sports curriculum resources to achieve effective use of local resources and complete hardware resources. Peng Cheng believes that to cultivate the core literacy of middle school students in physical education, physical education teachers should vigorously play a guiding role in the physical education classroom, strengthen the education of students' character literacy, and improve students' health awareness and behavior literacy. Hongzhao Wang believes that cultivating the

core literacy of students' sports disciplines in high school physical education should insist on guiding and cultivating students' good habits. Apply effective teaching methods to improve students' athletic ability. Cultivate students' good sports ethics and character. The students of higher vocational colleges are close to college students, and their ideas have gradually developed to be close to adults. Therefore, we should also pay attention to the cultivation of the core literacy of sports disciplines of students in higher vocational colleges. Guohong Zhuang investigated the status quo of the core literacy training of physical education in higher vocational colleges in our country, and found that the physical education teaching methods are old and outdated, the school's sports ideology is weak, and the cultivation of the core literacy of physical education is not in place. Therefore, it is proposed to cultivate the core literacy of physical education for students in higher vocational colleges. It is necessary to change the concept of physical education, reform the evaluation method of physical education, formulate school-based physical education curriculum materials, integrate the core literacy teaching of physical education, and strengthen the education of discarding. Yuefeng Liu and others used the literature method, mathematical statistics method and teaching experiment method to analyze the findings in the investigation and research. Outdoor development courses have a positive effect on cultivating the core literacy of college students' sports disciplines. Especially in terms of cultivating students' sports character and sportsmanship, it can effectively enhance team consciousness, brave sportsmanship and correct outlook on victory and defeat, and can also improve college students' 800/1000 meters running performance[52].

In summary, Chinese scholars have defined the core literacy of physical education from the perspectives of people and society, all-round development of students, physical education curriculum reform, and the goal of school physical education. The core literacy of physical education is the knowledge that must be possessed in the learning process of physical education today[53]. Cultivating the core literacy of students in physical education is the goal of physical education at all levels in all stages of education. It mainly diagnoses problems in the process of understanding, setting and implementing physical education courses. Put forward training strategies to enable students to develop in an all-round way.

#### 3. THEORETICAL BASIS

3.1 The composition of high school students' sports core literacy

The core literacy of high school physical education is the integration of the comprehensive quality of high school students, including high school students' mastery of sports knowledge, proficiency in sports skills, the establishment of values, and the response to setbacks. The core literacy of the physical education subject is specifically manifested in high school students' sports participation, sports skills mastery, and sports cognition. Senior high school students to be able to participate in independent sports must have certain sports knowledge

and skills, strong knowledge transfer ability and selflearning ability. Because it is impossible for teachers to teach all the knowledge in schools, high school students still have to have the ability to slowly realize and accumulate in their usual exercises. And high school students have a certain affection for sports is also a necessary condition for high school students to be able to exercise autonomously. If the high school students themselves are not interested in sports, it will be even more impossible to perform the necessary exercises without supervision and requirements. Autonomous fitness requires strong self-control and willpower. High school students who can persist in self-employment generally show that they are more socially active, have stronger emotional control, and have better interpersonal skills. These abilities will greatly promote the professional development of high school students after they enter the society. The development of sports core literacy is also an important basis and direction guide for building a scientific knowledge system and skill framework.

3.2 The Basic Characteristics of the Cultivation of the Core Accomplishment of High School Students in Physical Education

The cultivation of core literacy should pay attention to the gradual progress, and it is necessary to set up corresponding training content at different stages and different periods of students. First, physical education literacy is the literacy that includes sports and health, which will accompany people throughout their lives. Therefore, core literacy training has long-term characteristics. Second, cultivation is a dynamic process. The development of society, the development of disciplines, and the development of individuals all require literacy training to have developmental characteristics. What needs to be clarified is that the speed and direction of development will lag due to the influence of individuals and the environment, but it does not reduce the developmental nature of training. Third, the training will be restricted by the individual students, social environment and other factors. There is a certain degree of difference in the speed, content, and direction of training. This difference is reflected in different age groups, different levels of cognition, and different genders. Fourth, the training should be carried out around three dimensions and six elements, and the related content is indispensable, with strong integrity. If the training focuses on only one aspect or content, it may lead to problems such as lack of sportsmanship and lack of motor skills in high school students. Fifth, training does not rely solely on physical education in schools, it is a long-term accumulation process. In addition, without the coordination and cooperation of all parties, even highlevel physical education schools and professional physical education teachers will not be able to improve the physical quality of high school students. Therefore, the cultivation of core literacy requires the cooperation of parents and the participation of society, and joint cooperation can help students improve the core literacy of sports.

3.3 Basic Ideas for Cultivating the Core Accomplishment of High School Students in Physical Education

3.3.1 Shaping the spirit of sportsmanship

The key element of the core literacy of physical education is sports emotion, and the essential element is sports character. Therefore, teachers should pay attention to the dual education of students' emotion and character, so as to achieve the goal of perfecting students' sportsmanship. The shaping of sportsmanship is more difficult than learning a sports skill, especially in physical education where the classroom is the main teaching method. How to effectively shape the spirit of sports is a problem that high school teachers need to think deeply. Hard training and fierce competition can effectively shape the sportsmanship of high school students and cultivate their good character and emotion. Within a certain range, the timing of cultivation is more important than the method of cultivation. Teachers should seize the opportunity, select training content in a targeted manner, develop training in an appropriate way, and evaluate and measure the relevant results to achieve the goal of perfecting the spirit of sports.

3.3.2 Follow the sports practice

In the core literacy framework system of sports disciplines, athletic ability plays an important role as the most core element, and athletic habits are accompanied by athletic ability. Therefore, in the process of sports practice, teachers should pay attention to the cultivation of students' sports ability and sports habits. The size of ability and the quality of habits determine the degree of physical and mental impact of sports on students. For sports practice, both habit and ability indispensable[53]. In the actual process, how to coordinate the effective interaction between exercise ability and exercise habits through effective exercise practice is one of the keys to the cultivation of the core literacy of physical education. The main content of sports practice lies in practice, that is, constant practice. The level of athletic ability is related to practice, and the development of exercise habits is also closely related to the number of exercises. Therefore, teachers should reasonably control the number of students' exercises, cultivate students' good exercise habits, and improve students' athletic ability. There are four dimensions to measure the quality of exercises, namely, interest dimension, content dimension, time dimension and effect dimension. Different dimensions have different judgment standards for practice. Whether students can be interested or whether they can generate interest in the process of practice is an important sign of practice. The content of the exercise determines the direction and upper and lower limits of sports practice. With the change of age and personality, the content of the practice will also change. The length of the practice time determines the degree of athletic ability. Without consistent practice, it is difficult to improve athletic ability, let alone develop good exercise habits. The effect evaluation can intuitively measure the results of the exercises, reflect relevant content and conditions, and facilitate teachers to adjust the exercises in a targeted manner. Therefore, teachers should grasp the interest, content, time and effect of students' exercises, and improve students' sports practice ability.

#### 3.3.3 Health promotion ability

Healthy behavior is inseparable from the support of a large amount of health knowledge, and it is also an important factor in promoting the formation of healthy ability. Healthy behaviors, as an obvious sign of testing and mastering health knowledge, have a promoting effect on personal health. Teachers should pay attention to students' health behaviors and health knowledge. Implement the relationship between healthy behavior and health knowledge in the cultivation of the core literacy of sports disciplines, and closely integrate the two. The learning of students' health knowledge and behavior is inseparable from the guidance and teaching of physical education teachers. In the teaching process, teachers should understand students' mastery, so that students can fully understand the meaning and connotation of health promotion. The cultivation of students' health promotion ability and awareness needs to be considered from four dimensions, namely sequence, timing, content and form. A reasonable teaching sequence helps to promote students' understanding of knowledge[54]. The timing of healthy teaching is also more important. Teachers should teach students appropriately at the

right time. The content of teaching determines the specific scope of health knowledge and health behaviors. The selection of scientific and correct content has a greater role in promoting the health of students. In the actual teaching process, the way teachers use to explain health promotion is also more important. The ability of students to promote health is inseparable from the teaching explanations of physical education teachers. The superb teaching methods and methods will effectively enhance the students' health promotion ability.

#### 4. METHODS

#### 4.1 Literature data method

The research of this article has consulted related books and related theories such as the "Core Literacy of Chinese Student Development", "General High School Sports and Health Curriculum Standards (2017 Edition)", "Introduction to Sports Literacy" and other related theories. Deepen, consolidate and improve the understanding of the core literacy of sports disciplines. In CNKI and Wanfang database, the key search terms are sports core literacy, core literacy, and subject core literacy, and 31 documents related to this article are collected and consulted. See Table 1 for details. Also consult relevant important conferences, master and doctoral dissertations, etc., to summarize and summarize the literature.

Table 1 List of research literatures on the core literacy of high school students in physical education collected by CNKI

	CIVICI		
First author	Title	Literature source	Year
Min Li	Analysis of the Status Quo of Middle School Physical Education Curriculum Based on the Core Literacy of Physical Education Subject	Journal of Shijiazhuang University	2020
Xiaobo Yuan	Basic Ideas and Multiple Ways of Cultivating the Core Accomplishment of High School Students' Physical Education Subject	Sports Vision	2020
Jiaqian Li	Strategies for Cultivating High School Students' Sports Ability from the Perspective of Subject Core Literacy	Famous Teacher Online	2020
Zhongyan Li	Research on Teaching Strategies of High School Physical Education Based on Cultivation of Disciplinary Core Quality	Anhui Educational Research	2020
Qi Yang	How to Cultivate High School Students' Interests and Hobbies in Volleyball	Curriculum Education Research	2020
Hengjing Ko	The Constitution and Cultivation Strategies of High School Students' Sports Core Quality	Chinese Journal of Multimedia and Network Teaching (Late Issue)	2019
Hongzhao Wang	On How to Cultivate the Core Accomplishment of Students in Physical Education Teaching in Senior Middle Schools	Science Popular (Science Education)	2019
Yanjun Xing	Research on the Cultivation of Sports Morality of Senior High School Students Based on the Core Accomplishment	Sports Science Literature Bulletin	2019
Yulan Yu	Analyzing the Cultivation Strategy of High School Students' Core Accomplishment in Physical Education	Sports Science Literature Bulletin	2019
Qingqing Li	The Ideas and Method Innovation of High School Physical Education Teaching Based on Subject Core Accomplishment	Sports Science Literature Bulletin	2019
Xiaona Sun	Research on the Cultivation of Core Accomplishment of High School Students in Physical Education and Health	Sports Science Literature Bulletin	2018
Guoshui Zhai	The Status Quo and Strategies of High School Physical Education Micro-Class Teaching Based on Core Accomplishment	New Course (below)	2018
Xuecheng Ding	Significance and Ways of Cultivating the Core Accomplishment of High School Students' Sports	Chinese out-of-school Education	2018
Xiaoyu Shi	A Preliminary Study on the Evaluation System of the Core Accomplishment of High School Students in Physical Education and Health Subjects	Physical Education	2018
Chengliang Zhang	A Practical Research on Cultivating the Core Accomplishment of High School Students in Physical Education	Motherland	2018
Zhengjun Cao	How to Cultivate the Core Accomplishment of High School Students in Physical Education	Teacher	2017
Tingyu Zhang	The Investigation and Countermeasures of the Current Situation of the Core Accomplishment of Physical Education of High School Students in Changsha City	Master's Thesis of Hunan Normal University	2020
Tingchao Ceng	Research on the Current Situation and Countermeasures of High School Sports and Health Curriculum Implementation from the Perspective of Subject Core Literacy	Master's Thesis of Hunan Normal University	2020
Wenxuan	Research on the Effect of High School Students' Aerobics Learning	Harbin Normal University Master Thesis	2020

Ban	under the Goal-oriented Background		
Xinxiao Li	An Empirical Study on the Factors Influencing the Development Level of the Core Accomplishment of High School Students' Physical Education Subject	Ludong University Master Thesis	2020
Candong Yin	Research on the Current Situation and Cultivation Strategies of the Core Accomplishment of Physical Education of Senior High School Students in Zhangzhou City	Master Degree Thesis of Minnan Normal University	2020
Qian Liu	Research on Development Strategies of High School Students' Core Accomplishment of Physical Education Subject under the Background of New Curriculum Standards	Master Degree Thesis of Central China Normal University	2020
Wei Liu	Research on the Current Situation and Countermeasures of the Core Accomplishment of Physical Education of High School Students in Huaibin County	Xinyang Normal University Master Thesis	2020
Yong Wang	An Experimental Research on the Teaching Method of Understanding Based on Core Accomplishment in High School Basketball Teaching	Master's Thesis of Jilin Institute of Physical Education	2020
Guanglei Zhang	Research on the Cultivation Model of Core Accomplishment of Sports and Health Subjects of High School Students in Yanji City	Master's Thesis of Yanbian University	2019
Dong Li	An Analysis of the Factors Influencing the Cultivation of the Core Accomplishment of Physical Education for Senior High School Students in Xi'an	Master's Thesis of Xi'an Institute of Physical Education	2019
Jun Jie	Research on the Physical Education Optional Teaching in Provincial Demonstrative Senior Middle Schools in Four Districts of Shijiazhuang City	Master Degree Thesis of Hebei Normal University	2019
Ping Lu	Research on the Status Quo and Cultivation Countermeasures of the Core Accomplishment of High School Students' Physical Education Subject	Master's Thesis of Qiannan Normal University for Nationalities	2019
Xiaona Sun	Research on Cultivation Strategies of Core Accomplishment of High School Students in Physical Education	Ludong University Master Thesis	2018
Yaru Liu	Research on the Cultivation of Core Accomplishment of High School Students in Physical Education	Shandong University Master Thesis	2017
Wei He	Research on Strategies of Cultivating the Core Accomplishment of High School Students in Physical Education	"Research on the Development of Teachers' Teaching Ability" Scientific Research Achievements (Volume 12)	2017

#### 4.2 Interview method

Face-to-face interviews with parents of senior high school students in Yangling District, Xianyang City, Shaanxi Province. Understand their knowledge and understanding of the core literacy of physical education, as well as some of their views and requirements for children. Ask targeted questions, and sort out the writing of this article in an orderly manner by collecting the views of the parents who answered the questions and the reasons for answering the questions.

#### 4.3 Questionnaire survey method

Using the stratified cluster sampling method, high school students from 4 middle schools were selected, including Yangling Middle School in Yangling District, Xianyang City, Shaanxi Province, the Affiliated Middle School of Northwest Agriculture and Forestry University, Shaanxi Academy of Agricultural Sciences

Children School, and Yangling District Gaoxin Middle School in Shaanxi Province. According to the grade stratification, the whole group is selected by class as a unit, and some students who have incomplete test items and have not been tested due to illness or other reasons are excluded. A total of 1474 high school students are selected, as shown in Table 2. There are 828 students in high school, 383 students in high school and 263 students in high school. Among them, 737 are boys and 737 are girls. Yangling Middle School has 828 students, 414 boys and 414 girls. There are 384 high school affiliated to Northwest Agriculture and Forestry University, 192 boys and 192 girls. Shaanxi Academy of Agricultural Sciences has 198 children's schools, with 99 boys and 99 girls. There are 64 high schools in Yangling District, Shaanxi Province, including 32 boys and 32 girls.

Table 2 Basic situation of survey subjects

Tuble 2 Busic situation of survey subjects								
Name	Option	Frequency□	Percentage (%)	Cumulative percentage (%)				
C1	Male	737	50	50				
Gender	Female	737	50	100				
	Freshman	828	56.17	56.17				
Grade	Sophomore	383	25.98	82.16				
	Junior	263	17.85	100				
Total		1474	100	100				

The questionnaire was designed by using the questionnaire survey method and drawing on the core literacy indicators and content of the physical education subject in the "Ordinary High School Sports and Health Curriculum (2017 Edition)". Design a questionnaire on the core literacy of students' sports

discipline from three aspects: athletic ability, healthy behavior and sports morality. At the same time, referring to relevant literature, self-designed "Questionnaire on the Core Literacy Status and Influencing Factors of High School Students in Yangling District, Xianyang City, Shaanxi Province".

The questionnaire consists of two parts: the status of the core literacy of high school students in the physical education discipline of Yangling District, Xianyang City, Shaanxi Province and the influencing factors of the formation of the core literacy of high school students in the physical education discipline. Among them, each part of the question is set as exercise ability Q1-Q8, healthy behavior Q9-Q19, and sports morality Q20-Q26. Each part of the influencing factors is set as school factors Y1-Y5, family factors Y6-Y10, personal factors Y11-Y13, and social factors Y14-Y18. In the design of the questionnaire, each question is divided into five levels according to the Likert scale, and the question options of the core literacy status of high school students in the physical education subject are set as: completely disagree, disagree, basically agree, relatively agree, and totally agree. When dealing with the data of the questionnaire on the core literacy status of the Tibetan college students in the physical education subject, the positive questions are used, and the values are 1, 2, 3, 4, and 5 respectively. The higher the individual score in each dimension, it means that the core literacy of the student's physical education discipline is approximately close to the best level. The questionnaire was finalized after expert appraisal, pre-survey and reliability and validity test. The Cronbach α coefficient of the questionnaire was 0.898, which was greater than 0.70, indicating that the questionnaire has high reliability. The validity of the questionnaire is averagely scored as 89.5 by experts, which is greater than 80.0, indicating that the questionnaire has high reliability. The content of the questionnaire includes gender, grade, athletic ability,

healthy behavior and sports morality, as well as school level, family factors, personal level and social level factors. The questionnaire will be issued from March 24, 2021 to May 10, 2021. After training, the investigator will organize students to fill out the questionnaire in a centralized manner by class and collect it in time.

The data obtained are all used Excel and SPSS22.0 software for quantitative coding statistics, analysis and processing. When analyzing the data, the average of each value is used for comparison. The average value represents the equilibrium state of the data. The higher the average value, the higher the student's core literacy level of physical education. Within the range of the mean value, the quantization settings are performed according to the options. The lowest score is 1 point and the highest score is 5 points. The core literacy level of the physical education subject is divided into four ranges: 1-2 points; 2-3 points; 3-4 points; 4-5 points. If the average value is within the range of 1-2, it indicates that the core literacy of the physical education subject of the students is between level one and level two. If the average value is within the range of 2-3, it indicates that the core literacy of the physical education subject of the students is between level two and level three. If the average value is within the range of 3-4 values, it indicates that the core literacy of the physical education subject of the students is between level three and level four. If the average value is within the numerical range of 4-5, it indicates that the core literacy of the students' physical education is between level four and level five. See Table 3.

Table 3 Investigation of the core literacy status of high school students and college students in physical education disciplines

Title	Sample	Minimum value	Maximum value	Average value	Standard Deviation	Median
Q1: I think physical fitness is very important to study and life	1474	1	5	4.236	0.957	5
Q2: I usually make a reasonable physical exercise plan for myself	1474	1	5	3.655	0.98	4
Q3: I will arrange the exercise reasonably according to the plan I made	1474	1	5	3.665	0.988	4
Q4: I know how to evaluate my own exercise effect	1474	1	5	3.524	0.978	3
Q5: I can briefly evaluate important sports events at home and abroad	1474	1	5	3.147	1.177	3
Q6: I can use the sports skills I have mastered to participate in demonstrations or competitions in the class	1474	1	5	3.248	1.054	3
Q7: I basically master the judging methods of the sports that I learn	1474	1	5	3.147	1.055	3
Q8: I can use the basic knowledge of sports that I have learned to organize some sports competitions	1474	1	5	3.17	1.141	3
Q9: I think physical exercise is good for your health	1474	1	5	4.493	0.836	5
Q10: In my spare time, I often participate in sports competitions organized by the school	1474	1	5	3.461	1.067	3
Q11: I usually do warm-up activities before exercise	1474	1	5	4.021	1.045	4
Q12: After the exercise, I will do some relaxing activities such as stretching	1474	1	5	4.046	1.001	4
Q13: I usually study on time, rest on time, and exercise properly	1474	1	5	3.727	1.027	4
Q14: If a sports injury occurs during exercise, I know how to deal with it	1474	1	5	3.55	1.125	3
Q15: I will reasonably arrange my diet and nutrition according to the intensity of exercise	1474	1	5	3.664	1.018	4
Q16: In daily life, my relationship with people is handled very well	1474	1	5	3.955	0.87	4
Q17: In sports, study and life, I can maintain a better stable mood	1474	1	5	3.845	0.994	4
Q18: I can adapt well to the changes in the natural environment	1474	1	5	3.884	0.899	4
Q19: I understand health knowledge and can apply it to life	1474	1	5	3.798	0.908	4
Q20: In the process of running, I am tired in the middle, I will still insist on finishing the run	1474	1	5	3.731	1.068	4
Q21: I am not afraid of dirty, hardship, or injury. I dare to actively participate in sports	1474	1	5	2.219	1.266	2
Q22: I will consciously participate in sports learning in accordance with sports regulations	1474	1	5	3.85	0.917	4
Q23: I will consciously participate in sports competitions in accordance with the rules of the game	1474	1	5	3.888	1.09	4
Q24: In sports, I will consciously respect my peers, opponents, and referees	1474	1	5	4.297	0.894	5

Q25: I understand the responsibilities of the athlete role and can experience different athlete roles	1474	1	5	3.75	1.001	4
Q26: When I have not achieved my ideal results in sports, I still insist on physical training and learning	1474	1	5	3.923	1.102	4

#### 4.4 Mathematical statistics method

This article uses SPSS22.0 statistical software to process the relevant results of the questionnaire survey and uses EXCEL statistical software to perform statistical processing and analysis of the relevant survey results. And produce the corresponding chart. Analyze the survey data of the core literacy of high school students in physical education in Yangling District, Xianyang City, Shaanxi. To province Provide a basis for detailed preparation for the training suggestions put forward in this article.

#### 4.5 Logical analysis method

Summarize and sort out related data from literature and questionnaire surveys, and analyze the statistical data using methods such as synthesis, analysis, and comparison. The status quo of the core literacy of physical education of high school students in Yangling District of Xianyang City, Shaanxi Province and the teaching situation of teachers are analyzed. Draw out the influencing factors, discover the main problems that exist, and explore the corresponding training strategies.

#### 5. RESULTS

- 5.1 Analysis of the status quo of the cultivation of the core literacy of sports disciplines for high school students in Yangling District, Xianyang City, Shaanxi Province
- 5.1.1 Status Quo of Cultivating Sports Ability of High School Students in Yangling District, Xianyang City, Shaanxi Province

Table 4 List of current situation of high school students' athletic ability in Yangling District, Xianyang City, Shaanxi Province

Name	Option	Frequency	Percentage (%)	Cumulative percentage (%)
	Absolutely disagree	28	1.9	2.1
1.1:1.1.1.1.6.	Disagree	17	1.15	3.05
I think physical fitness is very important to study and life	Basically agree	278	18.86	21.91
	Quite agree	398	27	48.91
	Totally agree	753	51.09	100
	Absolutely disagree	21	1.42	1.42
	Disagree	119	8.07	9.5
I usually make a reasonable physical exercise plan for myself	Basically agree	566	38.4	47.9
exercise plan for myself	Quite agree	410	27.82	75.71
	Totally agree	358	24.29	100
	Absolutely disagree	22	1.49	1.49
	Disagree	116	7.87	9.36
I will arrange the exercise reasonably	Basically agree	569	38.6	47.96
according to the plan I made	Quite agree	394	26.73	74.69
	Totally agree	373	25.31	100
	Absolutely disagree	27	1.83	1.83
	Disagree	148	10.04	11.87
I know how to evaluate my own	Basically agree	616	41.79	53.66
exercise effect	Quite agree	392	26.59	80.26
	Totally agree	291	19.74	100
	Absolutely disagree	70	4.75	5.97
, , , g , , , , , , , , , , , , , , , ,	Disagree	290	19.67	24.42
I can briefly evaluate important sports events at home and abroad	Basically agree	625	42.4	66.82
events at home and abroad	Quite agree	277	18.79	85.62
	Totally agree	212	14.38	100
	Absolutely disagree	60	4.07	4.07
I can use the sports skills I have	Disagree	275	18.66	22.73
mastered to participate in	Basically agree	603	40.91	63.64
demonstrations or competitions in the	Quite agree	311	21.1	84.74
ciass	Totally agree	225	15.26	100
	Absolutely disagree	72	4.88	4.88
	Disagree	311	21.1	25.98
I basically master the judging methods	Basically agree	621	42.13	68.11
of the sports that I learn	Quite agree	269	18.25	86.36
	Totally agree	201	13.64	100
	Absolutely disagree	76	5.18	6.04
I can use the basic knowledge of	Disagree	267	18.11	23.27
sports that I have learned to organize	Basically agree	627	42.54	65.81
some sports competitions	Quite agree	300	20.35	86.16
· · · · ·	Totally agree	204	13.84	100
Total	, <u>,</u>	1474	100	100

It can be seen from Table 4 that 51.09% of the sample of senior high school students in Yangling District, Xianyang City, Shaanxi Province chose "completely

agree". From the point of view that I generally make a reasonable physical exercise plan for myself, more than 30% of the samples are "basically agree". From

the fact that I will reasonably arrange the distribution of exercise according to the plan I made, most of the samples are "basically agreed", and the proportion is 38.60%. From the distribution of the methods I know how to evaluate the effect of exercise, most of the samples are "basically agree", the proportion is 41.79%. 42.40% of the samples selected "basically agree". 40.91% of the sample would choose "basically

agree". 42.13% of the samples are "basically agree". I can use the basic knowledge of sports that I have learned to organize more than 40% of the samples in some sports competitions to choose "Basically Agree". 5.1.2 The status quo of the cultivation of healthy behaviors of high school students in Yangling District, Xianyang City, Shaanxi Province

Table 5 List of current health behaviors of senior high school students in Yangling District, Xianyang City, Shaanxi Province

N		IXI I TOVINCE	D (0/)	G 1.: (0/)
Name	Option	Frequency	Percentage (%)	Cumulative percentage (%)
	Absolutely disagree	11	0.75	0.75
I think physical exercise is good for	Disagree	9	0.61	1.36
your health	Basically agree	238	16.15	17.5
your nearm	Quite agree	200	13.57	31.07
	Totally agree	1016	68.93	100
	Absolutely disagree	49	3.32	3.32
In my spare time, I often participate	Disagree	186	12.62	15.94
in sports competitions organized by	Basically agree	598	40.57	56.51
the school	Quite agree	318	21.57	78.09
	Totally agree	323	21.91	100
	Absolutely disagree	23	1.56	1.83
	Disagree	50	3.39	4.95
I usually do warm-up activities			29.92	I .
before exercise	Basically agree	441		34.87
	Quite agree	307	20.83	55.7
	Totally agree	653	44.3	100
<u> </u>	Absolutely disagree	16	1.09	1.09
After the exercise, I will do some	Disagree	58	3.93	5.02
relaxing activities such as stretching	Basically agree	435	29.51	34.53
relaxing activities such as stretching	Quite agree	298	20.22	54.75
Ī	Totally agree	667	45.25	100
	Absolutely disagree	28	1.9	1.9
	Disagree	109	7.39	9.29
I usually study on time, rest on time,	Basically agree	537	36.43	45.73
and exercise properly	Quite agree	363	24.63	70.35
-	Totally agree		29.65	100
	Absolutely disagree	437		
<u> </u>		42	2.85	3.66
If a sports injury occurs during	Disagree	140	9.5	12.35
exercise. I know how to deal with it	Basically agree	561	38.06	50.41
energies, rame water to dear want to	Quite agree	392	26.59	77
	Totally agree	339	23	100
	Absolutely disagree	26	1.76	1.76
I will reasonably arrange my diet	Disagree	132	8.96	10.72
and nutrition according to the	Basically agree	542	36.77	47.49
intensity of exercise	Quite agree	385	26.12	73.61
·	Totally agree	389	26.39	100
	Absolutely disagree	8	0.54	0.54
<u> </u>	Disagree	29	1.97	2.51
In daily life, my relationship with	Basically agree	458	31.07	33.58
people is handled very well	Quite agree	506	34.33	67.91
-	Totally agree	473	32.09	100
<u> </u>	Absolutely disagree	19	1.25	1.76
In sports, study and life, I can	Disagree	52	3.53	4.82
maintain a better stable mood	Basically agree	485	32.9	37.72
mamain a sener static mood	Quite agree	479	32.5	70.22
	Totally agree	439	29.78	100
	Absolutely disagree	10	0.68	0.68
The standard of the standard o	Disagree	47	3.19	3.87
I can adapt well to the changes in the	Basically agree	489	33.18	37.04
natural environment	Quite agree	486	32.97	70.01
<del> </del>	Totally agree	442	29.99	100
	Absolutely disagree	12	0.81	0.81
<del> </del>	Disagree	56	3.8	4.61
I understand health knowledge and	Basically agree			
can apply it to life		546	37.04	41.66
-^ ·	Quite agree	464	31.48	73.13
	Totally agree	396	26.87	100
Total		1474	100	100

It can be seen from Table 5: I believe that physical exercise is beneficial to physical health. According to the distribution, most of the samples are "completely

agree", there are 1016.0 in total, accounting for 68.93%. In my spare time, I often participate in sports competitions organized by the school and more than

40% of the samples choose "Basically Agree". 44.30% of the sample was "completely agree". 45.25% of the sample was "fully agree". 36.43% of the sample would choose "basically agree". Judging from the fact that I know how to deal with sports injuries that occur during exercise, there are relatively more "basic consents" in the sample, with a ratio of 38.06%. According to the intensity of exercise, I will rationally arrange my own diet and nutrition distribution. Most of the samples are "basically agree", with 542.0 in total, accounting for 36.77%. In daily life, the relationship between me and people is handled very well. More than 30% of the samples choose "relatively agree". There are also 32.09% of the samples completely agree. Judging from the fact that I can maintain a good stable mood in

sports, study and life, more than 30% of the samples are "basically agree". There are also 32.50% of the samples "relatively agree". From the perspective of my ability to adapt to the distribution of changes in the natural environment, most of the samples are "basically agree", with a total of 489.0, accounting for 33.18%. And the proportion of the "relatively agree" sample is 32.97%. From the fact that I understand health knowledge and can apply it to distribution in life, most of the samples are "basically agree", the proportion is 37.04%. In addition, the proportion of the "relatively agree" sample is 31.48%.

5.1.3 Status Quo of Cultivation of Sports Morality for Senior High School Students in Yangling District, Xianyang City, Shaanxi Province

Table 6 List of current status of sports morality of high school students in Yangling District, Xianyang City, Shaanxi Province

Name	Option	Frequency	Percentage (%)	Cumulative percentage (%)
	Absolutely disagree	26	1.76	2.37
	Disagree	96	6.51	8.28
In the process of running, I am tired in the middle, I will still insist on finishing the run	Basically agree	513	34.8	43.08
middle, I will still insist on finishing the run	Quite agree	426	28.9	71.98
	Totally agree	413	28.02	100
	Absolutely disagree	540	36.64	36.64
T C . I C I . I . I	Disagree	454	30.8	67.44
I am not afraid of dirty, hardship, or injury. I dare to actively participate in sports	Basically agree	229	15.54	82.97
dare to actively participate in sports	Quite agree	119	8.07	91.04
	Totally agree	132	8.96	100
	Absolutely disagree	9	0.61	0.61
T 70 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Disagree	52	3.53	4.14
I will consciously participate in sports learning in accordance with sports regulations	Basically agree	537	36.43	40.57
in accordance with sports regulations	Quite agree	429	29.1	69.67
	Totally agree	447	30.33	100
	Absolutely disagree	23	1.56	2.31
I will consciously participate in sports	Disagree	55	3.73	5.29
competitions in accordance with the rules of	Basically agree	499	33.85	39.15
the game	Quite agree	351	23.81	62.96
	Totally agree	546	37.04	100
	Absolutely disagree	9	0.61	0.61
T ( T 21)	Disagree	18	1.22	1.83
In sports, I will consciously respect my peers, opponents, and referees	Basically agree	327	22.18	24.02
opponents, and referees	Quite agree	292	19.81	43.83
	Totally agree	828	56.17	100
	Absolutely disagree	18	1.22	1.22
1 1 4 14 227 64 414	Disagree	106	7.19	8.41
I understand the responsibilities of the athlete role and can experience different athlete roles	Basically agree	542	36.77	45.18
role and can experience different athlete roles	Quite agree	369	25.03	70.22
	Totally agree	439	29.78	100
	Absolutely disagree	30	2.03	2.94
When I have not achieved my ideal results in	Disagree	36	2.44	4.48
sports, I still insist on physical training and	Basically agree	473	32.09	36.57
learning	Quite agree	374	25.37	61.94
	Totally agree	561	38.06	100
Total	-	1474	100	100

It can be seen from Table 6 that 34.80% of the samples selected "basically agree". I am not afraid of getting dirty, not afraid of hardship, and not afraid of injury. I dare to take an active part in sports. According to the distribution, most of the samples are "completely disagree", with 540.0 in total, accounting for 36.64%. Another 30.80% of the samples disagree. According to the sports regulations, I will consciously participate in sports learning distribution. Most of the samples are "basically agreed", with a total of 537.0, accounting for 36.43%. In addition, the proportion of the "completely agree" sample is 30.33%. Judging from the fact that I will consciously participate in sports competitions in accordance with the rules of the game, there are relatively more "completely agree" in the

sample, with a ratio of 37.04%. In addition, the proportion of the "basically agree" sample is 33.85%. The percentage of the sample who chose "fully agree" was 56.17%. From my understanding of the responsibilities of an athlete's role and the ability to experience the distribution of different athletes' roles, most of the samples are "basically agreed", with a ratio of 36.77%. When I have not achieved ideal results in sports, I still insist on physical training and learning, and "completely agree" accounts for the highest proportion of 38.06%. In addition, the proportion of the "basically agree" sample is 32.09%.

5.2 Analysis of influencing factors of the core literacy of physical education of senior high school students in Yangling District, Xianyang City, Shaanxi Province

From the previous literature review, it can be seen that personal factors are also important factors that affect the formation of students' core literacy in physical education. Therefore, the influence of school-level factors, family-level factors, personal-level factors,

and social-level factors on the formation of core literacy of high school students in Yangling District, Xianyang City, Shaanxi Province is discussed. The results of the questionnaire are shown in Table 7.

Table 7 Factors influencing the formation of core literacy of high school students' physical education disciplines

Title	Sample	Minimum value	Maximum value	Average value	Standard Deviation	Median
Y1: School sports facilities are not good, which affects my active participation in physical exercise	1474	1	5	2.862	1.21	3
Y2: The school physical exercise atmosphere is not good, which affects my active participation in physical exercise	1474	1	5	2.803	1.21	3
Y3: The pressure of study affects my active participation in physical exercise	1474	1	5	2.71	1.259	3
Y4: I like what the physical education teacher teaches	1474	1	5	3.756	0.955	4
Y5: I like the teaching method of physical education teachers	1474	1	5	3.766	0.95	4
Y6: My parents prefer sports and often take part in physical exercises	1474	1	5	3.172	1.211	3
Y7: My parents often tell me the importance of physical exercise	1474	1	5	3.452	1.093	3
Y8: My parents will often urge me to take part in sports activities both inside and outside of class	1474	1	5	3.507	1.057	3
Y9: My parents only remind me to complete my schoolwork, and seldom remind me to take part in physical exercise	1474	1	5	2.717	1.275	3
Y10: My parents support my spending on physical exercise	1474	1	5	3.545	0.989	3
Y11: I prefer sports	1474	1	5	3.78	1.013	4
Y12: I think strengthening physical exercise is of great significance to my life now and in the future	1474	1	5	3.988	1.109	4
Y13: I think participating in physical exercise can improve learning efficiency	1474	1	5	3.872	0.965	4
Y14: I live in a place where sports competitions are held from time to time	1474	1	5	2.998	1.269	3
Y15: The place where I live has basic sports venues or equipment	1474	1	5	3.494	1.103	3
Y16: I think the social atmosphere for people to participate in physical exercise is better	1474	1	5	3.634	1.156	4
Y17: The local government attaches great importance to sports	1474	1	5	3.515	1.017	3
Y18: The place where I live usually promotes sports knowledge	1474	1	5	3.229	1.099	3

According to the data in Table 7, the Person correlation test is used to obtain a correlation test table between the various levels and the formation of the core literacy of the sports discipline of high school students in Yangling District, Xianyang City, Shaanxi Province. See Table 8. It is generally believed that the absolute value of the correlation coefficient is less than or equal to 0.39 is regarded as low correlation, between 0.40 and 0.69 is regarded as moderate correlation, and greater than or equal to 0.70 is regarded as high correlation. It can be seen from Table 5 that the order of correlation with the core literacy of high school students' physical education disciplines is: school

level>personal level>family level>social level. From the data in the table, we can see that, on the whole, school-level factors and individual-level factors form a correlation coefficient with high school students' core literacy in physical education disciplines> 0.70. It shows that there is a significant correlation between the two and the core literacy of high school students in physical education. The correlation coefficient between family-level factors and social-level factors and the core literacy of high school students in physical education is 0.70>R>0.40. Description is moderately relevant.

Table 8 Correlation analysis of various influencing factors and the formation of core literacy of high school students in physical education discipline

		School level	Family level	Personal level	Social level	
	Person Correlation	0.832**	0.606**	0.718**	0.578**	
Core literacy of physical education	Significance (bilateral)	0.000	0.000	0.000	0.000	
	N (effective)	1474	1474	1474	1474	
** p<0.01						

5.3 Strategies for the cultivation of core physical education literacy of high school students in Yangling District, Xianyang City, Shaanxi Province

The current linkage between school education, society and family is the weakest link in the development of the core literacy of students' disciplines. Therefore, cultivating the core literacy of students' disciplines should be a combination of school education, society and family, and work together to cultivate the core literacy of sports disciplines of high school students in Yangling District, Xianyang City, Shaanxi Province. 5.3.1 School level

First, train qualified physical education teachers. To

realize the reform of classroom teaching, the most important thing is to have a physical education teacher who has good subject understanding and teaching innovation ability and can play a demonstrative and leading role. Physical education and sports are the carriers for the development of the core elements of the physical education discipline of students[56]. The realization of all goals in teaching activities is guided by the regulation of teachers' teaching strategies, teachers' teaching design and professional knowledge. Therefore, a qualified physical education teacher is the prerequisite and guarantee for the development of the core literacy of the students' physical education subject. One is the

cultivation of teacher ethics. The expectation of teachers in the new era is to "provide morality and foster people." Teachers' "ethics" is the foundation that leads students to grow up healthily and develop sturdily. For the healthy growth of students, teachers should further strengthen their own teacher ethics. First of all, cultivate teachers' spirit of being dedicated to their jobs and fulfilling their duties. That is, at work, stick to school rules and regulations, urge oneself to treat sports work as one's own career, and treat it with heart. Don't be passive, and don't act loosely. Prepare lessons carefully and teach each lesson carefully. The second is the cultivation of teacher's love. Love is the core of teacher's morality and at the same time the charm of teacher's morality. Only when a physical education teacher has a selfless dedication, can he pay attention to every student wholeheartedly and devote himself to education. This is a kind of selfless love that requires teachers to develop slowly over a long period of time. Finally, in all kinds of sports activities, train teachers to not forget the original heart of education. Sports activities are normalized in physical education. Therefore, these activity scenes must be carefully organized to cultivate morality and emotions, and strive to render students with their own perfect personality and cultivate students with noble sentiments. To shape people with a healthy image, and never forget to cultivate students' healthy personality and noble sentiment in educational activities.

Second, the cultivation of the core literacy of physical education teachers. Ningzhong Shi, president of Northeast Normal University, believes: cultivation of the core literacy of students will ultimately fall on the cultivation of the core literacy of the subject." The core literacy of physical education teachers refers to the comprehensive reflection of the three dimensions of a high sense of social responsibility, a solid theoretical foundation and superb sports skills. Physical education teachers are the core of cultivating the core competence of students. Only physical education teachers with core competence can better cultivate the core competence of students in physical education discipline. The first is to cultivate a high sense of responsibility for physical education teachers. Social responsibility is a comprehensive expression of educational philosophy, educational emotion, educational wisdom and teaching style. China's physical education has undergone many reforms, and it is still facing the longterm worrying physical and health problems of students, which have not brought practical results. Facing the problem of safety in the implementation of physical education curriculum, teachers should be strengthened to take up the spirit of innovation. Facing the marginalization of sports, cultivate teachers' willingness to teach and dedication. Only in this way can we solve the problems faced by physical education from the source and promote the cultivation of students' core literacy in physical education. The second is to cultivate teachers' basic theoretical

knowledge. Whether the basic theoretical knowledge of physical education teachers is solid or not restricts the comprehension ability of physical education teaching. Basic theoretical knowledge mainly includes educational psychology, sports human science, sports health science, teaching and training, physical education teaching design, implementation, evaluation, etc. The cultivation of these basic theoretical knowledge will directly determine whether a teacher can "teach", "church", "teach well" and "teach through" abilities. The last is to cultivate teachers' superb motor skills. As the saying goes: "To give students a scoop of water, teachers need to have a jar of water." Before teaching students motor skills, teachers need to have superb motor skills. Training teachers' superb sports skills mainly includes sports competition, sports training and management, technical and tactical innovation, etc. As a physical education teacher under the background of cultivating the core literacy of students, it is far from enough to only know the sports technical specifications and corresponding teaching methods. From the perspective of sports technology alone, physical education teachers who can only explain, demonstrate, and correct errors can no longer meet the needs of schools to cultivate students' core literacy in physical education. Therefore, teachers should strengthen the training and learning of sports skills.

Third, choose an appropriate method of physical education. The correct choice of physical education teaching methods is one of the basic conditions for cultivating students' interest in sports. The survey results show that most students do not like the teaching methods of physical education teachers. For this reason, attention should be paid to the selection of teaching methods in physical education in the future, not only to facilitate the cultivation of students' interest in sports, but also to consider the characteristics of the physical and mental development of high school girls. Liu Ji and Bingshu Zhong believe that most girls do not like sports at present, even in physical education classes, they are in a passive state, and most of them use evasive methods to attend physical education classes. First, it is possible to carry out optional teaching in the class, so that students can choose their favorite projects for learning, and it is helpful to promote students' enthusiasm for participating in sports. Second, avoid the previous teaching method: "teacher demonstration, students imitate, teacher error correction, and students practice". In physical education, more situations are set up. For example, in the teaching of aerobics, the teacher can teach the students a few basic steps, and then ask the students to make up their own upper body movements. When students have basically mastered the basic steps and the creation of upper limb movements, increase the difficulty and let the students choose equipment. Create another step to enrich the action content. Finally, we teach the grading method of aerobics competitions, and end the teaching of this class in the form of demonstration competitions, allowing students to learn in a complex, competitive and cooperative environment. It is not only conducive to the cultivation of students' self-study ability, but also

conducive to the cultivation of the student group's combination of work morality. Third, the cultivation of the core literacy of students is developmental and staged. The core literacy of different grades is different, and the focus of teaching is also different. When choosing a teaching method, we must consider the characteristics of students' physical and mental development. Based on the development of the core literacy of students, different teaching methods and different organizational forms are adopted to cultivate students' innovative ability and the ability to adapt to social development, and lay a good foundation for students' future development.

Fourth, strengthen the goal of physical education. Teachers should have a clear sense of goal, establish the idea of goal-leading content and methods, and refine the curriculum goals to the ability of each learning goal. To achieve the training of students' athletic ability, healthy behavior and sports morality by achieving the goals of each class. On the one hand, teachers must deeply understand and practice the idea of "target leading content and methods". The curriculum objectives in the physical and health curriculum standards formulated by the country are detailed into each plan, and the learning objectives should be fully connected with the core literacy of the subject. The general goals and sub-targets proposed in the "Sports and Health Curriculum Standards (2017 Edition)" actually refine and penetrate the core literacy of the subject, which points out the direction for our majority of frontline teachers. On the other hand, physical education teachers should refine the core literacy of the subject into different types of learning when designing the lesson plan, module teaching plan and class time teaching plan. Then through continuous implementation at different levels, and finally through the form of classroom teaching to implement the cultivation of students' core literacy of physical education.

Fifth, establish a knowledge view of physical education teaching. If the physical education class still does not change the viewpoints of "knowledgecentered theory" and "sports technology theory", and keeps the teaching of a single technique unchanged for decades, it will be impossible to cultivate students' athletic ability. The survey results show that the current high school students have poor technical and tactical abilities and display and competition abilities. Therefore, in the future physical education teachers in the classroom teaching. First of all, the teaching of single knowledge or single technical action should be avoided, and students should learn to use structured knowledge and skills to solve problems. Every sport is composed of interrelated knowledge points and technical movements. It is impossible to learn a certain sport well with one or two individual movements. Therefore, in physical education, teachers should pay attention to the combination of multiple techniques and the overall application when teaching a certain sport. Secondly, teachers need to create rich and

diverse situations, especially complex situations, to develop students' methods of learning, mastering, and using sports and health knowledge and skills. Actively guide students to learn, think and practice sports and health knowledge and skills in the context, and internalize them into relevant knowledge and abilities. Only in this way can it help cultivate students' strong will and quality, good emotional control ability and cooperative spirit, and improve the core competence of students. As the famous educator Pestalozzi said: "Skills and abilities can only be developed through practical application." Finally, we must guide students to learn to use structured knowledge and skills to solve problems. In classroom teaching, teachers should attach great importance to guiding students to learn and practice structured knowledge and skills, and experience a complete sport. Promote students to improve a variety of technical levels in the process of performing a complete exercise, enhance physical fitness, improve students' athletic ability, and cultivate students' healthy behavior and sports morality. It turns the process of teaching students' physical fitness and motor skills into a process of cultivating students' core literacy of subjects, changing the situation that students have been unable to master a complete sport in their physical learning all the time.

Sixth, rationally organize physical education content. The organization of physical education content is a complex systematic project. It is not only necessary to consider whether it conforms to the actual life of the students, but also whether it is helpful to cultivate the students' core literacy of physical education. The survey found that the physical health of the students was poor, and the students did not like the content taught by the physical education teachers. Therefore, the selection of physical education content in the future should be based on the three dimensions of athletic ability, healthy behavior and sports morality. And because of the differences in the core literacy of students of different grades and genders. It is suggested that teachers should adopt the principle of spiral upward as much as possible when organizing physical education content, and choose teaching content according to the differences between the core literacy of the students, the characteristics of physical and mental development, and the interests of students. First of all, add ten minutes of physical exercises to the teaching content of each class. Physical exercises should be combined with special sports, and combined with special action design physical exercises. This is not only conducive to special teaching, but also helps to improve students' physical fitness. Secondly, in the selection of physical education teaching content, the connection between the content and the individual life of the students should be strengthened. It is not only necessary to improve students' athletic ability, but also to focus on the teaching of health knowledge and the cultivation of students' healthy behaviors. It is also necessary to train students to apply the healthy behaviors and excellent sports morality learned in the physical education class to their lives. Finally, physical education teachers should fully analyze the educational value of physical education content, instead of staying on the important and difficult points of analyzing the teaching content, pay attention to the organization of physical education content should combine the explicit curriculum content with the invisible curriculum content. The explicit content of the curriculum is the content of the learning stipulated in the textbook, and it is to promote the student's athletic ability. Invisible curriculum content refers to the potential situations outside of formal learning, such as the relationship between teachers and students, the relationship between students and students, and the relationship between teammates and teammates in the game. These potentially invisible courses are just the carriers of cultivating students' healthy behaviors and sports morality, so physical education teachers should grasp and use them.

Seventh, choose a variety of physical education evaluation methods. At present, PE teaching pays too much attention to the teaching of students' motor skills and knowledge, and always pays attention to the evaluation of cognitive goals but ignores the development of students' non-intellectual factors. The evaluation method is single and the evaluation grades are formulated according to the degree of achievement of the students' sports performance. For students' emotional attitudes and specific performances in the learning process, content that is too subjective and difficult to measure and evaluate is ignored, leading to students not getting comprehensive development. Except for the improvement of motor skills, students' healthy behaviors and sports ethics will not be developed. The core literacy concept of the physical education discipline puts forward corresponding requirements for the evaluation of students' sports learning. Students' sports skills can be measured explicitly, but the evaluation of healthy behavior and sports morality needs to rethink the problem of physical education evaluation. Based on this, the evaluation of physical education teaching to develop the core literacy of students' physical disciplines must change from a single-subject evaluation to a multiplesubject evaluation, not only the evaluation of students' sports skills, but also the evaluation of students' health behavior and sports morality. For this reason, physical education teachers can formulate corresponding learning evaluation standards for teaching practice. For example, the evaluation of healthy behaviors can be based on whether they can show preparation activities before physical exercise, relax after exercise, healthy eating, good hygiene habits, prevent sports injuries, have a good attitude and other indicators for the development of classroom scales. Used to evaluate students' classroom health behaviors and classroom performance. The latter lies not only in the evaluation of physical education teachers. Students' selfevaluation, inter-student evaluation, inter-group evaluation, and parental evaluation are also required to examine students' learning conditions and realize the diversification of subject evaluation.

#### 5.3.2 Family level

First, cooperate with school sports work arrangements. The cultivation of the core literacy of physical education is far from enough by the school alone. It requires the combination of family education and school education to get twice the result with half the effort. On the one hand, it is to supervise the completion of students' homework for sports. At present, there is still a phenomenon of attaching importance to cultural achievements. When students return home, their parents first supervise the completion of homework in various subjects, and the completion of sports homework has never been supervised, leads to students learning which Achievements are cultivated, but the core literacy of physical education cannot be cultivated. Therefore, parents should pay attention to the completion of the students' homework for physical education, and give evaluations based on each completion situation, record each evaluation situation, unified comprehensive evaluation at the end of the term, and the final evaluation results are handed over to the school. On the other hand, it is to fully support and encourage students to participate in sports events organized by schools or related organizations to cultivate students' special skills. When necessary, you can take the students to participate in the competition, take care of the students and cheer for the students, and give the students spiritual support and encouragement. It not only cultivates students' athletic ability, but also promotes the development of students' healthy behaviors.

Second, establish a portfolio of students' daily life. Establish daily life archives for students, which are mainly used to record students' diet, work and rest, hygiene habits and daily participation in physical exercise. Parents can draw up a statistical table of healthy life management and weekly participation in physical exercises, record the students' daily exercise status, supervise students to develop good work and rest and healthy eating habits, and form the ability to manage their lives in a healthy manner. For example, the cultivation of good diet, work and rest and hygiene habits of students is more importantly derived from the family. Although most students now live on campus and are managed by the school, there are too many people in the school, which is not conducive to supervision. It is different at home. Parental supervision is more conducive to the development of healthy living habits of students. Furthermore, parents should spend more time with the students. Take more students to travel or participate in social activities to cultivate students' ability to adapt to the environment. Form optimistic, open-minded, tolerant and open-minded people who are good at interacting and cooperating with others and have strong ability to adapt to the environment to improve students' survival and living ability.

Third, develop the habit of leading students to participate in physical exercises. At present, most parents have not formed the awareness of guiding or actively leading students to participate in physical exercise. If parents like sports, they can bring their own students to exercise, or whether they like sports or not, they will urge students to take part in physical exercises. This will increase the cultivation of the core literacy of students in physical education to varying degrees. First of all, parents should be clear about the value and significance of cultivating the core literacy of the student's sports discipline, and actively participate in the school's training on the core literacy of the discipline. Parents should know what the core literacy of the student's sports discipline is, what value it has, and how to cultivate it. A clear understanding of the important value of cultivating students' core literacy in physical education and their role in training will be more conducive to the cultivation of students' core literacy. Second, provide sports venues or facilities for students. For example, parents can buy sports equipment such as treadmills for students, which not only solves the problem of not being able to participate in physical exercise in bad weather, but also prevents some students from being unwilling to go out for exercise. It allows students to exercise at home without going out and saves the time wasted due to exercise. Finally, parents should develop the habit of leading or supervising students to participate in physical exercise. Parents have a great influence on students. If parents encourage students to participate in physical exercises, students will change their rejection of physical exercises and actively participate in physical exercises. 5.3.3 Individual level

First, cultivate your own interest in sports. Interest is a psychological tendency with a strong color that promotes people to know things, understand things, and seek truth[57]. Moreover, this tendency has strong stability, which enables people to maintain their mental activities on certain things or activities for a long time. According to the survey, the main reason why students do not like to participate in sports activities is because they are not interested in sports and their own sports foundation is poor. To this end, on the one hand, students can watch more domestic and foreign sports events or participate in more extracurricular sports activities organized by the school to cultivate awareness and interest in sports. On the other hand, participate more in sports clubs and physical exercise activities carried out by the school to strengthen one's physical quality and cultivate one's own sports skills.

Second, correctly understand the value of physical exercise. The correct understanding of the value of physical exercise is a prerequisite for students to actively participate in physical exercise. Since ancient times, people have had prejudices against sports deep in their hearts. Therefore, students are influenced by this kind of thinking since childhood, and over time they will have prejudice against sports. Believe that sports will only make people "developed limbs and simple mind", they are unwilling to participate in physical exercise. Therefore, students need to feel the benefits of physical exercise before they can actively participate in physical exercise. First of all, students

can read sports books to understand the sports characteristics and sports value of different sports. Then take an active part in it according to your hobbies. Feel the benefits of this sport to your studies and life, and gradually you will have a good impression of physical exercise. Secondly, students can try to develop their own sports skills and fully understand the entertainment and pride that this sport brings to their lives. Finally, attend more lectures on sports to fully understand sports and understand the value of physical exercise.

#### 5.3.4 Social level

First, provide places for students to exercise. Cultivating students' physical education discipline is a big project. It requires the joint efforts and attention of the whole society to create a good atmosphere for physical exercise, so that high school students can form the consciousness of participating in physical exercise independently after studying. Providing sports training equipment and various types of sports fitness clubs is a prerequisite for students to actively participate[58]. If there are no conditions for sports training, it will weaken the enthusiasm of students to exercise to a certain extent. Sports equipment is the guarantee for effective exercise, and various types of fitness clubs meet the hobby needs of students. They can choose their favorite sports according to their hobbies and interests and conduct special exercises. Sports equipment and facilities can be arranged according to local conditions, and simple sports venues, such as basketball courts, badminton courts, and track and field fields, can be established in the communities where students live[59]. Or set up special sports areas in parks or squares and arrange sports equipment so that students can exercise places whether they are at home or outside. Various types of sports and fitness clubs mean that relevant departments should issue relevant policies to encourage those with lofty ideals to open various types of fitness clubs. With the guidance and protection of sports majors, the feasibility of students' independent exercise will be greatly increased. Students participating in this kind of fitness club, on the one hand, are conducive to students mastering scientific exercise methods, forming basic health skills, communicating with strangers and cooperating with peers, improving students' environmental adaptability and developing attention. A healthy and civilized lifestyle of being healthy, loving life, and cherishing life promotes the cultivation of students' healthy behaviors. On the other hand, the participation of students in this kind of training institution is conducive to strengthening the professionalism of the major they are learning, so that students not only master the basic sports skills of the major they are learning. Also master the skills and tactics of the selected sports and referee knowledge, know how to use the knowledge of the selected sports to comment on a game.

Second, encourage students to participate in social practice activities. Encouraging students to participate in sports activities organized by the community can increase communication between students and social personnel, enrich students' sports social emotions, and enhance

students' social adaptability. Relevant departments should vigorously support sports events organized by communities and encourage unity between communities. Only when the community or other departments organize sports events, students have the opportunity to participate in learning. According to the survey, at present, although people have the awareness of physical exercise, they are all doing exercises individually, without a scale, a unified management model and a unified exercise plan, which is not conducive to students' participation in exercise learning. Therefore, the relevant management departments should vigorously supervise and support the management. The community can select a special person in charge, organize and guide the community members to conduct physical exercises, give them funds, hold some sports events from time to time, introduce relevant policies, and encourage students to participate. Give them honor certificates or awards, and these certificates can be used as a reference for school evaluation and awards, and increase the importance of students' participation in social practice activities. In this way, it not only provides students with opportunities to participate in social practice activities, but also allows students to feel that physical exercise has been paid more and more attention, which has a certain impact on their psychology, and facilitates the cultivation of students' core literacy in physical education.

5.4 Cultivation path of high school students' sports core literacy in Yangling District, Xianyang City, Shaanxi

5.4.1 Innovating the teaching methods of high school sports theory knowledge

Physical education is one of the contents of physical education, but practice alone is not enough to achieve the goal of core literacy teaching. Theoretical teaching in physical education curriculum is also an important part of physical education curriculum. In the traditional physical education teaching process, physical education teachers often ignore theoretical teaching and pay more attention to the application of physical skills in practice. But theory is derived from practice and can in turn know practice. The teaching goal of core literacy is to achieve autonomous, active, and lasting fitness habits and ability development of high school students. And autonomous fitness requires high school students to have strong self-learning ability and can quickly master new movement essentials. After all, the time of classroom teaching is limited, and the content of physical education teaching is also limited. And the development speed of sports skills is also extremely fast. After leaving school, high school students must use their own learning ability to improve their athletic level. Therefore, in order to better enhance the enthusiasm of high school sports participation and better develop the core literacy of high school students, it is necessary to increase the optimization of the teaching methods of sports theory knowledge.

5.4.2 Innovating the organization of high school physical education

In the traditional physical education teaching process, physical education teachers simply repeat movements and conduct boring physical training. Simple and boring repetitive training will only increase the fatigue of students, produce a feeling of aversion to sports in the psychology, and have an adverse effect on the teaching effect of mastering sports skills. Therefore, in order to better improve the effectiveness of physical skills teaching, it is necessary to entertain and teach students to learn in happiness. Physical education teachers can enrich the content and form of physical education teaching by arranging some games. Of course, these games are selected according to the needs of the course content. For example, when learning track and field physical education content, teachers can create ways to organize competitions, enrich classroom teaching roles and other methods to enable high school students to participate in physical education more actively and actively. Let high school students cultivate their interest and hobbies in sports in the process of sports entertainment, and finally develop the habit of independent fitness, and complete the goal of lifelong fitness.

5.4.3 Increase the training of high school students' athletic ability

In order to better improve the ability to participate in high school physical education, it is necessary to break the traditional physical education process in the teaching process, take the teacher as the leading, and the student as the main body from the content of physical education, the form of physical education, the method of physical exercise, etc. Carry out targeted innovation and development to promote the pertinence and effectiveness of high school sports ability training. The core literacy clarifies the cultivation of high school students' innovative ability, which is also an ability urgently needed by society. To a large extent, the cultivation of innovative ability requires students to think independently. Physical education teachers should actively set up problems and tasks for students in the teaching process, and let students think and solve problems independently. In order to take care of students at different levels, the problems and tasks should be broken down to help students understand the problems and tasks and solve them smoothly. This will also help increase high school students' interest in sports learning and improve the lifelong and effectiveness of the development of sports awareness.

5.4.4 Enriching the content of high school physical education classroom teaching

China's extensive sports resources and culture provide abundant resources for high school sports participation. In the process of physical education reform, physical education teachers sometimes need some support from the school for the arrangement of physical education teaching process, including support in time, space and sports resources. In the process of promoting core literacy physical education, the school can fully integrate the

geographical advantages of the school, adapt measures to local conditions, and create unique physical education courses, which can increase the attractiveness of students. For example, in some minority areas, some minority sports activities can be taught to increase the sense of national identity. Moreover, learning through ethnic activities can also increase the sense of national pride, which in turn can better develop the cultural identity and patriotic emotional quality of high school students. Provide effective educational carriers and resource support[60]. 6. CONCLUSION

6.1 The status quo of the cultivation of core literacy of sports disciplines of high school students in Yangling District, Xianyang City, Shaanxi Province needs to be improved

#### 6.1.1 Athletic ability

The number of skills to master is insufficient, and physical fitness needs to be strengthened. The ability to formulate physical exercise plans, participate in and organize sports activities, and solve problems in sports practice is insufficient.

#### 6.1.2 In terms of healthy behavior

High school students can arrange their time reasonably, help their peers develop good living habits, and form correct and positive values. But there are also problems: poor awareness of physical exercise, lack of physical health knowledge and poor living and eating habits, at the same time, lack of self-worth in sports and poor ability to self-regulate emotions.

#### 6.1.3 In terms of sports morality

The students have good sports morality. But there are also problems: lack of sportsmanship that is tenacious and hard-working, not afraid of difficulties, obedience to referees, poor awareness of fair competition, inability to correctly view the outcome of competitions, and poor emotional experience in sports.

6.2 Multiple ways to cultivate the core literacy of sports disciplines for senior high school students in Yangling District, Xianyang City, Shaanxi Province

#### 6.2.1 Give full play to the role of the classroom

High school physical education classroom teaching is an important way to cultivate the core literacy of students' physical disciplines, and it is also the main way to impart sports knowledge, scientific exercise methods, and professional sports skills. Physical education courses can improve students' physical fitness, enhance their physical and mental health, and help students effectively acquire the required physical education knowledge, methods, and certain skills. At the high school stage, the cultivation of the core literacy of students' physical education is inseparable from classroom teaching. If high school students leave the physical education classroom, they will lose their position to systematically learn physical knowledge. It is difficult for teachers to transfer standardized health behaviors and correct health knowledge to students. At the same time, students' sports character and sportsmanship cannot be effectively guaranteed, and the training of athletic ability and the development of sports habits will also lose their professional foundation. Therefore, teachers must formulate a content plan for scientifically cultivating students' core literacy, match the plan with the arrangement of physical education courses, complete the set goals every semester and every year, develop systematic thinking, and effectively guarantee physical education. In view of the quality of the physical education classroom, teachers should establish a corresponding evaluation mechanism, and constantly adjust the content and form of teaching according to the learning situation of the students, so as to ensure the high quality and high efficiency of the physical education classroom to cultivate the core literacy of students.

#### 6.2.2 Ensure extracurricular sports activities

In 2007, China launched the Sunshine Sports activity nationwide. This activity requires young students across the country to walk out of the classroom and go to the playground to carry out sports activities in any form. At the same time, the school should also arrange physical activities to walk into the nature according to the needs to ensure that students go to the sun and feel the warmth and care of the sun. Sunshine Sports has clear requirements for the length of exercise to ensure that students in school have one hour of exercise time every day. In the high school stage, in the development of physical education curriculum, teachers should pay more attention to sunshine sports activities in addition to completing physical education tasks. As the second classroom of physical education, extracurricular activities have the characteristics of autonomy and flexibility. Through extracurricular activities, students can gradually improve their physical literacy, and effectively master and practice the content they are interested in or what they have learned in the classroom, which to a certain extent solves the problem of insufficient practice time in the physical education classroom. In addition, extracurricular activities can also promote the teaching of physical education classrooms. When students are engaged in extracurricular activities, whether the motor skills and behaviors are correct, whether the quality and quantity are in place are directly related to the results of physical education classroom teaching.

#### 6.2.3 Expand independent training

The cultivation of the core literacy of physical education has the characteristics of long-term, completeness, development and coordination. For the elements that are difficult to implement in the physical education classroom, teachers should guide students to gradually implement them in external development. For example, teachers can guide students to organize and participate in a number of expansion training independently to improve the core competence of physical education in practice. Effective exercises can help improve students' athletic ability, but also help students develop good exercise habits. In the process of independent development training outside the school, the training methods and content of students are more difficult to control, and new problems may arise at the same time. However, the school should not hinder students from pursuing physical

exercises, but should actively guide them through appropriate methods. Students carry out correct, appropriate and reasonable physical training. At the same time, the physical education subject can learn from the experience of other subjects and arrange the corresponding sports homework to arouse the attention and concern of the parents, so as to promote the students' independent outreach training outside the school with the assistance of the parents. The cultivation of the core literacy of physical education has multiple dimensions and multiple paths. The core of its cultivation is to improve the sportsmanship, sports practice and health promotion of middle school students through teaching and guidance, and enhance the comprehensive physical literacy of students. High school students need to have a good core sports literacy, so as to lay a good foundation for their future development. By expounding the basic characteristics of the training of the core elements of the physical education discipline, this article focuses on the basic ideas of training, that is, focusing on shaping the spirit of sports, strengthening the follow-up of sports practice, and improving the ability of health promotion, and then proposes multiple ways of training, namely Give full play to the role of the classroom, ensure that students actively participate in extracurricular sports and correctly guide independently carry out out-of-school outreach training, etc., in order to provide practical guidance for the development of my country's high school sports. ACKNOWLEDGEMENT

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#### REFERENCES

- [1] Yacheng Zhu, Liu Ji. An Empirical Study on the Core Literacy of College Students' Physical Education and Its Influencing Factors. Solid State Technology, 2020, 63(1).
- [2] Yacheng Zhu, Liu Ji. Investigation and Research on Graduation Requirements for Undergraduate Majors of Physical Educatio. Solid State Technology, 2020, 63(3).
- [3] Cairney, J., Dudley, D., Kwan, M., Bulten, R., & Kriellaars, D. Physical literacy, physical activity and health: Toward an evidence-informed conceptual model. Sports Medicine, 2019, 49(3).
- [4] Cairney, J., Kiez, T., Roetert, E. P., & Kriellaars, D. A 20th-century narrative on the origins of the physical literacy construct. Journal of Teaching in Physical Education, 2019, 38(2).
- [5] Whitehead, M. The concept of physical literacy. European Journal of Physical Education, 2001, 6(2).
- [6] Whitehead, M. Physical literacy: Philosophical considerations in relation to developing a sense of self, universality and propositional knowledge. Sport,

- Ethics and Philosophy, 2007, 1(3).
- [7] Whitehead, M. E., Durden-Myers, E. J., & Pot, N. The value of fostering physical literacy. Journal of Teaching in Physical Education, 2008, 37(3).
- [8] Young, L., O'Connor, J., & Alfrey, L. Physical literacy: A concept analysis. Sport, Education and Society, 2019, 14(1).
- [9] Xia Li. Research on the Construction and Practice of Tai'an City PE Core Literacy Evaluation System for Primary and Secondary School Students. International Journal of Higher Education Teaching Theory, 2021, 2(1). [10] Huilan Yang, Shuai Wang. Summary of the Research on the Cultivation of College Physical Education Teachers' Teaching Ability from the Perspective of Sports Core Literacy. International Journal of Social Science and Education Research, 2021, 4(3).
- [11] Shaojuan Hu. The Teaching Strategy of Ice and Snow Sports in Colleges and Universities from the Perspective of Sports Core Literacy. Frontiers in Sport Research, 2021, 3(1).
- [12] Xinwen Li, Jianfeng Xiang. The Reality and Necessity of Youth Sports Core Literacy Deficiency based on Complex System Theory. Frontiers in Sport Research, 2020, 2(6).
- [13] Meixiu Liu. Research on the Cultivation Path of Sports Core Literacy of Primary and Middle School Students in China. International Journal of Education and Economics, 2019, 2(2).
- [14] Li Honghai. Research on Physical Education and Cultivation of students' core literacy. Frontiers in Sport Research, 2020, 2(2).
- [15] Yongming Zhou. The Teaching Design of Junior Middle School Physical Education Under the Background of Core Accomplishment. International Journal of Education and Economics, 2020, 3(1).
- [16] Yangming Xiong. Research on the Construction of New Normal Sports Classroom Based on the Concept of Core Literacy. International Journal of Education and Economics, 2019, 2(3).
- [17] Tremblay, M., & Lloyd, M. Physical literacy measurement the missing piece. Physical and Health Education Journal, 2010, 76(1),
- [18] Tinning, R. The idea of physical education: A memetic perspective. Physical Education & Sport Pedagogy, 2012, 17(2).
- [19] Tinning, R. Troubled thoughts on critical pedagogy for PETE. Sport, Education and Society, 2019, 12(1).
- [20] Quennerstedt, M. Physical education and the art of teaching: Transformative learning and teaching in physical education and sports pedagogy. Sport, Education and Society, 2019, 24(6).
- [21] Robinson, D. B., Randall, L., & Barrett, J. Physical literacy (mis) understandings: What do leading physical education teachers know about physical literacy?. Journal of Teaching in Physical Education, 2018, 37(3).
- [22] Roetert, E. P., & MacDonald, L. C. Unpacking the physical literacy concept for K-12 physical education: What should we expect the learner to master?. Journal of Sport and Health Science, 2015, 4(2).
- [23] Shearer, C., Goss, H. R., Edwards, L. C., Keegan, R.

- J., Knowles, Z. R., Boddy, L. M., ...& Foweather, L. How is physical literacy defined? A contemporary update. Journal of Teaching in Physical Education, 2018, 37(3).
- [24] Jurbala, P. What is physical literacy, really?. Quest, 2015, 67(4).
- [25] Larsson, H., & Quennerstedt, M. Understanding movement: A sociocultural approach to exploring moving humans. Quest, 2015, 64(4).
- [26] Lawson, H. A. Renewing the core curriculum. Quest, 2007, 59(2).
- [27] Lorusso, J. R., & Richards, K. A. R. Expert perspectives on the future of physical education in higher education. Quest, 2008, 70(1).
- [28] Lundvall, S. Physical literacy in the field of physical education—A challenge and a possibility. Journal of Sport and Health Science, 2015, 4(2).
- [29] McKenzie, T. L., & Lounsbery, M. A. School physical education: The pill not taken. American Journal of Lifestyle Medicine, 2009, 3(3).
- [30] Xiaoming Xu. Review on the Influence of Core Literacy Guidance on the Improvement of Physical Education Quality. Advances in Physical Sciences, 2019, 7(2).
- [31] 김진국, 김수현. A Study on the Development Strategies of University Students in Sports Colleges by Evaluating Core Competencies. Journal of the Korea Entertainment Industry Association, 2019, 13(4).
- [32] Meixiu Liu. Research on the Cultivation Path of Sports Core Literacy of Primary and Middle School Students in China. International Journal of Education and Economics, 2019, 2(2).
- [33] Yi Yu. Research on the Training Path of "Core Quality" of Sports Discipline under the Background of "Double First-class". Frontiers in Sport Research, 2019, 1(1).
- [34] Chemistry. Researchers from Beijing Sport University Describe Findings in Chemistry (Evaluation of Sports Skill Learning Based On Core Literacy In Primary and Middle Schools). Chemicals & Chemistry, 2019.
- [35] Carol M. Ciotto, Amy G. Gagnon. Promoting Social and Emotional Learning in Physical Education. Journal of Physical Education, Recreation & Dance, 2018, 89(4).
- [36] Li Huang. The Teaching Design of Junior Middle School Physical Education Under the Background of Core Accomplishment. Organic Chemistry: An Indian Journal, 2017, 14(3).
- [37] Shenghua Qi. Research on the Teaching Integration of Physical Education Core Literacy[P]. 2019.
- [38] Yacheng Zhu, Qing Zhang. Research progress on promoting the formation of students' sports core literacy. Zhejiang Sports Science, 2021, 43(02).
- [39] Rui Qu, Qing Zhang, Yacheng Zhu. Research on the correlation analysis and difference of gender on the athletic ability of college students in higher vocational colleges. Stationery and Sports Supplies and Technology, 2020(19).

- [40] Qing Zhang, Yacheng Zhu. Analysis of the relevance and difference of gender to the sports morality of college students in higher vocational colleges. Stationery and Sports Products and Technology, 2020(19).
- [41] Heng Li, Yacheng Zhu. The value reflection and teaching strategy of the cultivation of the core literacy of college students in physical education. Stationery and Sports Products and Technology, 2020(17).
- [42] Qing Zhang, Yacheng Zhu. Research on the Relevance and Difference of Gender to the Health Behavior of College Students in Higher Vocational Colleges. Stationery and Sports Products and Technology, 2020(17).
- [43] Qing Zhang, Jia Niu, Yacheng Zhu. Innovative development of school sports in the new era-a summary of the 29th National University Track and Field Thesis Conference. Sports Science and Technology, 2020, 41(04).
- [44] Qing Zhang, Yacheng Zhu. Current status and improvement strategies of cheerleading TLC teaching in higher vocational colleges based on the core literacy of physical education. Sports Science and Technology, 2020, 41(01).
- [45] Yacheng Zhu, Liu Ji. A literature review on the improvement of my country's youth sports literacy. Zhejiang Sports Science, 2020, 42(01).
- [46] Yacheng Zhu, Ping Zhu, Liu Ji. Research on school physical education reform from the perspective of subject core literacy. Sichuan Sports Science, 2019, 38(05).
- [47] Yacheng Zhu. Research progress on core literacy of sports disciplines at home and abroad. Stationery and Sports Articles and Technology, 2019(15).
- [48] Yacheng Zhu. A review of researches on the core literacy of sports disciplines-a bibliometric analysis based on CNKI. Stationery & Sports Products & Technology, 2019(15).
- [49] Qing Zhang, Linbao Zhao, ZhenZhao, Yacheng Zhu. Research on the Current Situation and Strategies of Cultivating the Core Literacy of Physical Education for College Students in Higher Vocational Colleges. Stationery and Sports Products and Technology, 2019(15).
- [50] Xiaobo Yuan. The basic ideas and multiple ways of cultivating the core literacy of high school students in physical education. Sports Vision, 2020(03).
- [51] Min Li, Ligong Zhao, Le Pan. Analysis of the status quo of middle school physical education curriculum under the core literacy of physical education subject. Journal of Shijiazhuang University, 2020, 22(06).
- [52] Jiaqian Li. Strategies for cultivating high school students' sports ability from the perspective of subject core literacy. Famous Teacher Online, 2020(18).
- [53] Qi Yang. How to cultivate the interest and hobby of high school students in volleyball. Curriculum Education Research, 2020(13).
- [54] Yanjun Xin, Qianqian Li. Research on the cultivation of high school students' sports morality based on the core literacy of the subject. Sports Science and Technology Literature Bulletin, 2019, 27(06).
- [55] Qianqian Li, Yanjun Xin. The ideas and method

- innovation of high school physical education based on the core literacy of the subject. Contemporary Sports Science and Technology, 2019, 9(08).
- [56] Xiaona Sun. Research on the cultivation of core literacy of high school students in physical education and health. Contemporary Sports Science and Technology, 2018, 8(27).
- [57] Xuecheng Ding. The significance and ways of cultivating the core literacy of high school students in physical education. China Extra-School Education, 2018(22).
- [58] Xiaoyu Shi, Jiang Cang, Wenwei Jia. A preliminary study on the evaluation system of the core literacy performance of high school students in physical education and health. Physical Education, 2018, 38(07).
- [59] Chengliang Zhang. Practical research on the cultivation of the core literacy of high school students in physical education. Motherland, 2018(10).
- [60] Zhengjun Cao. How to cultivate the core literacy of high school students in physical education. Teacher, 2017(25).

### The Core Connotation of College Students' Network Media Literacy and Its Educational Direction--Based on the perspective of the evolution from "public communication" to "public consultation communication"

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Abstract: With the development of the governance theory and practice, it has become particularly important to use cyberspace to negotiate public issues and promote national or regional governance. Public communication, as a form of communication, is faced with the threat of freedom and disorder, and it is urgent to transform it to another forms, namely, public consultation communication. College students, as the future of the country and society, need to prepare themselves well in terms of network media literacy in this context, and they are expected to have certain critical skills, individual expression skills, and the ability to participate in social interaction and public issues. In response to the new connotations and new requirements of the media literacy, the doubleempowered education was proposed in this article.

**Keywords:** public communication; public consultation communication; governance; double empowered; network media literacy

# I. EVOLUTION: FROM PUBLIC COMMUNICATION TO PUBLIC CONSULTATION COMMUNICATION

Chinese scholars have a great controversy about what is public communication. Some scholars hold that all communication other than private communication is public communication, that is, it can be any kind of communication aimed at the public. In this sense, both entertainment information communication communication belong communication. Some scholars believe that public communication is the communication carried out by government agencies to the public. Considering the publicity of the media, some scholars point out that the media, especially the mass media, are public communications. Some scholars organizations' public communication in crisis events is public communication. Shi Changshun and Shi Yongjun (2007) pointed out that public communication is the publication of public information and public programs through the media for the purpose of social public interest by government agencies, social organizations, public media, non-profit organizations or citizens. [1] In this article, the connotation of public communication refers to the views of the two scholars.

1. The research evolution in the category of public communication

Under the background of new media, public communication research has undergone a propositional transition from public communication to public negotiation communication between 2007 and 2020. Shi Changshun and Shi Yongjun (2007) stated that the development of new media has led to the blurring of boundaries between public communication and private communication, and between mass communication and interpersonal communication. They advocated the realization of public communication from three levels, namely, the "revolutionary interaction" between disseminators and recipients, the diversified communication to meet the need for public information, and the normative guidance of emerging media. [2]

Wu Fei (2012) regarded public communication as one of the four branches of communication (the other three are professional communication, critical communication, and policy communication). According to his point of view, public communication emerged from the need of the public to actively participate in various community practice activities based on the needs of public social development, and it provides theoretical and strategic support for the equality of human rights, social justice and democratic participation in social governance. [3]

Hu Baijing and Yang Yi (2016) believed that public communication is social communication and multiple dialogues with multiple themes in public space on public issues and public interests. [4] The information technology revolution represented by the Internet provides broader space and possibilities for social interaction and multiple dialogues, and the main body of public communication can surpass traditional power, knowledge or media elites. In this context, the general public can also initiate exchanges, discussions, and competition for opinions in public spaces through the Internet. However, "everyone is a media" also brings a

series of drawbacks, among which the outstanding problem is the balance between freedom and order. Free participation is often accompanied by homogenous preferences, emotional venting, and even cyber violence. How to cultivate public rationality, design public discussion procedures, and build a public communication ecology featured by mutual symbiosis of "individuals -- free expression -- opinion competition" and "community -- order -- multiple consensus"? [5] As a result, the form of communication that facilitates public consultation is ready to emerge, and in this article, it is summarized as public consultation communication.

# 2. Public consultation communication and consultation democracy and consultation governance

Deliberative democracy was first proposed in 1980 by Joseph Saite, who pointed out that it is the majority principle of the republican government. After that, Manning and Cohen took the lead in discussing deliberative democracy from the perspective of political legitimacy, and Rawls and Habermas conducted related researches based on public rationality and intersubjective philosophy. John Drezek pointed out that the essence of democracy is negotiation. Chinese scholars advocate deliberative democracy should be "formally incorporated into the public policy system. [6]

Nowadays, the concept of negotiated governance emerges from time to time, with the rise of governance theory and governance practices all over the world. In etymology, the original meaning of "government" is manipulation or control, which has the same meaning as the root word "government". At the end of the 20th century, the term "governance" began to emphasize the non-governmental characteristics of administration and management. The Commission on Global Governance (1995) defined governance like this: governance is the sum of many ways that various public or private institutions manage their common affairs; it is a continuous process of reconciling conflicting or different interests and promoting all related parties to take joint actions. [7] Governance theory emphasizes the multiple participation, multiple interaction and even multiple mutual construction of social subjects. Besides explaining the existing political system and management methods, it aims to "shape the policy agenda" and provide forwardlooking guidance programs. [8]

Negotiated governance theory is the deepening and development of deliberative democracy theory, and they all point to a common content -- the agenda communication of multiple subjects. The important purpose and mission of public consultation communication is to promote agenda communication and multiple dialogues in the public sphere, and ultimately form multiple consensuses to promote national governance.

Based on the analysis above, the author defines public consultation communication as follows: it is a dialogue

and communication involving multiple subjects, with the short-term purpose to promote multiple consensus and positively promote public issues, and with the long-term purpose to safeguard public interests and improve public living conditions.

# II. THE CONNOTATION OF NETWORK MEDIA LITERACY: FROM INDIVIDUAL EXPRESSION TO SOCIAL INTERACTION AND PARTICIPATION IN PUBLIC ISSUES

Internet media literacy is born out of traditional media literacy. According to the definition by the American Media Literacy Research Center in 1992, media literacy refers to people's ability to choose, understand, question, evaluate, create and produce information, as well as relevant ability to think and react. The emergence and development of the Internet broke the pattern of information production and dissemination which was once dominated by traditional mass media. Individuals can participate in the production and dissemination of Internet media content as long as they have the basic skill to read and write on the Internet platforms. In the information age, individuals have changed from audiences to netizens. At the same time, research on network media literacy has emerged for netizens. The ability of participation and selfexpression has become as important as the ability to select, understand and question information, and participation has also become an important feature of network media literacy. The emphasis on participation in the early stage was mainly from the perspective of individual expression, and later it was emphasized from the perspective of communication relationships.

Jenkins (2009) called network media literacy as "new media literacy". In his viewpoints, this literacy should not only be regarded as a personal expression skill, but also as a "social skill" and a "means of interaction in a larger community". [9] Peng Lan (2013) summarized network media literacy as media use literacy, information production literacy, information consumption literacy, social communication literacy, social collaboration literacy, social participation literacy, etc. [10] In this literacy connotation framework, the last three kinds of literacy are all closely related to social interaction and social relationship shaping.

Social interaction can refer to the interaction of individuals or groups, as well as the collision and collection of opinions and ideas. The communicative rationality advocated by Habermas mainly emphasizes the rational interaction of people's views and opinions, so as to achieve a better public life through communication. It can be said that communicative rationality is an advanced form of social interaction and also important content of Internet media literacy.

III. CORE OF COLLEGE STUDENTS' NETWORK MEDIA LITERACY IN THE FRAMEWORK OF PUBLIC CONSULTATION COMMUNICATION: ABILITY OF SOCIAL COMMUNICATION AND PARTICIPATION IN PUBLIC ISSUES

Whether at home or abroad, adolescents are the core researched group of Internet media literacy. "Adolescent" is a relatively broad concept, because it covers the group of people aged between 6 and 24 years. The research on adolescents' network media literacy should be subdivided under the concept of "adolescent". For example, immunization, protection and using Internet media to learn knowledge may be the focus of primary school students' Internet media literacy, rather than the focus of college students.

College students, as a group with high education level, have certain advantages in the use of Internet equipment and ability of reading and writing. They are quite active in terms of individual expressions, and are also the backbone of fan culture and anime culture. However, this group also present the problem of "high contact" and "low literacy". [11] Low literacy is mainly manifested as emotional expression, assisting online violence, or indifferent to public issues. The reason lies in their insufficient critical faculties and the lack of their network social ability, especially the awareness and ability of rational participation.

From the perspective of public consultation communication, college students' online participation has significant meaning to public topic participation, opinion competition and democratic construction. The capabilities contained in network media literacy also ultimately point to rational participation in public issues. Figure 1 shows the ability category of college students' Internet media literacy. Among the three abilities, the ability to participate in social interaction and public issues is at the top of the ability pyramid. It is a high-level ability, while the abilities to criticize and express are the basic capacities. Under the influence of Internet participation culture, many studies just emphasize the ability of individual expression but neglect the ability of criticism. Whether in the traditional media era or in the Internet media era, critical ability is one of the basic qualities of individuals, and the criticism on content and media is becoming more important as capital invades the Internet media.

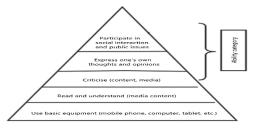


Figure 1 Ability categories included in college students' Internet media literacy

College students need to reserve corresponding knowledge and skills. Abilities, knowledge and skills constitute the content framework of college students' network media literacy, while knowledge and skills serve their abilities. In terms of critical ability, the knowledge that college students need to master includes common sense, and knowledge about the media industry, cultural industry, etc. The mastery of

these kinds of knowledge is helpful for them to make preliminary judgments on the authenticity of media information, and can also help them to identify the position and purpose of information disseminated through media. At the same time, college students need training in independent thinking. In terms of individual expression ability, they need to understand media language, media communication laws, methodological knowledge in order to express themselves properly in accordance with the laws of media content production. Besides, they need to receive training about content production and multimedia production. In terms of social interaction and participation in public issues, college students should master knowledge about citizens, governance, promotion of public issue and laws of Internet dissemination, so as to actively participate in public issues and promote public life in accordance with the standards of good citizens. At the same time, training about the rational participation in public issues is necessary for them.

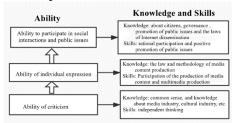


Figure 2 Framework of Network media literacy content of college students

# IV. THE ORIENTATION OF COLLEGE STUDENTS' NETWORK MEDIA LITERACY EDUCATION: DOUBLE EMPOWERED EDUCATION

It can be seen from the analysis above that the education goal of college students' network media literacy is to cultivate active, positive and rational interlocutors and communicators. The main content of education is to cultivate their abilities of criticism, individual expression, social interaction participation in public issues. The cultivation of these abilities is inseparable from the environment created by Internet technology. Information technology represented by the Internet has changed the identity composition of the communication subjects. The network creates a participatory cultural space where everyone have the chance for their voices to be heard. The audience is no longer a "receiver" and no longer a simple "reader", but a "producer and consumer" of Internet media information. Some scholars pointed out that the Internet media "empowers the majority", and that netizens do not need to be represented by others, but can directly express their personal thoughts and opinions on the Internet. [12] Some scholars also believed that online communication has opened up a new public space for netizens to make friends. They argued that, in addition to helping netizens to acquire knowledge, online communication is beneficial to them to combine online discourse campaigns with offline rights protection activities and policy support, thereby placing the network communication function in the realistic framework of progressive social change. <sup>[13]</sup> In essence, this is a kind of technological empowerment, which is based on the development of Internet technology and information technology.

Ideally, multiple subjects have technical support for express themselves, which is conducive to promoting public consultation and negotiated governance. However, it is not necessarily promoted, because it involves the effectiveness of "expression". College students present the problem of "technical enrichment and spiritual emptiness", and the spiritual emptiness is manifested in the weakening of ideals and beliefs, confusion of values, weakening of moral awareness, and lack of social responsibility. [14] In this sense, solving "spiritual" problems is the primary task of college students' media literacy education, and spiritual empowerment is urgent to "activate" their subject consciousness and subjectivity. Joe Rowlands divided power into four levels: power over (controlling power), power to (generating new potential), power with (collective power generated through group interaction), and power from within (enlighten and activate the spiritual power of others). [15] Among them, the last level is particularly important for college students. After having experienced more than ten years of life centered on study and test grades, and coupled with the influence of "sang culture", college students clearly show a weak sense of subjectivity and citizenship at the spiritual level. Therefore, spiritual empowerment is as important as technological empowerment, and even more important than it.

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#### REFERENCES

- [1] Shi Changshun, Shi Yongjun. On Public Communication in the Era of Emerging Media. Modern Communication (Journal of Communication University of China), 2007(04): 12-14+77.
- [2] Shi Changshun, Shi Yongjun. On Public Communication in the Era of Emerging Media.

- Modern Communication (Journal of Communication University of China), 2007(04): 12-14+77.
- [3] Wu Fei. On Social Value and Academic Significance of Public Communication. Social Sciences in Nanjing, 2012(05): 102-111.
- [4] Hu Baijing, Yang Yi. Basic Issues on Public Communication Research and the Innovation of Communication Research Paradigm. Journal of International Communication, 2016, 38(03): 61-80.
- [5] Hu Baijing. Conversion of Public Negotiation and Preference: Public Communication as a State and Social Governance Experiment. Journalism & Communication, 2020, 27(04): 21-38+126.
- [6] Xu Gan, Xu Shuangmin. The Value Connotation and Construction Path of the Public Policy Negotiation Mechanism. Study and Practice, 2019(05): 42-50.
- [7] He Haowei, Ren Xiaolin. Brief Analysis on Three Modes of Governance Theory via Visual Angle of Developing Countries. Journal of Shaanxi Institute of Junior Managerial Personnel, 2009(03): 3-7.
- [8] Gerry Stoker, "Governance as Theory: Five Propositions", International Social Science Journal 50.155(1998): 17-28.
- [9] Hery Jenkins. Confronting the Challenges of Participatory Culture: Media Education for the 21st Century. The MIT Press, 2009
- [10] Peng Lan. Three Kinds of Media Literacy in Social Media Era and Their Relationships. Journal of Shanghai Normal University (Philosophy & Social Sciences), 2013(05): 52-60.
- [11] Ji Jing. A Probe into the Goals of College Students' Network Media Literacy Education. Jiangsu Higher Education, 2018(07): 91-93.
- [12] Wang Ailing. Media Technology: Empowerment and Re-empowerment. Culture Journal, 2011(03):70-73
- [13] Ding Wei. New Media Technology and Empowerment: A Case Study on Self-organized, Online Rare Blood Type Communities in China. Open Times, 2011(01):124-145.
- [14] Ding Wei. New Media Technology and Empowerment: A Case Study on Self-organized, Online Rare Blood Type Communities in China. Open Times, 2011(01):124-145.
- [15] Shi Zengzhi, Hu Yong, et al. New Media Empowerment and the Rise of the Internet of Meanings, Beijing: Social Sciences Academic (China), 2014: 31.

# Current Situation and Training Path of Cross-border E-commerce Talents in Foreign Trade Enterprises

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**Absrtact:** in the process of rapid development of foreign trade, the integration of e-commerce and international trade has promoted the development of cross-border e-commerce. At the same time, it also expands its market share. However, in the process of developing cross-border e-commerce, new requirements have been put forward for the quality of enterprise personnel. Compared with the traditional foreign trade talents, the compound requirements are constantly improved. However, from the current situation of training cross-border e-commerce talents, there are still many problems, which seriously affect the development of foreign trade enterprises. Therefore, it is necessary to analyze the current situation of cross-border ecommerce personnel training from the perspective of the needs of foreign trade enterprises, formulate effective training programs, expand the training path, and transport more highquality talents for the development of foreign trade enterprises.

**Keywords:** foreign trade enterprises; crossborder e-commerce; talent; training

#### 0. INTRODUCTION

with the rapid development of cross-border ecommerce, foreign trade enterprises have ushered in new development opportunities. By promoting their own transformation and upgrading, foreign trade enterprises have gained new development power and expanded their market share. In this process, enterprises for cross-border e-commerce talent demand is also increasing rapidly. For cross-border e-commerce talents, it is necessary not only to master the relevant knowledge of traditional foreign trade, but also to have the relevant skills of e-commerce, to improve their comprehensive literacy, and to provide reliable guarantee for the development of cross-border ecommerce<sup>[1]</sup>However, from the development situation of foreign trade enterprises, there are obvious deficiencies in cross-border ecommerce talents, and the shortage of talents has become an important factor restricting their own development. Therefore, in the teaching of higher vocational colleges at the present stage, we must strengthen the cultivation of complex crossborder e-commerce talents, not only pay attention

to the teaching of traditional foreign trade theory, but also strengthen the skills of e-commerce. Better promote the development of foreign trade enterprises.

#### 1.DEMAND FOR CROSS-BORDER E-COMMERCE TALENTS BY FOREIGN TRADE ENTERPRISES

(i) Familiarity with foreign trade workflow

In the process of developing cross-border e-commerce transformation, foreign trade enterprises require cross-border e-commerce talents to be familiar with the process of foreign trade work so as to meet their own work needs<sup>[2]</sup>In the course of carrying out foreign trade, it is necessary to carry out import and export customs declaration, fill in foreign trade documents, etc. In addition, it is necessary to form a correct understanding of the rules of international trade, exhibition planning, international business etiquette, and so on, so as to ensure the smooth development of foreign trade work.

(ii) Operational capacity of cross-border ecommerce platforms

In the process of developing cross-border e-commerce business, we need to build on a certain platform, which requires foreign trade talents to have the ability to operate cross-border e-commerce platform, and to operate skillfully in overseas electronic platforms, such as Amazon, SpeedLink, etc., to increase store views, increase the visibility of enterprises, and expand their overseas market share<sup>[3]</sup>With the help of e-commerce platform to complete the transaction, can effectively control their own costs, especially in tax expenditure control results.

(iii) Cross-cultural communication skills

In the process of engaging in foreign trade, we must have a solid foreign language foundation. In the communication of cross-border e-commerce platform, we need to communicate with the trading object in real time online, which requires the use of foreign language to describe the product. Promote the completion of the entire transaction. Although in most platforms, translation assistants and templates are provided, the success rate of transactions can be improved by improving your foreign language proficiency<sup>[4]</sup>At the same time, cross-border e-commerce services are widely

targeted, which requires understanding the needs of different consumers, respecting cultural differences, mastering relevant cultural customs and business etiquette, and forming targeted marketing programs.

#### (iv) Computer and network technology

In the development of cross-border e-commerce, the whole transaction activity needs to be carried out on the Internet, which requires the relevant talents to have computer network technology to provide reliable guarantee for logistics distribution, credit supervision and price payment. In this process, we need to have the operation and maintenance ability of cross-border e-commerce platform, and at the same time, we need to carry out online operation to improve our own web page making, shop decoration and product design ability.

# 2. PROBLEMS IN THE DEMAND FOR CROSS-BORDER E-COMMERCE TALENTS

#### (i) Lack of complex talents

From the current development of foreign trade cross-border e-commerce enterprises, become an important business means. At present, the scale of cross-border e-commerce transactions in China has exceeded 5 trillion yuan, which puts forward new requirements for crossborder e-commerce talents. With more and more enterprises participating in the cross-border ecommerce industry, it is urgent to need highquality cross-border e-commerce talents to promote their own transformation, which results in the complex cross-border e-commerce talents in a state of short supply. At present, the training of foreign trade talents is carried out more by colleges and universities, but at present, there are still many shortcomings in the training of crossborder e-commerce talents in colleges and universities, and there is no cross-border ecommerce major. Foreign trade talent comes more from business English and international trade. In this case, the talents they train do not meet the actual needs of enterprises, many students do not have the skills of cross-border ecommerce operation, can not provide protection for the development of foreign trade enterprises, but also affect the growth of individuals.

(2) Difficulties in recruiting talents for enterprises In the development of foreign trade industry at present, the overall competition is more intense, which results in the profit space of enterprises greatly compressed, and then affects the recruitment of talents. In the recruitment of talents in some foreign trade enterprises, affected by cost factors, the salary level is relatively low, which results in its own talent attraction is insufficient, many high-quality cross-border ecommerce talents choose large enterprises. For the development of small and medium-sized

foreign trade enterprises have a serious obstacle. In the case of talent recruitment difficulties, foreign trade enterprises are difficult to build a high-quality talent team, unable to adapt to the current fierce industry competition.

#### (3) Inadequate personnel system

From the current stage of the development of foreign trade enterprises, there is no perfect personnel system, which results in a serious brain drain, many employees choose to leave the company because of poor wages and benefits. Especially in the current staff management, there is no sound promotion and selection mechanism, and there is a lack of incentive programs, which can not provide employees with clear career development goals, which affects the enthusiasm of employees. In addition, the threshold of foreign trade industry is relatively low, some employees can work for a few years, so choose independent innovation, which will lead to the loss of high-end talent intensified.

#### 3.THE CULTIVATION PATH OF CROSS-BORDER E-COMMERCE TALENTS FROM THE PERSPECTIVE OF FOREIGN TRADE ENTERPRISES

(i) Strengthening cooperation between schools and enterprises

In the development of foreign trade enterprises at present, the demand for talents has changed a lot, but colleges and universities still adopt the traditional training mode in the training of talents. This results in that the talents they train do not meet the actual needs of enterprises. In this case, we must strengthen the cooperation between schools and enterprises, adjust the talent training mode of colleges and universities from the actual needs of enterprises, increase practical opportunities, so that students can understand the future working environment and clarify their own development direction. From the point of view of foreign trade enterprises, by providing students with the opportunity to work in the post, we can make up for the shortage of talents, at the same time, let students form a correct understanding of the current situation of the company, and enhance their talent attraction. From the point of view of colleges and universities, by requiring some high-end talents to carry out lectures and training, we can stimulate students' interest in learning, at the same time understand the current situation of the development of cross-border e-commerce industry, and lay a good foundation for future work.

(2) Improving the Personnel Training Mechanism of Enterprises

In the development of foreign trade enterprises, in order to better meet the development needs of cross-border e-commerce, we should perfect our own talent training mechanism, strengthen the internal training work, and train more high-quality talent Foreign trade enterprises, by combining the

current situation of the industry, appropriately raise the salary level, enhance their talent attraction, and reduce the brain drain. At the same time, it is necessary to construct a reasonable post mechanism promotion and assessment mechanism. For employees with performance, they need to give corresponding rewards to realize the promotion of employees' enthusiasm for work. Personnel departments should strengthen the guidance of career planning for employees, combine the current situation of enterprise development, formulate a clear direction for employees to grow, so that employees can feel the development of enterprises, and enhance the cohesion of enterprises. Improve the stability of the workforce.

(3) Clarifying the objectives of personnel training In the process of developing cross-border ecommerce talents training, it is necessary to make clear their own talent training objectives, give play to the advantages of running a university, and provide convenient conditions for the cultivation of new complex talents. To achieve cross-border e-commerce professionals comprehensive quality and professional ability to improve. In crossborder e-commerce platforms, foreign languages are needed to communicate online, which should pay attention to the cultivation of students' English writing ability. At the same time, we should pay attention to the cultivation of students' professional skills such as international logistics, electronic commerce, international marketing and so on. At the same time, we need to improve their own network marketing and web design level to meet the development needs of foreign trade enterprises. In this process, colleges and universities in the process of cross-border ecommerce personnel training, must be clear about their own talent training objectives, combined with the current situation of regional economic development and the needs of enterprises, professional curriculum structure

integration, Provide more practical training opportunities to promote the overall improvement of students' theoretical and practical ability.

#### 4.CONCLUSION

in the development of foreign trade enterprises, cross-border e-commerce has become an important business model, which also needs to build a high-quality cross-border e-commerce talent team, for their own development to provide reliable protection. In the process of promoting the training of cross-border e-commerce talents, it is necessary to strengthen the cooperation between schools and enterprises, realize the combination of theoretical teaching and practical ability training in colleges and universities, train more high-quality talents for social development, and ensure the talent supply of foreign trade enterprises. Provide reliable guarantee for the development of cross-border e-commerce industry.

#### REFERENCES

- [1] Yuan Yaya. Research on Co-training of Crossborder E-commerce Talents in the Context of Internet + Foreign Trade. Modern Marketing: Chuang Fu Information Edition 2019(04):189-190. [2] Zhang Jiapo, Zhang Penggang. A Study on the Cultivation Path of Cross-border E-commerce Talents in International Trade Practice Specialty in Higher Vocational Colleges Motherland, 2019(6):196-196.
- [3] Liu Bin. On the inevitability and feasibility of cultivating cross-border e-commerce talents to serve foreign trade enterprises in higher vocational colleges -- Taking Taicang, Jiangsu Province as an example. Shandong Textile Economy, No.276(02):45-47., 2020
- [4] Cheng Huimin, Chang Congmin, Yin Yu. A Study on the Cultivation of Cross-border E-commerce Talents in the Context of Construction of Foreign Trade Base of Cangzhou County Characteristic Industry. Engineering and Management Science, 2020, 2(4):37-38.

# The Influence of Parenting Styles of Adolescents on Their Social Adjustment: The Mediating Role of Emotional Intelligence

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Abstract: Based on 274 adolescents in junior high school in Shandong, China, this study examined the relationship among three variables of parenting styles (including three dimensions of favouritism and overprotection), emotional intelligence and social adjustment, demonstrated the mediating effect of emotional intelligence on the relationship between parenting style and social adjustment, and examined the influence of grade level on the relationship between variables. The results revealed parenting style significantly predicts emotional intelligence and social adjustment, and there is a significant correlation between emotional intelligence and social adjustment. Emotional intelligence played a partial mediating role in the relationship between parenting style and social adjustment. This study provides theoretical basis and evidence support for subsequent researches in the field of development and educational psychology, and also provides space for exploration in age-related studies. Suggestions for future directions were discussed.

**Key words:** parenting style; social adjustment; emotional intelligence; adolescents

#### 1. INTRODUCTION

#### 1.1. Social adjustment

Humans are social animals. The development of the individual is the process of gradually leaving the family, integrating into the society, and becoming an independent member of society. Social adjustment plays an indispensable role in this process.

Social adjustment refers to the psychological and behavioural changes that an individual produces in order to achieve a harmonious relationship with the environment. It is a continuous and constantly changing interaction process between the individual and various environmental factors. Social adjustment reflects the harmony and balance between the individual's inner world and the outside world. The "domain-function" model of the assessment of adolescents' social adjustment divides social adjustment into four basic adjustment domains (self-adjustment, interpersonal adjustment, behavioural adjustment

and environmental adjustment) and two functional states of positive and negative [1-2]. Adolescent social adaptation refers to the overall harmonious balance between individual adolescents' needs in society and their cognition [3].

#### 1.2. Parenting Style

Parenting style is defined as the parent's attitude towards raising children and the way of education [4], including three dimensions or characteristics: participation, autonomous support, and warmth [5]. Early studies proposed four types of education: authoritative, authoritarian, tolerant and neglectful [6]. Symonds divides parenting style into five indifference, cruelty, overprotection, laissez-faire and democracy. Baomlind classified the parents as authoritarian (high control), laissezfaire (low control), and authoritative (moderate control) according to their level of parental control over their children. Different types of parenting styles have different effects on the formation of adolescents' personality. The three dimensions of evaluating parenting styles include rejection, favouritism, and overprotection [7]. Psychologists generally agree that democratic parenting is the most ideal.

#### 1.3. Emotional intelligence

Emotional intelligence is the ability to process emotional information, including the ability to accurately evaluate the emotions of oneself and others, to appropriately express emotions, and to adaptively regulate emotions [8]. Emotional intelligence enables people to perceive and comprehend emotions correctly, integrate emotions to provoke thinking, and promote personal growth by regulating emotions. Studies have shown that emotional intelligence includes four factors: self-assessment of emotions, assessment of others' emotions, regulation of emotions, and utilization of emotions [9].

#### 1.4. Research Purpose

Many experimental evidences support that there is a significant correlation and predictive effect between parenting style and adolescents' social adjustment. Parental parenting behaviour is significantly correlated with all dimensions of adolescent social adjustment, positive parenting behaviour is significantly positively correlated with higher social adjustment level, and negative parenting behaviour is significantly correlated with lower social adjustment level, while negative parenting behaviour leads to contrary results [10]. Authoritative parenting style was associated with university students' adjustment. Students from families with authoritative parenting styles tend to be better adjusted than those from families with authoritarian and tolerant parenting styles [11]. Parenting styles significantly predict the social adjustment level of adolescents, and positive parenting styles are positively correlated with better social adjustment [12].

Meanwhile, family parenting styles (including the dimensions of participation, autonomous support and warmth) was positively correlated with emotional intelligence and its components including emotion evaluation, emotion utilization and emotion regulation [13]. Family parenting significantly predicted styles emotional intelligence: authoritative or positive parenting style are associated with higher emotional intelligence in adolescents, while overprotective or authoritarian parenting styles are associated with lower emotional intelligence. There was a negative correlation between emotional intelligence and permissive parenting style, and emotional intelligence played a mediating role in the negative effects of permissive parenting on personal growth. Authoritative parenting style was positively correlated with life satisfaction among adolescents, and emotional intelligence moderates the relationship between authoritative parenting style and life satisfaction among adolescents.

Emotional intelligence is an important predictor of social adjustment. The higher the level of emotional intelligence, the stronger the social adjustment ability of adolescents would be. The emotional intelligence, parental social support and social adjustment status of ordinary adolescents are significantly better than those of juvenile delinquents, and emotional intelligence significantly predicts the positive and negative social adjustment status of juvenile delinquents and ordinary adolescents.

A comprehensive meta-analysis of the relationship between emotional intelligence and mental health with Chinese samples in 2006 found a significant positive correlation between individual emotional intelligence and positive coping, social adjustment, and subjective well-being, and the relationship was moderated by the age of the participants. With the increase of individual age, the correlation coefficient between emotional intelligence and social adjustment also increased significantly.

On the basis of the researches above, the study presented here explored the relationship between parenting style, emotional intelligence and social adjustment, and verified the role of emotional intelligence as a mediator, as well as the effects of grade (age) on these relationships. It was expected that parenting style significantly predicted emotional intelligence and social adjustment, and that there was a significant positive correlation between emotional intelligence and social adaptation. Emotional intelligence plays a mediating role in the relationship between parenting style and social adjustment. In addition, grade (age) moderated the relationship between emotional intelligence and social adjustment, as well as the relationship between parenting style and social adjustment.

#### 2. METHODS

#### 2.1. Participants

A stratified random sample of 100 junior high school students from Grade 1, 2 and 3 of Leling Middle School in Dezhou City, Shandong Province, China was given questionnaires. Through screening questions and data cleaning, invalid questionnaires and samples with careless answers were eliminated. Thus, the final sample population included a total of 274 children (163 boys and 111 girls) between the ages of 12–15 years. All were from intact, middle-class families with 1–3 children, and had parents aged 30–35 years.

#### 2.2. Instruments

#### **Parenting Style Questionnaire**

The Chinese version of Jane's Parenting Styles Questionnaire prepared by Arrindell et al. (1999) and revised by Jiang et al. (2010) was adopted. The questionnaire contains three dimensions, including 6 items in the rejection dimension, 7 items in the favouritism dimension and 8 items in the overprotection dimension. A 4-point score is used, with 1 indicating "never" and 4 indicating "always", and item no. 17 is scored in reverse. The higher the score, the higher the adolescents' perceived level of parenting style.

#### **Social Adjustment Questionnaire**

Adolescent social adjustment assessment scale developed by Zhou Hui et al. (2008) and revised by Zou Hong et al. (2012) was adopted. It divides social adjustment into four basic adjustment domains (self-adjustment, interpersonal adjustment, behavioural adjustment environmental adjustment) and two functional states (positive and negative), with a total of 8 factors and 50 items. The 5-point score is adopted, with 1 indicating "completely inconsistent" and 5 indicating "completely consistent", and item no. 23 is scored in reverse. The higher the score is, the higher the social adjustment level of adolescents

#### **Emotional Intelligence Questionnaire**

The Emotional Intelligence Questionnaire of Middle School Students compiled by Zou Hong et al. (2008) and revised by Liu Yan et al. (2010) was adopted. The revised questionnaire contains 18 items. It includes four dimensions: emotion

perception, emotion application, emotion comprehension and emotion management.

#### 2.3. Procedure

After signing the Informed Consent Form, participants filled out a set of paper questionnaires which were revised and integrated from the parenting style questionnaire, social adjustment emotional questionnaire and intelligence questionnaire. At the beginning of the set of questionnaires, it was stated that the data were for research purposes only, the answers would be strictly confidential, and there were no right or wrong answers, which guaranteed the privacy protection of the participants. In order to avoid the experiment burnout of adolescents, the sixth part of the questionnaire also set intercultural interesting questions, asking participants to speculate what kind of body posture Chinese, Americans and Japanese people will pose when they feel sad, angry and bored. At the end of the questionnaire, there was also an interview willingness survey. If participants have relevant willingness, they can write down their contact information and participate in the follow-up interview. Use Excel for data entry and computerization; use SPSS 26.0 for data and statistical processing analysis. The instructions for the questionnaire are as follows:

Dear students,

Thank you for your participation in this study and we hope to get your support and cooperation!

This questionnaire is intended for scientific research purposes only. It is intended to learn about the daily life and learning of adolescents and their influencing factors. The answers of this questionnaire has nothing to do with any of your academic achievements or conduct ratings.

Your answers will be kept strictly confidential and will not be seen by anyone (including your parents, teachers, classmates, etc.) other than researchers, and there are no right or wrong answers. Please read the instructions of each part carefully and answer truthfully according to your actual situation. The questionnaire is divided into six parts, and your answer to each item in each part is very important for our research. Thank you very much!

Wish you all the best in your study and life!

#### 3. RESULTS

SPSS 26.0 was used to conduct descriptive statistics, correlation analysis and statistical test for common method biases (Harman single factor test) and to verify the mediating effect. In SPSS-process-model 1, age was used as the moderating variable in regulating the relationship between variables.

**Table 1.** Regression analysis of emotional intelligence of adolescents from dimensions of parenting styles

Variables in regression equation		β	t	P	R	$\mathbb{R}^2$	adj. R <sup>2</sup>
Parenting Style	Rejection	-0.181	-2.428	.016	0.500	0.250	0.242
	Favouritism	0.455	8.011	<.001***			
	Overprotection	0.194	2.714	.007**			

\*\*\* P < 0.001; \*\* P < 0.01; \* P < 0.05.

Parenting styles include three dimensions: rejection, favouritism and overprotection.

With parenting style as the predictive variable and emotional intelligence as the dependent variable, the forced entry method was used to conduct a regression analysis. The results are shown in Table 1, which indicated that parenting style could predict emotional intelligence and explain 24.2% variation of emotional intelligence.

**Table 2.** Analysis of the mediating effect of emotional intelligence on the relationship between parenting styles and social adaptation

Variables in regression equation		β	t	P	R	R <sup>2</sup>	adj. R <sup>2</sup>
Parenting Style	Rejection	0.221	2.847	.005**	0.431	0.185	0.176
	Favouritism	0.429	7.250	<.001***			
	Overprotection	0.113	1.515	.131			

\*\*\* P < 0.001; \*\* P < 0.01; \* P < 0.05.

With parenting style as the predictive variable and social adjustment as the dependent variable, the forced entry method was used to carry out a regression analysis. The results are shown in Table 2, which indicated that parenting style could predict social adjustment and explain 17.6% of the variation in social adjustment. Correlation analysis indicated that there was a significant positive correlation between emotional intelligence and social adjustment, r(274) = 0.177, p < .01. The mediating effect analysis indicated that the effect of Model 1 was highly significant (p < .001), and parenting style could explain 13.6% of the variation of social adjustment. Model 2 had a significant effect (p = 0.04 < .05) as well. Both parenting style and emotional intelligence could explain 14.6% of the variation in social adjustment, suggesting that emotional intelligence played a partial mediating role in the relationship between parenting style and social adjustment. The results of linear regression analysis indicated that the main effect of emotional intelligence was significant (p = 0.004 < .05), and the interaction between emotional intelligence and age was not significant (p = 0.171 > 0.05), indicating that age did not play a significant moderating role in the relationship between emotional intelligence and social adjustment. The main effect of parenting

style was significant (p < .001), and the interaction between parenting style and age interaction item was not significant (p = 0.55 < 0.05), indicating that age did not play a significant moderating role in the relationship between parenting style and social adjustment.

#### 4. CONCLUSIONS

This study examined the relationship among three variables of parenting styles (including three dimensions of rejection, favouritism overprotection), emotional intelligence and social adjustment, demonstrated the mediating effect of emotional intelligence on the relationship between parenting style and social adjustment, and examined the influence of grade level on the relationship between variables. The results revealed parenting style significantly predicts emotional intelligence and social adjustment, and there is a significant positive correlation between emotional intelligence and social adjustment. Emotional intelligence played a partial mediating role in the relationship between parenting style and social adjustment. In addition, the grade (age) of the subjects did not play a significant moderator role in the relationship between emotional intelligence and social adjustment, as well as between parenting style and social adjustment. The reason may be that the participants were only junior high school students in grades 7-9, aged 12-15, and the age range was so limited that the results of the statistical analysis were not significant. This study provides theoretical basis and evidence support for subsequent researches in the field of development and educational psychology, and also provides space exploration in age-related studies.

#### REFERENCES

- [1] Yahav, R. (2010). The relationship between children's and adolescents' perceptions of parenting style and internal and external symptoms. Child Care Health & Development, 33(4), 460-471.
- [2] Luo, Z., Jin, C., & Psychology, D. O. (2016). A comprehensive meta-analysis of the relationship between emotional intelligence and mental health with Chinese samples. Psychological Development and Education.

- [3] Jin, C., Hong, Z., & Ke, H. (2011). The effect of emotional intelligence and parental social support on social adjustment of juvenile delinquents: the direct effect or the stress-buffer effect?. Journal of Psychological Science.
- [4] Zou, H., Liu, Y., Zhang, W., Jiang, S., Zhou, H., & Yibing, Y. U., et al. Adolescents' social adjustment: a conceptual model, assessment and multiple protective and risk factors. Psychological Development and Education.
- [5] Baumrind, D. (1966). Effects of authoritative parental control on child behavior. Child Development, 37, 887-907.
- [6] Maccoby, E. E., & Martin, J. A. (1983). Socialization in the context of the family: Parentchild interaction. Handbook of Child Psychology, 4, 1-102.
- [7] Davies, MichaelaStankov, LazarRoberts, & Richard, D. . (1998). Emotional intelligence: in search of an elusive construct. Journal of Personality and Social Psychology.
- [8] Segrin C, Flora J .(2019). Fostering social and emotional intelligence: What are the best current strategies in parenting? Social and Personality Psychology Compass.
- [9] Argyriou E, Bakoyannis G, Tantaros S. (2016). Parenting styles and trait emotional intelligence in adolescence[J]. Scandinavian Journal of Psychology, 57(1), 42-49.
- [10] Grolnick, W. S., Deci, E. L., & Ryan, R. M. (1997). Internalization within the family: The Self-Determination Theory perspective. In J. E. Grusec, & L. Kuczynski (Eds.), Parenting and children's internalization of values: A handbook of contemporary theory, 135–161.
- [11] Mahsa Sadat Asghari & Mohammad Ali Besharat(2011). The relation of perceived parenting with emotional intelligence. Procedia Social and Behavioral Sciences 30, 231-235.
- [12] Debbarma R, Bhattacharjee A. (2018). Impact of Caring and Overprotecting Parenting Style on Emotional Intelligence and Adjustment of School Students. Journal of Psychosocial Research, 13.
- [13] Garg R, Levin E, Tremblay L . (2016). Emotional intelligence: impact on post-secondary academic achievement. Social Psychology of Education, 19(3), 1-16.

## Research on the Training of Undergraduate Level Occupation Education Talents Based On 1+X Certificate System

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**Abstract:** China's undergraduate vocational education has just started, and there is no mature talent training mode to copy. The 1+X certificate system is a reform to deepen the training mode and evaluation mode of compound technical talents from the perspective of industry enterprises. Therefore, it is a good idea to formulate the talent training plan of undergraduate Vocational Education under the 1+X certificate system.

**Key words:** Undergraduate; Vocational Education; 1 + X certificate talent development

#### 1. INTRODUCTION

The upgrading of vocational education and vocational talents is the premise of the current national economic structure transformation [1]. For a long time, higher vocational education has overemphasized the "Sufficiency and practicality" of theoretical knowledge, and focused on the practice around the occupation post with low technical content, ignoring the depth and breadth of theoretical knowledge. As a result, students have limited ability to understand and master the high-tech theory in their own industry and field in their future work, which leads to their lack of technical innovation and innovation ability The ability of technological innovation limits the development space of students, and is not conducive to the needs of technological innovation and industrial upgrading in China. At the same time, the current college to undergraduate system, which is different from the vocational education type of ordinary undergraduate education. The learning effect is not ideal because the theoretical basis of higher vocational students is not strong, most of them feel difficult to adapt to the rhythm of teaching. In view of the above situation, in January 2019, the national vocational education reform implementation plan (referred to as "Article 20 of pointed out vocational education") "vocational education and general education are two different types of education, which have the same important position", and defined the positioning of Vocational Education [2]. In the same year, a total of 21 pilot schools of undergraduate level vocational education were announced in two batches of "pilot schools of undergraduate level vocational education". Among them, 15 were announced in the first batch of pilot schools nationwide, and 3 in Shandong Province. The launch of pilot schools of undergraduate level vocational education shows that an exclusive track of vocational education parallel to general education is being built, and the "Overpass" of talent training is being built.

With the needs of scientific and technological innovation and industrial upgrading in China, more and more technical R & D talents who are proficient in practical skills and specialized in technological innovation and process innovation are needed. The pilot of undergraduate level vocational education has just started. At present, the national and provincial levels have not yet issued a series of professional standards for undergraduate level vocational education. There is no mature model for the talent training program of undergraduate level vocational education in China. Therefore, it is a good idea to formulate the talent training program of undergraduate level vocational education under the 1 + X certificate system.

In 2019, the "national vocational education reform implementation plan" proposed that "the pilot work of" diploma certificate + several vocational skill level certificates "system should be launched in Vocational Colleges and Application-oriented Universities", that is, the pilot work of 1 + X certificate. Deepen the reform of training mode and evaluation mode of compound technical and skilled personnel [2] [3], improve the quality of personnel training, smooth the growth channel of technical and skilled personnel, expand the ability of employment and entrepreneurship, and cope with the huge changes in the demand of employees caused by the industrial transformation and upgrading of China's industry 4.0.

X certificate has both breadth and depth. A major can correspond to different professional qualification certificates according to the requirements of professional ability. It can integrate the content of certificate into the teaching

content to realize the connection and integration of documentary evidence. At the same time, the advanced standard in the professional grade standard of X certificate is connected with the professional teaching standard of undergraduate vocational education, and the training content of "X" certificate is embedded into the teaching content of professional courses to realize the "integration of course and certificate". In this way, the integration of new knowledge, new technology and new standards, as well as the organization and overall planning of the teaching process are achieved Synchronous implementation [4] [5]. According to the national vocational education reform implementation plan issued by the State Council in 2019 (i.e. "20 items of vocational education") and the application of Shandong Vocational College of science and technology to carry out undergraduate level vocational education pilot specialty, this paper studies the idea of formulating the talent training plan of undergraduate level applied electronic technology specialty in Vocational Education under the 1 + X system.

# I\ORIENTATION AND TRAINING OBJECTIVES OF APPLIED ELECTRONIC TECHNOLOGY SPECIALTY AT UNDERGRADUATE LEVEL IN VOCATIONAL EDUCATION

1. The training Orientation of undergraduate level talents in vocational education.

Under the current situation, China's economic development has reached a critical transition period, which is in urgent need of industrial upgrading and scientific and technological innovation, which need a large number of talents to support. As the cradle of talent cultivation, vocational education needs to cultivate professional talents who can take root in the production line, master practical skills, and have certain theoretical basis as support according to the development needs of industries and enterprises and from the perspective of professional ability. They are not only good at guiding industry development with technical theory, but also can carry out technical innovation and improve production efficiency. With the development of technology, the automation of the production line is getting higher and higher, and the manual skilled operation on the production line has been gradually replaced by machines. What we need now is practical talents who can master the control knowledge, be familiar with the working principle of the equipment, quickly judge the fault point according to the fault phenomenon, and be diligent in thinking and solving the technical problems. In 2019, the State Council timely issued the "20 articles on Vocational Education" and stressed that vocational education and general education are two different types of education, which have the same important status; The state will learn from the common practice of international vocational education and training, deepen the reform of the training mode of compound technical and skilled talents, and launch the pilot of "1 + X" certificate system and the pilot of undergraduate vocational education. Therefore, the orientation of the undergraduate level of vocational education is to cultivate students who can use theory to guide practice, be good at using high-tech to lead industry practice, be able to track the technological frontier, be diligent in thinking in production practice, have the courage to innovate, be able to conduct indepth research on practical problems in production and creatively solve problems, and have the ability of lifelong learning and innovation, High quality innovative, compound and developing technical and skilled talents who are well versed in theory and practice and rooted in the front line [6] [7].

2. The training orientation in applied electronic technology specialty of Vocational education undergraduate level.

According to the specific situation of applied electronic technology specialty, combined with the demand of intelligent hardware industry for talents, combined with the corresponding "X" certificate, three certificates with professional closeness, namely "integrated circuit development and testing", "wireless sensor network" and "intelligent terminal technology and application", are selected to analyze and summarize the collected materials, We deeply explore the ability requirements of the three vocational skill level certificates, analyze the professional post requirements and typical tasks, and position the applied electronic technology specialty at the undergraduate level of vocational education as "intelligent terminal development, testing and maintenance": that is, we can formulate the development scheme of intelligent terminal according to the needs of the project, and design the hardware and software of complex intelligent products Intelligent hardware and application system architecture design, can understand the working principle of intelligent terminal products, proficient in product testing, able to maintain the intelligent terminal, can track and analyze the system operation status, can carry out research and tracking of new technologies and other technical work.

3.The training objectives in applied electronic technology of Vocational education undergraduate level.

Adhering to the socialist ideology of socialism with Chinese characteristics in the new era, XI insisted on building the spirit of craftsmanship and persisting in the spirit of craftsmen, and deepening the comprehensive reform of China's "three allround education". Cultivate high-quality

innovative, compound and developing high-end technical and skilled talents with firm ideology and politics, combined moral and technical training, innovative thinking, all-round development, adapting to the needs of transformation and upgrading of electronic industry, structural adjustment and reform, good professional quality of electronic practitioners, and oriented to intelligent terminal related fields.

# IIVTHE TRAINING MODE AND SYSTEM IN APPLIED ELECTRONIC TECHNOLOGY SPECIALTY OF VOCATIONAL EDUCATION UNDERGRADUATE LEVEL.

According to the positioning goal of Applied Electronics Major in undergraduate level vocational education, combined with the current development status of undergraduate level vocational education, guided by the professional ability requirements of 1 + X certificate, this paper explores the integration of "X" and "1" as a whole, actively explores "introducing enterprises into teaching", and promotes heuristic, inquiry based teaching methods and cooperative, task-based, project-based teaching methods The training mode of enterprise practical teaching is to deepen the integration of industry and education, to promote the connection between curriculum content and development, the connection technological between teaching process and production process, and the integration of talent training and industrial

Actively explore the mode of Industrial College, deepen the integration of schools and enterprises [8] [9], take the implementation of moral and human cultivation as the basic task, train complex and innovative talents as the goal, and improve the "dual" education system and mechanism of school and enterprise, and around the five dimensions of morality, knowledge, ability, quality and innovation and entrepreneurship, we will link ideological and political education through the talent training system, and reconstruct knowledge teaching The talent training system of "five in one" with skills training, innovation practice, quality cultivation and value accumulation [10].

#### III\ CURRICULUM SYSTEM DESIGN

### 1. Construction of curriculum system of "course certificate integration"

Starting from the ability requirements of vocational skill level certificate and the industry demand, the curriculum system with "foundation core integration post" ability as the main line is constructed, which integrates the X certificate standard which is closely related to the application of electronic technology specialty, pays attention to the dynamic development of the industry innovation chain, and promotes the curriculum content to meet the industry demand of certificate standard, industry standard, production process, project development, etc, Integrate the curriculum,

embed the content of "X" certificate into the curriculum content, develop the undergraduate level "course certificate integration" teaching material for applied electronic technology major, and integrate the knowledge of "wireless sensor network", "integrated circuit development and testing", "intelligent hardware development" and other professional level certificates with the existing relevant teaching materials, so as to make the curriculum content highly consistent with the actual work, Speed up the students to adapt to the role changes, shorten the transition time of students from campus to work.

2. Combining with the skill requirements of "X" certificate to construct the practical teaching system

According to the target orientation of applied electronic technology talents training at the undergraduate level of vocational education, combined with the content of vocational certificate, the practice teaching system is designed systematically and structurally. According to the technical skills requirements of professional certificates such as "wireless sensor network", "integrated circuit development and testing" and "intelligent hardware development", we purchased experimental equipment prototypes, arranged experimental teaching contents as a whole, compiled "course certificate integration" practical teaching materials, and increased the proportion of comprehensive and design practical teaching, Taking the real project and product design of enterprises as the source of topic selection in practice, the combination of campus experiment and cooperative enterprise practice can effectively improve students' cognition of industry and their ability to solve complex problems.

### IV\ INTRODUCING CDIO ENGINEERING EDUCATION MODE FOR TEACHING

The goal orientation of undergraduate level vocational education is different from that of ordinary undergraduate education, and it is not a simple upgrade of higher vocational education. Therefore, CDIO Engineering education mode is adopted in the teaching mode, C (conception) is used to design the overall teaching goal, and a reasonable teaching goal is formulated around the professional skill requirements of X certificate; Using D (Design) to design the teaching content, taking the ability training as the main line, integrating into the content of X certificate, the teaching content should be both basic and forward-looking, theoretical and practical; I (Implementation) is used to design the realization path of teaching objectives from the five dimensions of morality, knowledge, ability, quality, innovation and entrepreneurship; Using O (operation) to explore innovative teaching methods [11].

CDIO Engineering Education Mode reflects learning by doing, which not only focuses on students' mastery of basic knowledge, but also attaches great importance to the cultivation of students' practical ability and team cooperation ability. In the process of implementation, the project design tasks are arranged in combination with the teaching content, and the design tasks are completed in groups. This enables students to have both the skills required by the vocational skill level certificate and the engineering concept, so as to effectively realize the zero docking of employment.

#### V\ CONCLUSION

The undergraduate level talent training of vocational education has just started, and there is no mature scheme to copy. The 1 + X certificate system just provides a reference way. Starting from the cultivation of students' professional ability, through comprehensive analysis, the knowledge requirements and requirements of the certificate are integrated into the teaching, so as to realize the "integration of documents and certificates", So that professional personnel training and professional requirements integration, professional knowledge, skills and professional ability requirements match. A large number of vocational talents are needed for the adjustment and upgrading of the country's industrial structure. The cultivation of talents at the undergraduate level of vocational education will be conducive to technological innovation and meet the demand of production line for high-end skilled talents. With the career guidance of X certificate, students will lay a solid foundation and understand the development direction of future jobs, In the future work, we can quickly integrate into the working environment and realize zero docking of employment.

#### **PROJECT**

2020 National Light Industry Vocational Education Teaching Steering Committee "Research on talent training ideas of undergraduate vocational education based on" 1 + X "certificate" course certificate integration "project (project number QGHZW2020096).

#### REFERENCE

[1] State Council. Decision of the State Council on accelerating the development of modern vocational education (GF [2014] No. 19) [Z]. May 2, 2014.

- [2] State Council. Notice of the State Council on the implementation plan of national vocational education reform (GF [2019] No. 4) [Z]. 2019-1-24
- [3] The Ministry of education and other four departments issued the notice on the implementation plan of the system of "diploma + several vocational skill level certificates" in Colleges and universities [EB / OL] http://www.moe.gov.cn/srcsite/A07/moe\_
- 953/201904/t20190415\_ 378129.html, 2019-05-13.
- [4] Tang Yizhi. 1 + X certificate system: Innovation of vocational education system design in the new era [J]. China Vocational and technical education, 2019 (16): 5-11.
- [5] Zhang Xugang. Innovation value, orientation and adjustment strategy of 1 + X certificate system in Higher Vocational Colleges [J]. Education and occupation, 2021 (05): 5-11.
- [6] Liao Ping, Chen Bo, Yang Yunfang. Analysis on talent cultivation of undergraduate Vocational Education -- Taking "20 items of vocational education" to lead the pilot of landscape architecture specialty as an example [J]. Journal of Ningbo Polytechnic, 2020, 24 (01): 12-18.
- [7] Xu Lingli. Analysis on the development path of undergraduate Vocational Education [J]. Higher Vocational Education (Journal of Tianjin Vocational University), 2018 (27): 3-6.
- [8] Zhang Cheng, Zhang Zhuo. A preliminary study on robot education in Application-oriented Universities with reference to German "dual system" education mode [J]. Journal of higher education, 2019 (9): 27-29.
- [9] Zhang Yuanzheng. Research on school enterprise cooperation mechanism based on 1 + X certificate reform pilot [J]. Journal of Liaoning higher vocational education, 2021, 23 (03): 15-18 + 23.
- [10] Li Hongjian, Yu Xingping. Research and Practice on the construction of new generation information technology specialty group based on the development needs of intelligent manufacturing industry [J]. Computer education, 2019 (02): 99-102.
- [11] Xia Yanqing, Liu Chaoying. Research on the training mode of Vocational Undergraduates Based on a + T · CDIO Theory -- taking environmental art design as an example [J]. Design, 2021, 34 (05): 113-115.

### The Development of Chinese Aesthetic Interest -- Analysis of "The Path of Beauty" by Li Zehou

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Abstract: "The Path of Beauty" by Mr. Li Zehou is a classic aesthetic work. Although the book was finished 40 years ago, it is still very readable nowadays. Aesthetics is an advanced attribute of human beings. Why do we have today's aesthetic interest? Even if life now is completely different from the past, why do we still feel solemn and grandiose when we see the Forbidden City, instead of being unable to resonate due to the changes of the times? How did our ancestors pass on aesthetic interest to us? To answer these questions, perhaps more complex subjects will be involved. The author attempted to find out the ins and outs of these problems in "The Path of Beauty".

**Keywords:** The Path of Beauty; Li Zehou; Chinese Aesthetics

#### 1.INTRODUCTION

The first edition of "The Path of Beauty" was published in 1981, when Chinese aesthetics was a desert. This book condensed years of research results of Mr. Li Zehou and caused a sensation when it was published. Even to this day, it is still a classic of Chinese aesthetics. This book has been republished and reprinted several times, reaching hundreds of thousands of copies, and it has been available in several languages, including English, German and Korean. It is not only an important reading material for Chinese people to understand their own aesthetic interest, but also a must-read book for foreign scholars to understand Chinese aesthetics.

#### 2. THE EARLY DAYS OF CHINESE ART

Before the advent of the civilized era, the development of primitive societies was slow and long. Now it has been not possible to know the specific situation of the primitive societies, and we can only piece together what it looked like at that time from ancient legends and patterns of some unearthed pottery. The totems of dragons and phoenixes as well as the patterns and signs that have been abstracted and condensed are not artistic creations, but expressions carrying the original aesthetic consciousness [1]. represent the fanatical ritual activities of witchcraft, which are full of primitive man's piety and barbarism and condensed their reverence for nature, strong emotions, thoughts, beliefs and expectations. Art was originally

manifestation of witchcraft etiquette. Many symbol patterns in primitive society are not only decorations, but also clan totems. They are gradually abstracted in the evolution of realistic images, including imagination, meaning and belief. Precisely because it contains elements of ideas and imagination, beauty is a "significant form".

The matriarchal clan society in the early Neolithic period was probably relatively peaceful, as were the witchcraft etiquette, primitive totems and their iconic symbols at that time. During that period, there were many animal-style symbol patterns, and the fish pattern which symbolized prosperous reproduction was the most common. Most of them give people the impression of liveliness, simplicity and innocence, instead of conveying feelings of heaviness, horror, mystery and tension. In the early days of slavery, matriarchal clans were replaced by paternalism, and social development was in a stage of large-scale cruel wars, plunder and killing. Those childish and restrained patterns are gradually replaced by heavy and mysterious ones. For example, the patterns on the bronze ritual vessels are mostly scary and mysterious but also symbolic. The fierce gluttonous image is the incarnation of terror [2]. To foreign clans and tribes, it was a symbol of intimidation, but to the own clans and tribes, it was a protective deity. The sublime and stern beauty displayed by this bronze gluttonous gluttony was not an object of aesthetics at the time, but a religious ritual instrument. Chinese characters were also developed and mature in that era, and later developed into a unique line art of China, namely, calligraphy, which has become a unique art category and aesthetic object in China. However, Chinese characters did not get rid of their religious factors at that time, and they only became aesthetic objects after the material life developed to a certain stage.

#### 3. THE AWAKENING OF HUMAN

In the pre-Qin period, clan communes basically disintegrated, society changed drastically, and all schools of thoughts contended. Society began to get rid of traditional witchcraft and religious concepts, and rationalism was the general trend of thoughts at that time. Confucianism, represented by Confucius, implements rational guidance in

daily real life, ethical feelings and political concepts. It emphasizes ethics based on human feelings and relationships, rather than religious worship. Taoism, represented by Zhuangzi, breaks through the narrow and practical utilitarian framework [3]. It is romantic and uninhibited, constantly providing fresh impetus to Chinese art. Taoism advocates living a sequestered life, but it is full of feelings for nature and life, which can and deepen Confucianism. complement Confucianism knows the end of "Tao" but does not know its origin; Taoism knows its origin, but does not know its end. [1] The complementarity of Confucianism and Taoism is still a basic clue of Chinese thought. At that time, the focus of art development turned from religion to people.

When rationalism developed in northern China and the bronzes, architecture, poetry and prose all gradually got rid of the shackles of witchcraft religion, while southern China had more reservations of it due to the primitive clan social structure. In the field of literary aesthetics, this romantic world which was full of fantasy and symbolism is the Chu culture represented by Qu Yuan. The Han Dynasty originated from Chu (a state in the Zhou Dynasty), and the romantic art concept of the Chu and Han Dynasty was another great tradition in ancient China that complements the pre-Qin rationalism. It was the aesthetic trend that dominated the art of Western Han and Eastern Han Dynasties. The art world of the whole Han Dynasty was colorful. It can be seen from the wall paintings and portrait tiles of the Han tombs that mythology and history, reality and gods, humans and beasts performed on the same stage. The rough momentum and simplified outline presents non-realistic romantic meaning. Carrying men's prayer for eternal happiness before and after death, it no longer presented the authority and threat of bronze gluttony, but was equipped with a strong color of subjective desire. In addition, many common scenes in real life were portrayed on the objects provided for the deceased, which expressed people's positivity and affirmation of real life and their hope for the continuation of this kind of life. The view of death was also the romantic side of Chu and Han art, and this kind of romance still exists in Chinese customs nowadays.

#### 4. THE MISERABLE WORLD

The Wei and Jin Dynasties were a period of major changes in Chinese social history. The separatist society was highly hierarchical then and it was in the early stage of feudal society then. In that turbulent era when a lot of peasant revolutions happened, philosophy was re-liberated. Different from the pre-Qin period, the philosophy of the Wei and Jin period was a kind of rational and pure philosophical speculation. In the field of literature and art, it manifested as a person's awakening. Human talents surpassed morality, and "the seven

sages (refer to seven worthy persons who often gathered in the bamboo grove)" became ideal figures. They became ideal models for people through their personalities. People and personality increasingly became the center of philosophy and literature during that period. Frequent changes of dynasties put society in a state of turmoil, disasters, and blood, causing the fact that literati looked chic on the surface but actually were miserable and fear in their hearts. Contradictory and complex emotions became the inner and profound characteristics of Wei-Jin style, and "the Peach Garden" was a beauty that was ordinary and true but unattainable for people then.

In the Northern and Southern Dynasties, where wars frequently occurred, people not only suffered cruel oppression and exploitation, but also faced endless wars, famines and killings. Their lives were full of miseries and there was no fairness and reasonableness at all for them. Reason could not save them from sufferings any more, and Confucian and Taoist thoughts also seemed to not work. The emergence and prevalence of Buddhism became the sustenance of people in suffering. Since Buddhism was introduced into China, it has been an important factor of Chinese culture, and has its special influence in religion, philosophy, literature and art. [2] Since the real world was not fair and reasonable, people could only rely on the doctrine of preordained fate, and they escaped and resisted reality in Buddhist beliefs. The same was true for religious art. The tall body of the Buddha reflected the smallness of people in reality. People crawled at the feet of huge Buddha statues, praying for happiness in the afterlife. Jataka was the main theme of the cave murals of the Northern Wei Dynasty. The tragic scene and gloomy atmosphere promotes selfsacrifice. It is real life that determines artistic taste and aesthetic ideals. The sufferings showed in religious stories are the sufferings in reality after all, and the appearance of the Buddha is also the reaction of the real world.

#### 5. THE VOICE OF THE FLOURISHING AGE

The Tang Dynasty, founded by Li Shimin, ended the division and civil war which had lasted for a century and opened up territory to the outside world. The domestic stability and unity, the gathering of Hu businessmen, and the unprecedented integration of cultures played the most splendid and beautiful sound of the Tang Dynasty in ancient China. The "Voice of Tang Dynasty" in literature and art came into being under this background. Different from the literature and art works in the Wei, Jin and Six Dynasties, which focused on inner and speculation, those of the Tang Dynasty were full of passionate imagination and youthful vitality, even if they expressed melancholy, enjoyment, and decadence. In the prosperous Tang Dynasty, there were

hundreds of poems by Li Bai and genius beauty of Calligraphy by Zhang Xu, as well as the standard beauty for poetry, calligraphy and articles by Du Zimei, Han Tuizhi and Yan Lugong. These artists all came from the Tang Dynasty, and their works all showed the power of generosity.

The middle period of Tang Dynasty was the transition of feudal society from the early stage to the later stage. In spite of the "An-shi Rebellion", society was still in a prosperous stage at that time. The upper class of society became more luxurious and enjoyable, and many commoner intellectuals became the new upper echelons of society through the imperial competitive examinations. Social graces became more abundant, with hundreds of literary and artistic flowers blooming, and famous artists emerged in large numbers. There were many artistic styles with outstanding personalities, whether in poetry, calligraphy or painting. Figures, cows and horses, flowers and birds, and landscape paintings were separated from religious paintings in the Mid-Tang Dynasty and developed rapidly. The diversified real life is truly displayed in literature and art. At the same time, a deep inner contradiction began to brew, and the aesthetic ideal that permeated Confucian ideas became the general tendency of that era. Literature and art became a practical tool for ethical politics, and the aesthetic laws of art was put aside. However, art and literature does not always develop in this unreasonable direction, and will go to its opposite sooner or later. In that context, the artist emphasized "writing to express the truth" on the one hand, but on the other hand, they wanted to avoid this tendency. This kind of contradictory character gradually differentiated and gradually developed into the literary and artistic view of Neo-Confucianism and Neo-Confucianists in Song Dynasty.

### 6. THE DEVELOPMENT PEAK OF LANDSCAPE PAINTING

The Song and Yuan Dynasties were the peak period of the development of Chinese landscape painting art, presenting the most exciting chapter in the history of Chinese painting. Throughout the Song Dynasty, artists used generalized self and targeted objects to understand objective things, while painters in the Yuan Dynasty focused more on the inner self of the individual. [3] In the Northern Song Dynasty, literati and officialdom who entered the supper social class through examinations were different from aristocrats. They were in the court, but the mountains and hills were what they needed to supplement their souls, and thus landscape painting was developed in the Song Dynasty. Under the premise of the development of Neo-Confucianism, artists not only portrayed nature objectively, but also paid more attention to the inside spirit of things. The "selfless state" developed at a high level in the Northern Song Dynasty. "Selfless" here does not mean that there is no personal emotion of artists in their painting, but that they do not deliberately express emotions in their own work. In the Southern Song Dynasty, painting academies were developed, and the main purpose of art was to please the emperors, and artists' pursuit of real details reached its peak under the conditions of superior leisure. In parallel with this, poetic flavor was strongly promoted. The content of art was much richer in form. It was no longer the majestic and objective landscape in the Northern Song Dynasty, and the consciousness of consciously lyricism began to grow stronger. In the Yuan Dynasty, the great changes in society also brought variations in aesthetic taste, and imperial-court decorative painting became a thing of the past, just as the Zhao Song dynasty. Under Mongolian rule, a large number of Han's landlords and intellectuals were reduced to "the fourth class". They had to give up political retaliation and put their love on literature and art, and "wenrenhua" was officially established. Landscape painting became a means of expressing subjective emotions and feelings.

#### 7. SECULAR ART

In the Ming and Qing dynasties, people's eyes shifted from feelings of mountains and rivers to novels, operas, and prints, which could depict secular human sentiments. The colorful citizen literature and art has huge impacts on modern times. In the upper-class literati and officialdom literature in the mid-Ming Dynasty, there appeared romanticism which opposed orthodox classicism. Represented by Li Zhi, it opposed hypocrisy, the shackles of traditional ideas and authority, and advocated telling the truth. The lower-level realism and the upper-level romanticism complemented each other and developed to the extreme in the late Ming Dynasty. When the Qing empire was established, a trend of thought that broke through the shackles of tradition prevailed in society, which was not conducive to those in power to consolidate their rule. The retro Confucian orthodox theory became the guiding ideology of the country; the thought that broke through tradition did not develop, and the romanticism of the upper echelons became sentimental literature. "The Story of the Stone", a treasure of Chinese literature, was just a sentimental fantasy of life. The appearance of "High Qing" could not conceal the internal decay of Qing Dynasty, and literati were full of helplessness after waking up from a dream. In that context, severe critical realism matured.

#### 8.CONCLUSION

The tour of the beauty has come to an end, but it will continue. Why do we still have sympathy and intimacy with classical art? Is it because a certain art form or structure is eternal? Aesthetics has a lot to do with cognition and material life. It is

different from animal-like sensory pleasures, because it also includes human concepts, emotions, and imaginations. Changes in artistic taste and aesthetic ideals are often accompanied by major social changes. The development of art is related to real life, but it presents strong imbalances and contradictions. In troubled times, art generally flourishes and developed greatly in spite of unceasing wars and social turmoil, and a relatively stable society is not necessarily a greenhouse for artistic development. The formation of aesthetic interest is related to all aspects of social life. People, as the subject of aesthetics, are both rational and perceptual. This may also contain the complex subject of "aesthetic psychology". Do today's Chinese have a similar relationship with the ancients in terms of psychological structure, so that they can transcend time and space to appreciate the beauty of ancient art? Does the psychological structure create the eternity of art, or does the eternal art embody the code of the psychological structure? Maybe they are not so absolute.

Aesthetics is a high-level human activity, not an ability that everyone is born with. The hurried review of the path of beauty is not to theoretically distinguish the fixed characteristics of the aesthetics of each historical period, nor is it to allow us to check in when we are performing

aesthetics. Social life is always changing, and beauty also has a different look. It may be the artistic conception of landscapes in the Song and Yuan dynasties, or it may be the horror and fierce bronze gluttony. They condense human imagination, emotion, understanding and perception, and are a kind of "significant form". As the subject of aesthetics, we must be able to appreciate beauty, and it is necessary to review this path of beauty.

It is needed for us to study the past, but not to indulge in the past, because the art of each period is irreplaceable. Furthermore, the art of the past can never replace that of the present. Therefore, the path of beauty must continue, pointing to the future.

#### REFERENCES

- [1] Feng Youlan, Tu Youguang. A Short History of Chinese Philosophy. Peking University Press, 2013.
- [2] Ding Wei. New Media Technology and Empowerment: A Case Study on Self-organized, On-line Rare Blood Type Communities in China. Open Times, 2011(01):124-145.
- [3] Fang Wen, translated by Li Weikun. Images of the Mind: Collections of Chinese Calligraphy and Painting. Shanghai Painting and Calligraphy Publishing House, 2016.8.

# The Adjustment of U.S. Policy towards China in the 1960s

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Abstract: The 1960s was an era of adjustment in the United States policy towards China. After the founding of the People's Republic of China and before the Nixon's Administration decided to open up Sino-U.S. relations, China and the United States were basically in a state of isolation. The U.S. policy towards China was surely to contain and isolate China. During Johnson's administration, "Containment without Isolation" was put forward as a mark that those strategic community and policy research sectors had intellectually completed adjustment of the U.S. policy towards China, which had great historical significance for both countries. It not only laid the foundation for the thawing of Sino-US relations during Nixon's administration, but also triggered great changes in the world pattern.

**Keywords:**policy towards China; adjustment; Sino-US relations

After World War II, the United States' global strategic thinking and decision-making had been continuously adjusted, from acting as the leader of the Western world to seeking "world leadership", its strategic goal of dominating the world has never changed. The socialist countries such as the Soviet Union and the People's Republic of China are considered to be the main factors that hinder the United States from achieving its hegemony. Therefore, after the founding of the PRC, the United States implemented a hostile policy towards the new China, with the aim of containing and isolating it, and the two sides were in a state of opposition. By the 1970s, with the development and change of the world structure, the Sino-U.S. relations had gone from "defrostation" to normalization, which also triggered major changes in the pattern of the world. Such relationship change was not only due to the international context at the time, but also the result of the common requirements of the national interests of China and the United States. It can be said that it was the adjustment of the U.S. policy towards China in the 1960s that laid the foundation of the normalization of the subsequent Sino-U.S. relationship.

At present, there are plentiful research works on U.S. policy towards China and Sino-US relations in the 1950s at home and abroad. Yet only a few research references focus on the adjustment of U.S. policy towards China in the 1960s, and domestic research in this area is obviously lagging behind to their American peers. With the increasing number of declassified archives from Presidents Kennedy and Johnson in the

1990s, the depth and breadth of foreign scholars' research in this field continued to deepen, but until the mid- and late- 1990s, a unified view was still not formed. American scholar Arthur Wardren, in *From No Contact to Almost Normalization: Sino-U.S. Relations in the 1960s*, pointed out that the ossification of Sino-U.S. relations during this period should be entirely attributed to China's domestic political situation and the ideological conflict with the Soviet Union. It has little to do with the U.S.' position on China [1].

American scholars have made great contributions to the research in this field, especially on some local issues. For example, more researches have been built on this issue of the U.S. position towards China and the Soviet Union. In *China and the United States since 1949: A Trouble* by Robert Garson and *Kennedy in Pursuit of Victory* by Thomas Patterson, both argue that the United States exploited the contradictions between China and the Soviet Union and wanted to form an alliance with the Soviet Union to contain China. Some scholars believe that an important reason for the United States to launch the Vietnam War and to escalate the war was to prevent East Asian countries from supporting China. This has also become a factor in the stiffness of Sino-US relations.

The research of Chinese scholars in this field is very lagging behind, and only sporadic works were published in the 1980s and 1990s. For example, Gu Ning's The Kennedy Administration's China Policy and Su Ge's The "Unfreezing" of U.S. China Policy in the Late 1960s, etc. [2]. These papers related to the relationship among China, the United States and the Soviet Union during that period, and the Vietnam War's impact on the U.S.' China policy and the negative impact on the "two Chinas" policy of the U.S. The former Chinese Vice Foreign Minister Wang Bingnan's work Nine Years Review of Sino-U.S. Talks has become a basic document for understanding the shift in American attitudes towards China. However, the research at this stage is only limited to the discussion of the Kennedy administration's China policy and hardly refers to the U.S. foreign policy during the Johnson administration. That reason might be that the Johnson administration had a shorter ruling period and less political actions than its predecessors. Besides, a large number of relevant archives still have not been declassified. The research in this area have not been seen until the millennium, while the number is very small. In short, the exploration of mainland scholars in this field is basically based on foreign

existing research results and public publications, and their conclusions are also similar [3].

The author believes that the main reason for this situation is that domestic and foreign scholars have focused more on the study of the Vietnam War. They believe that the U.S. policy towards China in the 1960s is only a study of the rigid traditions of the 1950s. On the other hand, the documents of the Johnson Administration's foreign policy have only been declassified in a short time, and the research time for scholars is not long. As a result, relevant documents are relatively lacking and many original documents have not yet been translated. Certainly, this is also conducive to future scholars for innovative research. The policy consensus of "containing without isolating" formed by the U.S. policy-making departments in the 1960s was a major policy adjustment towards China. It is not only the basis of the China policy during the Nixon administration, but also the traceable source of the evolution of the United States' China policy since the end of the Cold War. This article takes time as the order, mainly using the translation of the original collection of American policy towards China as a reference, and discussing the adjustment and

# 1.THE LOOSENING OF THE U.S. "CONTAINMENT AND ISOLATION" POLICY TOWARDS CHINA

transformation of U.S. policy towards China in 1960.

After the Second World War, the "containment" strategy implemented by the Truman administration was a major change in American foreign strategy. The beginning of the Cold War marked that the U.S. and the Soviet Union had transformed from their wartime alliances to postwar confrontations. The Eisenhower administration even proposed a "large-scale retaliation strategy" to deal with socialist countries in the military field subsequently.

After taking office, the Kennedy administration inherited in the principle of "containing and isolating" China policy formulated by his predecessors Truman and Eisenhower. The concrete practice was to isolate China diplomatically, not recognize the People's Republic of China and oppose the restoration of China's legitimate seat in the UN General Assembly, implement militarily encirclement on China, interfere and invade Laos and Vietnam in Southeast Asia, occupy Taiwan Province, block China economically, and impose an embargo on China. However, when formulating China policy, the Kennedy administration once considered adjusting its rigid China policy. This consideration also reflected in the Kennedy Administration's approach on ambassadorial talks. The United States tried to discuss with China over the Taiwan issue, the return of American personnel, the Chinese mainland economy, the mutual assignment of journalists and negotiations on banning nuclear weapons.

The United States believed that although the two sides held their own views on the Taiwan issue, it would not incite the people's emotions against the Communist Party of China. On the contrary, the *State Council's Telegram to the Polish Embassy* (August 13, 1961) illustrated that the U.S. hoped to realize the common interests between both sides with a consensus by "looking for even the smallest opportunities to improve the atmosphere between the two countries" so that the two sides could achieve a shared interest [4]. The United States believed that it would be a construction step to improve dialogues between the two sides if China released the imprisoned American citizens. It also took the Soviet Union as an example and pointed out the importance of this action to the improvement of relations between these two countries.

Although the 1961 Sino-U.S. ambassadorial talks seemed to be ineffective and time-consuming, the United States still reaped many political and moral benefits: the opportunity to place the blame for the imprisoned persons, terminated journalist exchanges and other delayed issues, even China's isolated condition, on the Chinese side. Those talks, to some extent, eased the CCP military action against Taiwan [5]. Most importantly, "The talks constitute a direct, private means of communications between the United States and Communist China". The United States believed that the ambassadorial talks could provide a convenient, fast, safe and confidential channel for communicating with Chinese leaders. One thing that needed to be faced squarely was that although the ambassadorial talks were still based on the United States containment policy on China, the American side had already put into practice the idea of "Sino-U.S. talks as a detection channel for adjusting bilateral relations", which still had positive meanings for adjusting the United States policy towards China and improving of Sino-US relations [6].

In 1962, witnessed the failure of the Great Leap Forward carried out by the People's Republic of China and its national strength was undermined, Chiang Kaishek was eager to take this opportunity to counterattack the mainland. On the one hand, he began to actively adjust the army's deployment, chanting the slogan that a counter-attack was imminent. On the other hand, he still consulted the United States in the hope of getting its support. In this Taiwan Strait crisis, the U.S. believed that whether supported Taiwan or not, once it started military operations, the CPC and the Soviet Union would carry out powerful political propaganda against Taiwan and the U.S. Afterwards, the CPC would conduct a military buildup in front of Kinmen and Matsu islands. The United States believes that this was undoubtedly a situation in which "a direct confrontation between the U.S. and Chinese Nationalist interests seems very likely" and the existence of China cannot be ignored by the United States. Besides, the American society called on the government to re-examine its China policy. Therefore, the United States had not promised to support Taiwan's counter-offensive action but rather to restrict it by considering various factors [7].

During the Kennedy administration, although the basic policy of "containing" China remained unchanged, the United States believed that China's national power should not be ignored based on the analysis of the actual situation, as Kennedy mentioned that "adjust China policy, do not recognize China, nor agree it to enter the United Nations, but to make improvements in contact with China" in a speech on the "New Frontier" administrative program in the Senate in 1960. It can be seen that, as a realist, Kennedy had already considered the adjustment of American's China policy. Although then Secretary of State Rusk adhered to the "two Chinas" policy, he also addressed that he hoped to bring China back into the international environment through multiple methods. In view of the long-term existence of Communist China, he suggested that the U.S. government should not be too hostile to the CPC. In the Telegram from Consul General of the State Council in Geneva (June 23, 1961) [8], Rusk repeatedly proposed to approach the Chinese representatives in an appropriate manner. And in November 1961, Kennedy appointed Averill Harriman, who was habitually contrary to tradition, as the Assistant Secretary of State for Far East Affairs. Kennedy intended to use Harriman's characteristic to decouple the State Department from the Dulles' rigid policy for Asia Communism.

The author believes that in the early 1960s, the United States had a preliminary attempt to adjust its China policy, but at the same time, the containment of China remained unchanged.

# 2. THE CHANGE OF THE U.S. POLICY TOWARDS CHINA FROM " CONTAINMENT AND ISOLATION " TO " CONTAINMENT WITHOUT ISOLATION "

On November 2, 1963, President Kennedy was assassinated and Vice President Johnson was sworn in. Since 1958, the U.S. government began to pay attention to the phenomena of divergences between China and the Soviet Union. As the Sino-Soviet conflict came to the surface in the 1960s, the U.S. government gradually realized that there were many potential Sino-Soviet conflicts through continuous analysis and evaluation. The U.S. government had been trying to understand whether the U.S. can benefit from the Sino-Soviet divergences. Through the analysis of the collection of documents, it is not difficult to see that the U.S. government was uncertain from the beginning. By the mid-1960s, the deputy director of the Central Intelligence Agency bluntly stated in the memorandum that the differences between China and the Soviet Union had become very deep in all aspects of ideology and national policy as "the Soviet Union and China are now two separate countries", and the break between Moscow and Beijing was undoubtedly obvious. This division between Two Communist Parties "obviously allowed the West to gain many significant interests". Secretary of State Rusk previously thought that the CPC was "combines old-fashioned Chinese imperialism as well as left-wing Communist deviationism." It can be seen that the Johnson administration maintained a strong hostility towards China. The hawk politicians in the government held that compared with the Soviet Union, China was more dangerous to the West, more aggressive and more difficult for the United States to manipulate. This erroneous perception led the Johnson administration to adopt a series of strategies to ease their relationship with the Soviet Union while to be tough on China.

1964 was a critical time for the adjustment of the U.S. policy towards China. On January 27, France, as a former ally of the United States, announced the recognition of the People's Republic of China, which not only demonstrated its determination to get rid of the shackles of the United States, but also broke the United States principle and bottom line of "containing and isolating China" [9]. Although the United States immediately stated strong opposition to the resolution when the French ambassador to the United States Alfonde proposed it, believing that France's decision simply ignored the U.S. interests and was contrary to the U.S. policy of "containing and isolating" China and attempting to obstruct it, the then French President de Gaulle gave no heed to it. As Alfonde said, France just did something that other countries wanted to do a long time ago. The biggest impact of France's recognition of China was to "break the long-term tacit silence of the major U.S. allies on China policy", brought them to the forefront in the form of a domino, and began to challenge the United States in an open manner. In this international situation, the United States had to start to re-examine its long-standing rigid China policy, which also urged the United States to propose a new China policy of "containment without isolation" in 1966 [10]. In the early 1960s, the United States began to pay close attention to China's nuclear program, and conducted long-term observation, analysis, and evaluation of the prospects, progress, and impact on the development of nuclear weapons. In October 1964, China successfully conducted its first nuclear test. The U.S. government evaluated the results and impact of China's nuclear test and had to accept the fact that China became a nuclear power. Among many declassified memos, each department believed that there was no need to panic about the success of China's nuclear test, but efforts needed to be made to prevent the proliferation of nuclear weapons. Since then, nuclear non-proliferation had become an important factor for the United States to consider its relations with China.

In the Memorandum from Thompson to McGeorge Bundy (June 2, 1965), it can be seen that the U.S. government had been considering relaxing travel restrictions to China since Kennedy took office, but it had been stranded due to various factors, and the Far East Branch of the Senate Foreign Relations Committee, on May 14, 1965 suggested in a report that the U.S. government should consider initiating direct contact with China through gradually cultural exchange activities at an appropriate time. In

Thompson's view, this "appropriate time" was undoubtedly "immediate". In the 15th Memorandum from Bundy to Rusk beginning with this issue. Bundy bluntly wrote that "time seems to have come", and at the end suggested that "agree to expand the scope of American travel to the Communist China." (It proposed in the previous article that scope should be expanded to including scholars and postgraduates with legal occupations who need to visit the place). It can be said that it was the strong suggestions and support of these staff prompting President Johnson to make a decision in August to relax travel restrictions on China and to allow American doctors, scientists and staff from public health and other fields to visit China. Therefore, the President amended the government's travel ban on China implemented since the outbreak of the Korean War in 1950, which had a great positive effect on Sino-US relations. The author deems that to some extent the profound meaning behind this move was related to the escalation of the Vietnam War caused by the U.S. bombing of North Vietnam.

When the United States decided to intervene militarily in the Vietnam War and gradually escalated the war, containment of China had always been its primary strategic consideration. According to the so-called "domino" theory of Southeast Asia by American leaders, if the United States did not conduct military intervention in Vietnam to prevent northern Vietnam from unifying the south, it would result in American recession from the entire Asia and leaving it to China. On the other hand, based on the lessons of the Korean War, the U.S. policy-makers were unwilling to directly conflict with China due to excessive interference in the Indo-China region. Containing China and avoiding direct large-scale conflicts with it had turned into the two decisive factors influencing the U.S. decision to intervene militarily in Vietnam. This consideration had an important impact on the adjustment of the U.S. policy towards China both at that time and later (e.g. as mentioned before, the relaxation of restrictions on travel to China).

In 1964, with the escalation of Washington's intervention in the Vietnam War, the Sino-U.S. ambassadorial talks fell into a deadlock. The United States hoped to use the intermittent talks to understand China's position on this issue and to convey the U.S. government policy to its counterpart. The United States believed that it was good for both sides to have a clear understanding of each other's intention. In the State Council's Telegram to the Embassy in Poland (April 2, 1964), Washington indicated the general principle of the U.S. representatives in the negotiations, that is, "the Chinese Communists are responsible for any break or interruption in talks and that the US, in its search for a peaceful settlement of dispute, has been willing and continues willing explore every avenue to this end." An overall survey on files of the ambassadorial talks related to the Vietnam War from 1964 to 1968 and other materials of the U.S. government on the Vietnam War refers to most that the

U.S. side always emphasized it's desire to resolve disputes between two sides by peaceful means rather than direct military conflicts with China. After all, the U.S. authorities noticed little about China's attitudes of the America's continuing pressure on North Vietnam and whether it wanted to confront the U.S. directly. According to the documents, it can also be seen that the United States was extremely cautious in formulating its Vietnam War strategy and attached great importance to the warnings issued by the Chinese leaders. The same was true for the Chinese government. China had no intention of fighting another battle like the Korean War. Therefore, it constantly considered the behavior and attitude of the U.S. when making decisions. The two sides finally agreed to compromise with each other on the bottom line of the issue of "engage no war against each other." This compromise also laid the foundation for future Sino-US reconciliation.

On March 1, 1966, in the Memorandum from Thompson to Wilandi, a new proposal for the adjustment policy towards China was put forward. He believed that "the top priority for American policymakers is to tame China's communist revolution in China's relations with other countries, or to put it another way, to make mainland China return to a responsible member of the international community. "This statement can be said to clearly put forward a strategic goal for China. Thompson held that "this task demands not merely 'containment', but a multiple strategy. Three chief aspects of such a strategy should be: (a) traditional military containment-the deterrence of overt and covert Chinese aggression, and resistance to such aggression wherever it may occur (as in Vietnam or Laos on the one hand, India on the other): (b) generous assistance to the fragile societies on China's perimeter in the process of nation-building; and (c) systematic efforts to help erode the Chinese totalitarian state, to influence Chinese behavior, and to combat Chinese ignorance and fear of the outside world." The purpose of this adjustment was to keep the U.S. military containment on China at an equal pace with their bilateral diplomatic, economic and nongovernmental exchanges so as to achieve the effect of changing China. In the memorandum, Thompson also affirmed several reconciliation measures made by the United States previously and suggested that these measures should be continued for long-term interests. Meanwhile, he also mentioned the positive effects of contact, communication, travel and trade between these two countries.

Subsequently, the *Memorandum from Thompson to Moyers* mentioned for the first time that the Vice President verbally agreed: "(a) a friendly and positive approach to the China hearings, and (b) the ideas of Fairbank and Barnett, namely, "containment-yes, isolation-no". On March 13, 1966, the Vice President Humphrey publicly expressed support for the "Containment without Isolation" policy at the National Broadcasting Corporation press conference during the

Senate hearing. This measure shows that the U.S. government was desired to mitigate the CPC's hostility through the adjustment of its China policy and to truly draw China into the international community so that the mainland people can establish peaceful relations with the international community instead of its previous "isolation" strategic thinking towards China. In June 1966, the Report of the State Council-Ministry of National Defense Special Research Group Communist China: Long-term Research proposed a more detailed strategic outline for China. The report believed that China's economy was in a recession at the time and its leaders were extremely indifferent to it, but it was still able to realize some military plans. The development of nuclear weapons would undoubtedly become one of the leading programs. In terms of foreign relations, the report pointed out that China would avoid risks into a direct large-scale military conflict with the United States or the Soviet Union as usual. The report put forward a long-term outlook: "A strategy of containment need not result in a frozen confrontation. Successful containment in fact both facilitates and takes advantage of favorable change." It shows that the U.S. government wanted to maximize its own interests through a flexible China policy. The report believes that the national interests of the United States and China collided on two basic points:

- 1. The U.S. stands for orderly, peaceful evolution toward an international system based on law and respect for diversity among national societies. The Communist Party of China stand for revolutionary change leading ultimately to a Communist world.
- 2. The U.S. is prepared to accept China as one of many components in a peaceful Asian balance of power. The present leadership in Beijing will not settle for anything less than regional hegemony and aspires, first, to acceptance as one of three global powers and, eventually to leadership of a Communist world.

It can be seen that the conflict between China and the United States for the direction and pursuit of the future world, as well as for China's future international status, was the root cause of the conflict between both sides. Therefore, the U.S. government believed that three basic national strategies could be chosen, namely, disengagement, containment, and showdown. Among these three strategies, the United States could only accept the containment strategy, which was different from the rigid policy to China of the previous administrations. Instead, it achieved the purpose of containment policy on China in multiple fields and forms.

The report gave two policies: one was to enable China to gain a certain position by dragging China into the world to shoulder corresponding international responsibilities, so as to abandon its ambitious goal of becoming a world superpower; the other was to make China more inclined to the United States than it to the Soviet Union by easing tensions between China and the United States, as the normalization of Sino-U.S. relation conformed to the interests of both countries.

The U.S. government initially regarded China as an vital factor threatening peace and stability of Asia, and then it was prepared to "accept China as one of many components in a peaceful Asian balance of power" Many important people in various fields had continued to advise in numerous documents from 1966 to 1968 that the travel ban on the Communist China should be removed and trade embargo on it should also be relaxed. The change over the U.S. attitude towards China demonstrated that Washington wanted to show their ultimately acceptance of an aggressive China, which contributed to the U.S. to gain benefits from an Asia with balanced powers.

The author considers that although the Johnson administration had shown a desire to adjust its China policy and to ease Sino-US relations to a great extent, its actual actions were insufficient. In addition to President Johnson's worries about China, the two countries' domestic situation cannot be ignored. At that time, the United States was trapped in the quagmire of the escalating Vietnam War, while the "Cultural Revolution" in China was in full swing. One's ability falls short of its wishes, and the other focused on domestic affairs with no time to think about others. Besides, the Johnson administration was always following the "two Chinas" policy on the Taiwan issue. Therefore, it is almost an impossible task to improve relations between both countries during this period. However, the Johnson administration began to re-examine its China policy. The proposal of the "containment without isolation" policy was an effort by the United States to change its China policy. On the one hand, the U.S. government resorted to containing China through the Vietnam War. On the other hand, it executed the "non-isolation" policy with China by trimming its trade policy on China, which laid the foundation for the Nixon administration to achieve a breakthrough in Sino-US relations. Moreover, as China's international status continued to rise, its increasing power had made the United States unable to undervalue. Both sides began to actively adjust their foreign policies. This had also made Sino-US relations "thawed" during the Nixon administration. Although there was no substantial breakthrough in terms of actions towards U.S.' China policy during this period, it had made sufficient preparations of ideology and policy for the Nixon administration to achieve major adjustments.

### 3. THE NORMALIZATION OF CHINA-U.S. RELATIONSHIP

On January 20, 1969, Nixon was inaugurated as President of the United States. The document to Kissinger by the new president on February 1 clearly stated that the U.S. government should try its best to improve the attitude of "seeking all possibilities of reconciliation with the Chinese". Nixon was the first President who expressed a peaceful and moderate attitude in dealings with China since the Truman administration, which even had not been stated publicly. This attitude has also affected the position of

the U.S. State Department on the Warsaw negotiations shifting from aggressiveness in the previous Sino-U.S. ambassadorial talks to the willingness to conduct serious and earnest negotiations with Beijing in a scientific and communicative manner. Surely, China's efforts could not be excluded. After Nixon taking office, China, actively looking for opportunities of detente with the United States as well, preferred a milder foreign policy than before. Both sides were pursuing a more rational Sino-U.S. relationship.

The Nixon administration held a different attitude from the Johnson administration regarding the relations among China, the United States and the Soviet Union. The United States thought that the Soviet Union hoped to reach a consensus with the United States on the issue of arranging the Communist China to join the United Nations. Although the United States still held the purpose of remaining the Republic of China in the United Nations, it did not prevent the Communist Party of China from entering the United Nations as well as not leave to the world, and particularly Beijing, a bad impression of "colluding" with the Soviet Union. In the memorandum titled Immediate U.S. policy Problems in Event of Major Sino-Soviet Hostilities dated September 10, 1969, the American side hoped to formulate a unified policy to avoid the stereotype that it was in line with the Soviet Union on the China issue. Meanwhile, it expected such a position could be indirectly conveyed to Beijing. The author believes that the change in the U.S.' attitude towards the Sino-Soviet issue could be seen as a positive signal to the CPC, which indicated that the United States had not been trying to use the Sino-Soviet dispute to expand its own interests.

In several documents issued in July 1969, the U.S. government mentioned that in light of the current unclear situation on the Sino-Soviet border (China and the Soviet Union clashed on the border Zhenbao Island in early March), it proposed to relax its economic controls on China. Subsequently, the White House issued a statement, "The President has decided to modify our control measures on Communist China's trade and financial transactions, which is a selective modification..." This move is very symbolic.

On July 25, 1969, Nixon visited Asia via Guam and announced a new policy towards Asia. The main points were as follows: (a) When the Vietnam War was over, the United States would continue to play an important role and abide by its treaty obligations. (b) Unless threatened by nuclear powers, the United States would encourage its Asian allies to take on their own responsibilities of domestic security and military defense and avoid involvement in the Vietnam-style wars itself. (c) Collective security was a goal pursued by the United States to support its allies in dealing with domestic or nuclear powers threats. This Asian policy was called Guamism. Later, in his State of the Union addresses over the years, Nixon further extended this policy to a global policy and the general guideline of handling comprehensive relations with its allies. The

emergence of the Nixon Doctrine indicated that the U.S. government would adopt a more flexible diplomacy in the Nixon era. During Nixon's tenure, the U.S. troops withdrew from the Vietnam battlefield; the Sino-U.S. relationship was improved; the strategic focus shifted to the Soviet Union, and the U.S. international status was adjusted. The Nixon Doctrine was a major adjustment of the United States foreign policy after the WWII. It marked the end of the Cold War as well as the containment policy that began with Truman Doctrine, and became the initial point of foreign policies by the following administrations.

On August 28 of that year, the memorandum between Ambassador Aga Hilary and Mideast expert Harald Sanders of the National Security Council at the Pakistani Embassy in the United States summarized President Nixon's views on the China issue, "Asia can not move forward if a nation as large as China remains isolated... The US should not be party to any arrangements designed to isolate China..." President Nixon's attitude was obviously contrary to the ideas of his predecessors. He hoped that the United States could face China in a positive manner which was contrary to the previous policy to China of containing and isolating, but it had moved into a direction that was beneficial to both China and the United States. The gradual reconciliation of Sino-US relations was in the need to get out of diplomatic dilemmas and conformed to the interests of both sides.

Nixon had outstanding achievements in both domestic and foreign affairs in his term, in particular, opening the door of Sino-US exchanges and normalizing their relationship.

Since Nixon's tenure was mainly in the early 1970s, the author will not elaborate herein.

#### 4. CONCLUSION

Throughout the policies towards China of the United States and the development of Sino-U.S. relations in the 1960s, it is not difficult to see that every adjustment of its China policy was related to the international environment, the self-development of the United States and China's domestic and surrounding situations especially under the circumstances of the Cold War. Everytime when evaluating the situation in China and the future direction of Sino-U.S. relationship, the United States had to consider the Soviet Union, a factor that could not be ignored. With the strengthening of China's comprehensive national power and the rising of its international status, the American public became more and more eager to call for the relaxation of Sino-US relations. Besides, the thinking of senior government officials on China had also undergone a major change, which affected the adjustment of the U.S. government policy towards China to a considerable extent. The U.S. government began to consider proactively adjusting its China policy as well as the attitude of China at the same time. From the principle of "containment and isolation" in the Kennedy period, to the policy of "containment without isolation" during Johnson's administration, even to the starting of exchanges and then the normalization of Sino-US relationship during Nixon era, every adjustment to China policy was inseparable from joint efforts of China and the United States. Nevertheless, the detente of Sino-U.S. relations did more good than harm for both parties.

The normalization of Sino-U.S. relations improved the international status of the two countries and changed the international strategic pattern. The end of the 20-year isolation policy promoted communication and cooperation between the two sides in economic, trade, culture, science and technology and other aspects. The above mentioned laid an important foundation for China to all-roundly entry into the regional and global economic development which also made China's strategic position reach unprecedented heights before the end of the Cold War.

The United States' policy towards China had already emerged certain changes before Nixon's administration. During the Kennedy era, the America's rigid policy to China showed a sign of relaxation. During Johnson's tenure, the U.S. policy towards had undergone obviously significant adjustments. Nixon made a decision to open the door for the development of Sino-U.S. relations which was definitely not based on a sudden inspiration or whim, but because American society already had certain conditions and foundations for improving Sino-U.S. relations at that time. Nixon was only conforming to the trend of history. The Sino-U.S. relations finally "thawed" after World War II.

#### REFERENCE

[1]Kunz, D.B., The Diplomacy of the Crucial Decade: American Foreign Relations During the 1960s, New York: Columbia University, 1994.

[2]Robert Gerson, The United States and China Since 1949: A troubled affair, Madison: Fairleigh Dickson University Press, 1994.

[3]Thomas G. Patterson, Kennedy's Quest for Victory, New York: Oxford University Press, 1989.

[4]Gu Ning. The Kennedy Administration's China Policy. World History, Vol.6, 1991.

[5]Su Ge. The "Unfreezing" of U.S. China Policy in the Late 1960s. American Study, Vol.2, 1997.

[6] United States Department of State, Foreign Relations of the United States, Washington D.C.: Government Publishing Office, 1998.

[7] Walters Iaacson & Evan Thomas. The Wise Men-Six Friends and the World They Made. New York: Simon & Schuster, 1997.

[8] Anatolii Andreevich Gromyko. Though Russian Eyes: President Kennedy 's 1036 Days, Washington, DC: International Library. 1973

[9] Tang Xiaosong. The Impact of France recognition of China on America's China policy(1964-1966). International Forum. Vol 5(1), Jan., 2003.

[10]Sino-American Rapprochement and the Cold War 1969-1972: Declassified U.S. Documents. Part One. Beijing: World Affairs Press.

# Thoughts on the Reform of Physical Education Teaching in Colleges and Universities Based on the Idea of Ideological and Political Course

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Absrtact: physical education teaching is an important medium to carry out the construction of curriculum thought and politics in colleges and universities. It is an important work of physical education teaching in colleges and universities to carry out the reform of physical education teaching with the goal of "curriculum thinking and politics", to explore the path and method of teaching reform, and to cultivate college students' good political, ideological and moral character, healthy body and sound personality through physical education teaching.

**Key Words:** Colleges and Universities; Curriculum Thought and Politics; Physical Education Teaching; Teaching Reform

# 1. THE VALUE AND SIGNIFICANCE OF "CURRICULUM THOUGHT AND POLITICS" INTEGRATING INTO PHYSICAL EDUCATION TEACHING

Physical education teaching in colleges and universities is an important platform for carrying out the construction of curriculum thought and politics. It is the central task of physical education teaching in colleges and universities to give full play to the educational function of physical education in colleges and universities, to perfect the form of ideological and political education, to improve the effect of education and teaching, and to promote the all-round development of college students' body and mind. The purpose of this paper is to explore the ways and methods of physical education teaching reform in colleges and universities, and to cultivate college students' good political, ideological and moral character, healthy body and sound personality through physical education. To become a qualified new era of socialism with Chinese characteristics its builders and successors to lay a good foundation.

(i) Contribute to the construction of ideological and political work in colleges and universities

At the National Conference on ideological and political work in Colleges and Universities, General Secretary XI stressed that it is necessary to make all kinds of courses go the same way as ideological and political theory courses, form synergistic effects, and give important tasks to higher education in China [1]. That is to say, ideological and political work runs

through every subject and every course. Physical education teaching in colleges and universities is an important means to promote the development of college students' physical and mental health, to integrate ideological and moral character, physical skills and physical exercise in physical practice. Therefore, it is urgent to strengthen the construction of college physical education "curriculum ideological and political ", to promote the integration of physical education curriculum and ideological and political education, and to give play to the role of physical education in ideological and political work in colleges and universities.

(ii) Adapt to the direction of talent training in colleges and universities

We should pay attention to strengthening physical education teaching in colleges and universities, train college students to set up correct life goals, set up correct "three views" ideas, carry forward the spirit of patriotism, and improve their ideological and moral quality through the carrier of physical education teaching. Physical education teaching in colleges and universities should be closely combined with ideological and political education, integrate the concept of "curriculum ideological and political" into all kinds of physical education courses, change the past physical education teaching only pay attention to the teaching of knowledge and skills, ignore the disadvantages of "educating people" education, so that college students can acquire healthy personality, temper will, raise consciousness and improve the realm through physical education, which is not only the need of the development of real society, but also the goal and direction of the cultivation of talents in higher education in our country [2].

(iii) Contribute to the reform of physical education in colleges and universities

In the reform of physical education in colleges and universities in our country, the main goal is to carry out quality education and train talents with all-round development, to promote the integration of physical education and ideological and political education, to integrate ideological and political education elements into physical education. At the same time, physical education plays a positive role in cultivating college students' sports spirit, will quality, healthy personality, making them have correct "three views" thought and social adaptability, and setting up a solid platform for

ideological and political education in colleges and universities.

## 2. THOUGHTS ON THE REFORM OF PHYSICAL EDUCATION TEACHING IN COLLEGES AND UNIVERSITIES

- (i) Reform of teaching content and methods
- (1) increase the content of sports theory and cultivate college students' good moral concept

Physical education teachers in colleges and universities can carry out ideological and political education for college students by explaining the rules of competition, the value of sports and the deeds of outstanding athletes to win honor for the country, so that college students know how to abide by the rules, abide by the law, set up patriotic consciousness, example consciousness and overall situation consciousness, and make college students improve their ideological and political consciousness while learning sports knowledge.

(2) Mining Education Elements and Reforming Teaching Mode

In terms of teaching methods, we should abandon the traditional indoctrination teaching, explore the elements of thinking and educating people according to the characteristics of the project, carry out projectbased teaching, build an educational platform of "curriculum thinking and politics" and physical education teaching in the same direction, create a new teaching model combining inspiration encouragement, mutual aid and confrontation, games and competitions, create a teaching environment dominated by college students and teachers, integrate the elements of ideological and political education into physical education, fully mobilize the enthusiasm and initiative of college students, improve the interest and efficiency of teaching, and make college students exercise and exercise their body and mind. Through the reform of teaching methods, such as games, competitions and other links, design goals and difficulties, temper the will quality of college students, cultivate college students not afraid of difficulties, unity and cooperation and other fine style of work, so that college students in learning sports skills at the same time thought and emotion also get inspiration and harvest [3]. Through the study and exercise of sports knowledge and skills, we can strengthen our physique, temper our will, perfect ourselves, and improve our ideological and political quality and moral cultivation.

- (ii) Reform of physical education evaluation
- (1)Reform Evaluation System

In addition to changing the concept and method of physical education teaching, we should perfect the evaluation system, reform the evaluation standards and methods, and establish a complete and scientific evaluation system. In the teaching evaluation, in addition to the examination of sports items, we should increase the weight of evaluation of normal performance, pay attention to process evaluation, incorporate the goal of moral education in physical

education into the teaching evaluation system, and make a comprehensive evaluation of college students' classroom performance and learning attitude, such as sports attitude, sports knowledge and skills, physical and mental health, social ability and so on.

(2) Strengthening Ideological and Moral Evaluation

In physical education teaching in colleges and universities, teachers should not only teach college students sports skills and skills, but also cultivate students' physical and mental development from ideological and political aspects, formulate scientific evaluation indicators, and give students a complete and accurate evaluation. Give full play to the influence and role of ideological and political education in physical education teaching in colleges and universities, strengthen ideological and moral evaluation, integrate ideological and political evaluation of college students into the evaluation system of physical education teaching, combine college students' interests and hobbies with sports spirit, combine individual goals with social goals, and combine physical and mental health goals with social development goals.

- (iii) Strengthening ethics and ethics
- (1)Strengthen the study of political theory and raise ideological and political consciousness

General Secretary XI called on teachers to be "the guide of students' character, the guide of students' learning knowledge, the guide of students' innovative thinking, and the guide of students' dedication to the motherland ".Therefore, as the executor of the work of educating people, physical education teachers in colleges and universities should set an example, strengthen ideological and political study, improve ideological and political consciousness and accomplishment, set up a correct three-view system, learn high as a teacher, and become good teachers with ideals and beliefs, moral sentiment, solid knowledge and benevolence, so as to promote the healthy growth of college students.

(2) rule by virtue and set an example

Physical education teachers in colleges and universities should strive to establish themselves by virtue, learn by virtue, improve their personality quality, make good use of the main position of classroom teaching, give play to the leading role of teaching, and impart correct morality to college students. Physical education teachers in colleges and universities should be based on the classroom, have both moral and talented education wisdom and ability, and give college students guidance and help in all directions. To guide college students to care about state affairs, to establish a correct world outlook, outlook on life and values, and to fulfill their responsibility to build up people and teach and educate people. We should respect students, love students, make college students know fraternity and gratitude, and guide college students to learn to be human and do things.

(3)love your job and live up to your mission

As the implementers and executors of promoting the construction of "curriculum ideological and political" in colleges and universities, PE teachers should constantly strengthen the sense of mission and responsibility of

teaching and educating people, and strengthen the concept of "curriculum ideological and political". Strengthen the construction of teachers' ethics, improve the political position and the mission consciousness of cultivating qualified talents for the Party and the country, improve the ability and personality influence of curriculum education, form attraction to college students, strive to set a good example for college students. Give full play to the leading role in teaching.

#### REFERENCES

[1] Yu Xinnan. Analysis on the Ideological and Political Function of Curriculum in Physical Education. Colleges and Universities Journal of Nanjing Institute of physical Education 19(12):66-69.

- [2] Wang Xianyi, Wang Honglin. A Study on the Teaching Design of the Integration of Physical Education into Ideological and Political Elements from the Perspective of . Curriculum Thought and Politics Youth Sports, 2019(12):32-33.
- [3] Chen Zhanyong. Construction of Evaluation Index System for the Implementation of Ideological and Political Education in Physical Education. Colleges and Universities Educational Theory and Practice, 2019, 39(15):63-64.
- [4] Zhu Xiaoling. An Analysis of the Integration of Public Physical Education Curriculum and Ideological and Political Education in Colleges and Universities . and Neijiang Science and Technology, 2017, 38(11):75-76, 53

### Exploring the Road of Sustainable Development In Mountainous Areas With Marxist View Of Nature And The Concept Of "Two Mountains"

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Abstract: Marxist view of nature is a scientific world outlook and methodology to correctly deal with the relationship between man and nature and between man and society. The basic foothold of Marxist view of nature is to recognize the preexistence of nature, the important content is the humanized view of nature of practical materialism, and the fundamental point is the harmonious development of man and nature. "Two mountains" concept is a successful benchmark for Zhejiang to explore the sustainable development of man and nature, the main basis and strategic force for the overall construction of ecological civilization in China, and the stable development of global natural ecology Zhiyuan's China plan. We must persist in applying Marx's view of nature to examine the real issue of sustainable development in mountainous areas, persist in using materialist methodology to guide the path of sustainable development in mountainous areas, and persist in applying XI's "two mountains" concept to build a dynamic system for sustainable development in mountain areas.

**Key words:** view of nature; "two mountains" concept; mountain area; sustainable development

# 1. THE ESSENCE AND GUIDING SIGNIFICANCE OF MARXIST VIEW OF NATURE AND THE CONCEPT OF "TWO MOUNTAINS"

Marxist view of nature is a scientific world outlook and methodology to correctly deal with the relationship between man and nature and between man and society. Marxist view of nature has experienced the process of germination, formation, maturity and development. In his doctoral dissertation, Marx used dialectics to expound materialist view of nature. He advocated the realization of human freedom through the environment. He believed that if people were separated from the transformation of the natural environment, they would not get real freedom. The early germination is of great value to the formation of Marx's view of nature. From the manuscript of economics and philosophy in 1844 to the outline of Feuerbach, then to the Holy Family and German Ideology, it is the formation stage of Marxist view of nature. Marx thinks that human production is an active kind of production, and the nature has changed, from the natural state of nature to the humanized nature, which is marked by human. Nature is human The works of man and the reality of man. The mature stage of Marxist view of nature is mainly reflected in the capital. Marx put forward the thought of natural productivity, circular economy and sustainable development. He thought that only by realizing the Communist society can man and nature realize the real

harmonious development. In the development stage of Marxist view of nature, Marx and Engels integrated the world history thought with the view of nature. They thought that the ecological environment of different civilizations was also different, so they chose different development paths suitable for their own personality. Throughout the process of Marx's view of nature, I believe that its content can be interpreted roughly from three aspects. Perhaps it will enlighten us to better understand and understand the essence and contemporary value of XI's "two mountains" concept, and further guide sustainable development in mountain areas. The basic foothold of Marxist view of nature is to recognize the nature's preexistence. Nature is the mother of man, and man is the product of nature. On the one hand, Marxism recognizes the primacy of the material world, and believes that nature exists before human society, and independent of human consciousness. Marx pointed out in the manuscript of economics and philosophy in 1844: "without nature and perceptual external world, workers can create nothing. Nature is the realization of workers' labor, the activity of workers' labor in it, and the production and use of workers' labor to produce their own crystalline materials. " [1]Therefore, Marx believed that nature existed before human society. Without nature, there would be no human society. Human society should comply with and respect the laws of natural development in the process of development. On the other hand, Marx thinks that human is a part of nature, and only by living in nature can human be continued and developed. "That is to say, nature is a human body with which human beings must be in a continuous interactive process in order not to die. The so-called physical life and spiritual life of human beings are connected with nature, but nature is connected with itself, because human beings are a part of nature. "[2] Marx argued that human is a part of nature from two points that nature is not only human's material home, but also human's spiritual home. Human's development depends on nature as an important material and spiritual support.

The important content of Marxist view of nature is the humanized view of nature of practical materialism. On the basis of criticizing and inheriting Hegel's and Feuerbach's view of nature, Marx and Engels put forward the "practical humanized view of nature", which contains two levels of meaning expression, namely the naturalization of human and the humanization of nature. The naturalization of human beings refers to that human beings act on natural objects in the process of transforming nature from the law of natural development. The humanization of nature refers to that nature constantly becomes human existence in the process of human transformation, and the essential power of human

beings can be objectified. The essence of this point of view is to practice on the basis of respecting laws, so that man and nature form a relationship of mutual influence and restriction based on practice. [3]In Marx's view, we should regard the object, reality and sensibility as the activities of perceptual people and understand them as practice From the perspective of the subject. Marx thought that "the change of environment is consistent with the change of human activity or self, which can only be regarded and reasonably understood as the practice of revolution".[4] It can be seen that practice is the basis of the emergence, change and development of Marx's humanized view of nature. The fate of nature is closely related to the fate of human beings. The bridge between man and nature is "practice".

The fundamental direction of Marxist view of nature is the harmonious development of man and nature. Engels once pointed out: "we should not be too intoxicated with our human victory over nature. For every such victory, nature will retaliate against us." Marx and Engels profoundly investigated the law of natural and social development from the perspective of the history of human civilization, and through the comparison and Reflection on the development of capitalist history, they believed that the development of human society and nature should not be antagonistic to each other, and that human and nature should share weal and woe and depend on each other. The author believes that the fundamental direction of Marxist view of nature is to realize the harmony between human and nature The harmonious development of nature. Marx and Engels examined it from many aspects and angles, and believed that the harmonious development of man and nature should follow the following principles or approaches: first, adhere to the principle of fairness and justice within and between generations. Nature is the common home of human beings. In the process of utilizing and transforming nature, contemporary people should show equal opportunities, foresight and farsightedness, and take responsibility. In the process of the continuation of human and natural generations, we should not only ensure the realization and satisfaction of contemporary people's interests, but also ensure that future generations can get the benefits

And enjoy the opportunity of balanced development. Second, give full play to the positive role of science and technology in the protection of natural resources. Science and technology play an important role in coordinating the development of human and nature. In Marx's view, with the progress of science and technology, people will further rationalize and scientize their own behavior and practice, "the improvement of machines will enable those materials that can not be used in the original form to obtain a form that can be used in the new production; the progress of science, especially chemistry, will not be ignored." We've discovered the useful properties of that waste, [5] However, science and technology is actually a "double-edged sword". If properly used, it can improve the utilization efficiency of natural resources and strengthen the ability to understand nature. On the contrary, it may make the contradiction between man and nature more prominent. Therefore, when human beings coordinate the harmonious

development of the relationship with nature, they should give full play to their subjective initiative, control this "doubleedged sword" and make full use of it Play the positive role of science and technology. Third, change the mode of production and establish a fair and just social system. Engels pointed out that in order to adjust the relationship between man and nature and solve the contradiction between man and nature, "it is not enough just to have knowledge. Therefore, we need to completely reform our mode of production up to now and our whole social system together with this mode of production.".[6]Nature is also a kind of productive force. On the premise of respecting the natural productive forces, we should change the mode of production, correctly handle the current and long-term, partial and overall interests, establish a fair and just social system, and coordinate urban and rural development, regional development and social development, so as to realize the harmonious development of man and nature.

### 2. THE ESSENCE AND CONTEMPORARY VALUE OF XI'S "TWO MOUNTAINS" CONCEPT.

The concept of "two mountains" is a successful benchmark for Zhejiang to explore the sustainable development of human and nature. Protect the environment in August 15, 2005, when Comrade XI visited Anji, he affirmed that Yu village was promoting the economic growth under the premise of protecting the environment. For the first time, he put forward the development concept of "green water and beautiful scenery, namely Jinshan Yinshan". The concept of "two mountains" is based on the contradiction between the protection of ecological environment and the development of productive forces, which reflects the problem consciousness of facing the ecological crisis and the responsibility of overcoming difficulties. The concept of "two mountains" profoundly reveals the importance of environmental protection, the coordination of economic development, the harmfulness of environmental damage, and the possibility of giving consideration to both economy and environment. In the 15 years since the concept of "two mountains" was put forward, Zhejiang has always been on the road of green development with the attitude of adhering to the sustainable development of human and nature, and has set a successful benchmark for building a beautiful China. Under the guidance of the concept of "two mountains", Zhejiang has well controlled the "steering wheel" of ecological construction. It has experienced the strategic deepening from ecological environment construction to green Zhejiang construction, ecological province construction, ecological Zhejiang construction, and "two beauty" construction. Zhejiang has become the first country to carry out inter regional water rights trading, the first country to implement the system of paid use of emission rights, and the first country to implement the "two beauty" Zhejiang construction It can be said that the successful exploration of the "two mountains" concept in Zhejiang has surpassed the "economic centralism" and "environmental protectionism" in the first province to implement the Provincial Ecological Protection compensation mechanism. The concept is systematic, the method is comprehensive, the effect is remarkable, and the benchmark is recognized.

The concept of "two mountains" is the main basis and strategic strength of China's ecological civilization

construction. Since the 18th CPC National Congress, the Communist Party of China has put forward a series of new ideas and new strategies for the construction of ecological civilization. It expounds that green waters and green mountains and golden mountains and silver mountains are not antagonistic relations, but dialectical unity. It is necessary to establish a strong sense that "green waters and green mountains are golden mountains and silver mountains" and realize a win-win situation of economic development and environmental protection. At the 19th National Congress of the Communist Party of China, the concept of "two mountains" was first written in the report of the National Party Congress: "we must establish and practice the concept that green water and green mountains are golden mountains and silver mountains, adhere to the basic national policy of saving resources and protecting the environment, and treat the ecological environment like life Build a beautiful China, create a good production and living environment for the people, and contribute to global ecological security. " Subsequently, the newly revised general program of the party constitution of the Communist Party of China also added the concept of "establishing the ecological civilization concept of respecting nature, conforming to nature and protecting nature, and enhancing the awareness that green water and green mountains are golden mountains and silver mountains." the concept of "two mountains" has become one of the important ruling concepts of the Communist Party of China. The concept of "two mountains" has thus become the main basis and strategic focus of China's ecological civilization construction. On the one hand, the popular and popular interpretation is used to form the main tone loved by the people. Through the most grounded way, the people can realize that "protecting the environment is protecting the productive forces, and improving the ecological environment is developing the productive forces". On the other hand, we should make clear the direction, value orientation and goal orientation of China's ecological civilization construction from the height of national top-level design. In order to realize the coordinated development of economic and social development and ecological environment as the direction, to build a beautiful China, to realize the people's yearning for a better life as the value orientation, to seek a global ecological community as the goal orientation, to "two mountains" concept as the main line, strengthen and consolidate the strategic commitment, and point out the direction for strengthening the construction of ecological civilization in the new era.

The concept of "two mountains" is a Chinese plan for the global natural and ecological development. Nowadays, the global ecological environment crisis is becoming increasingly prominent. The concept of "two mountains" has been successfully practiced and inherited in China. It is the latest achievement of the sinicization and modernization of Marx's view of nature, and provides Chinese wisdom and Chinese solutions for the stable and far-reaching development of global ecology. General secretary XI stressed the need to integrate ecological civilization construction into all aspects and processes of economic construction, political construction, cultural

construction and social construction. This is an overall framework for realizing the concept of "two mountains" based on the basic national conditions of socialism with Chinese characteristics. Although the development reality and national conditions of countries all over the world are different, to properly handle the relationship between environmental protection and social development is nothing more than to accurately grasp the relationship among ecological system, economic system and social system, and any country can benefit from ecological and economic development Facing the reality of "fish and bear's paw can't have it both", how to choose the development plan has become the torture and challenge of the times faced by all countries. Marx and Engels realized that the real sense of world history is formed because of exchanges all over the world. Just because of this, "the more history becomes world history". The world should form a common consensus to build a community of shared future for human beings, and build an ecological community of shared future that benefits both our country and other countries. In this regard, China, which takes the concept of "two mountains" as an example, has explored a development path of "human society nature" harmonious coexistence for the development of global natural ecology, leading the world to maintain life in awe of nature State the way of security, build a global green home.

# 3. PERSISTING IN GUIDING THE SUSTAINABLE DEVELOPMENT OF MOUNTAINOUS AREAS WITH MARXIST VIEW OF NATURE AND THE CONCEPT OF "TWO MOUNTAINS"

Adhere to the use of Marxist view of nature to examine the essence of sustainable development in mountainous areas. China's mountainous area is vast, accounting for more than two-thirds of the land area, which shoulders the important responsibility of China's ecological civilization construction and sustainable development. To examine the essence of sustainable development in mountainous areas with Marxist view of nature, we should focus on the following points: firstly, China is a large country with mountainous areas and a large population. Mountainous areas constitute the framework of China's territory. Mountainous areas are China's unique geographical conditions, which are objective existence not subject to human will. The green rise of mountainous areas will lead to the rejuvenation of the Chinese nation and the growth of the country Zhijiuan. Secondly, the sustainable development of mountain areas is the coordinated promotion of ecological civilization construction in spatial layout. All the practical activities of human beings show that human beings come from the mountains and forests, and Chinese people are no exception. The fate of mountains is closely related to the fate of human beings. In the era of farming, mountains are a beautiful home for human beings to avoid chaos and recuperate, a production and supply base of agricultural and forestry products, and a treasure house of national construction resources. In the era of industrialization and revolution, mountains have nurtured Chinese revolution, but they are still in the process of development Therefore, the promotion of sustainable development of mountain areas in spatial layout is the contemporary embodiment of humanized nature with Chinese characteristics and practical materialism. Finally, the ultimate goal of sustainable development in mountainous areas is to achieve the harmonious development of human and nature. Marxism believes that the development of human and nature is unified, only to achieve the ultimate goal of harmonious development of human and nature, can we achieve the real reconciliation between human and nature.

Adhere to the use of materialist methodology to guide the sustainable development path of mountain areas. Materialist methodology, namely materialist dialectics, is a science about the most general laws of nature, society and thinking. The basic point of view is that things are generally connected, changing and developing, and the basic laws are the law of unity of opposites, the law of mutual change of quality and the law of negation of negation. We may as well examine the path of sustainable development in mountainous areas from the three perspectives of creating favorable conditions, adhering to dynamic development and respecting the three laws. First of all, materialist dialectics tells us that things are generally connected and that connections are conditional. We should change the unfavorable conditions and create favorable conditions. The sustainable development of mountainous areas is related to the overall situation of China's ecological civilization construction. We should deeply grasp the special geographical conditions, human environment and social development level of mountainous areas, change the measures that are not conducive to the sustainable development of mountainous areas, and create conditions that are conducive to the construction and development of mountainous areas. Secondly, materialist dialectics points out that things are changing and developing, and the essence of development is the emergence of new things and the extinction of old things. The sustainable development of mountainous areas should adhere to the overall idea of ecological civilization construction in a dynamic way, conform to the pulse of the development of the times, and firmly grasp the essence of the concept of "two mountains", so as to make the development of mountainous areas truly conform to the direction of historical progress. Finally, the sustainable development of mountainous areas must follow the three laws of materialist dialectics, and recognize that economic growth and environmental protection are the unity of opposites, and environmental carrying capacity is limited. Exceeding the unreasonable "degree" will lead to unsustainable development. "Priority of environmental protection slowing down of economic growth - Value-added of economic growth" is a negative law of negation.

We must adhere to XI's "two mountains" concept and build a dynamic system for sustainable development in mountain areas. The vitality of sustainable development in mountainous areas is the ability to promote the continuous transformation and progress of the economic, social, political, cultural and ecological environment in the regional space system of mountainous areas. Macro environment and policy, the main body of the mountain people, mountain industrial development, mountain politics and culture are important factors to build a dynamic system. XI's "two mountains" concept has pointed out the way forward. The two mountain concept has become one of the important ruling ideas of the CPC through the evolution of modernization and practice. The national strategy guided by the concept of "two mountains", such as the construction of beautiful China, the strategy of revitalizing China and the healthy China strategy, affect the way and future of the mountain area. The concept of "two mountains" is always closely linked with "realizing people's yearning for a better life", stimulating people's self-consciousness in mountainous areas, and transforming the desire of "thinking of change if you are poor" into the driving force of actively responding to the national strategy, which is the fundamental to realize the vitality of sustainable development in mountainous areas. In fact, the concept of "two mountains" requires "Ecological "Ecological Industrialization of industry" and Industrialization". Developing characteristic industries according to regional advantages and driving people to get rich in ecological protection is an important guarantee for building a sustainable development vitality system. The concept of "two mountains" is full of wisdom and methodology, and gradually evolved into "two mountains" culture. This widely recognized culture, in a subtle way, encourages the mountain areas to take the road of green development, circular development and low-carbon development, and calls for the mountain areas to truly embark on the road of sustainable development.

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#### REFERENCES

- [1] Collected works of Marx and Engels: Volume 1 [M], Beijing: People's publishing house, 2009.158.
- [2] Collected works of Marx and Engels: Volume 1 [M], Beijing: People's publishing house, 2009.161.
- [3] Selected works of Marx and Engels: Volume 1 [M], Beijing: People's publishing house, 1995.54.
- [4] Selected works of Marx and Engels: Volume 1 [M], Beijing: People's publishing house, 1995.273.
- [5] Marx. Capital: Volume 3. Beijing: People's publishing house, 2004.117-118.
- [6] Marx and Engels. Selected works of Marx and Engels: Volume 4. Beijing: People's publishing house, 1995.385.

# On the Adaptive Relationship between Social Security Level and Economic Development

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**Abstract**: with the continuous improvement of China's economic level, people's material living standards are also steadily improving. As the most basic livelihood project, the relationship between the level of social security and the level of economic development, as well as the impact on the people's life, has been a topic of close attention. This paper makes a brief analysis of the adaptive relationship and present situation between the level of social security and economic development, and puts forward relevant measures and suggestions for the improvement strategy of China's social security system. It is expected to have a certain construction and guidance function for the improvement of social welfare security system and the adaptability of economic development level.

**Keywords:** social security; economic development; adaptive relationship

The level of a country's economic development is closely related to the construction of its social security system.As a livelihood project closely related to mass life, social security system plays an important role in stabilizing social order and ensuring people's basic life security. With the deep development of China's reform and opening up and the rapid growth of national economy, it is urgent to construct a social security system suitable for the national economic development. Social security level and economic development can reach the ideal virtuous circle only after mutual adaptation and coordination. From the current situation, there are still some problems to be solved in China, such as the aging of society, the increasing pressure on people to support the aged, the grim gap between the rich and the poor between urban and rural areas, the population in poor areas has not been completely lifted out of poverty, and the social welfare security system is not perfect [1]. A fundamental problem behind these problems is the imbalance between the level of development and the level social security. Therefore, it is necessary to study the relationship between economic development level and social security level.Based on the present situation of today's society, this paper makes a detailed investigation on the current social security system, and puts forward some measures to promote the balance between economic development and social security system, in order to achieve the ultimate goal of improving people's living standards.

## 1.OUTLINE THE DIALECTICAL RELATIONSHIP BETWEEN SOCIAL SECURITY AND ECONOMIC DEVELOPMENT

Economic development is the foundation of social security system, and economic development provides sufficient material basis for the establishment of social security system. Only when the economy develops can we talk about other social construction and development, whether it is the social welfare security system or the progress of social civilization and culture. It is not difficult to find that no nation or country can have a stable and perfect social security system under the condition of economic backwardness [2-3]. Therefore, to consider the social security system, the first thing to consider is the level and degree of economic development. Based on this basis, we can draw the conclusion that economic development is first and foremost the foundation and prerequisite of the social security system. It determines the upper limit of social security system construction.

The social security system reacts on the economic development, and the perfect social security system in promotes social the and economic development. The social security system, as its name implies, is a matter of concern to the people's livelihood. It plays an important role in the redistribution of social wealth, ensures the fair and just reuse and distribution of social resources, and is an important means to regulate the imbalance in economic development. It is also the system that plays the most important role in ensuring the lower limit of people's material life. A reasonable and sound social security system plays an important role in a society. It can improve people's living standards through comprehensive protection of people's lives, thus stabilizing people's hearts and promoting social development. Especially the development of economic level [4]. A good social security system should be more inclusive and friendly for the low- and

middle-income groups in society, because the social security system is built to scientifically and reasonably redistribute social resources at a higher level by the "visible hand" of the government in order to ensure the quality of life of low-income people, narrow the gap between the rich and the poor, reduce the burden of social aging, and have a positive effect on many aspects of social life, such as housing, health care, education and employment. Most importantly, a sound social security system can stimulate domestic demand, promote the further promotion of people's consumption desire, and thus promote further economic growth. Therefore, a sound social security system can promote economic development.

#### 2.STATUS OF THE RELATIONSHIP BETWEEN THE LEVEL OF SOCIAL SECURITY AND ECONOMIC DEVELOPMENT IN CHINA

With the continuous improvement of China's international status, China has become the second largest world economic entity. Only by coordinating the balanced relationship between domestic economic development and social security level can we better promote the further development and domestic promotion of and foreign economy.According to the investigation of the present situation, it can be found that the social security system of our country is not perfect enough, which is caused by various reasons. Because our reform and opening up has not been a long way, and the time to connect with the international economic market is relatively short. Although China has made remarkable achievements in a short period of time, it still needs to be strengthened in the construction of social security system. For example, the pressure of the middle-aged generation to support the previous generation and the education burden to the next generation, the employment pressure of the young people, the aging pressure of the society as a whole, and so on.

At present, the young people in many colleges and universities in our country are facing great employment pressure, as well as those who have worked for many years in enterprises and institutions, whose salary increases do not match the rising trend of house prices, and the current difficult problems of seeing a doctor.

## 3.STRATEGIES TO IMPROVE CHINA'S SOCIAL SECURITY SYSTEM

(i) achieving full coverage of the social security system in rural and urban areas

At present, while China's economy is growing rapidly, the gap between the rich and the poor is still an indisputable fact. Especially in rural areas in remote areas, their economic level is more backward. Although most of the urban and rural

areas of our country have already realized the coverage of the social security system, there is still a large social security gap in those economically backward areas that need to be improved and supplemented. From the overall point of view, although the proportion of the poor population in China is not large in the total population of the country, there is still a certain number of people [5]. This is not only related to the credibility of our government, but also related to the people's livelihood. It is the focus of the relevant government departments to make the social security system more perfect and comprehensive to cover the urban and rural areas of the country, and to give full play to its greatest social utility.

(ii)Expanding coverage of the social security system A more important aspect to realize the perfection of social security system is to expand the coverage of social security system. First of all, the social security system can be radiated into the population, into the needs of personnel goals. In the content of the social welfare security system, the scope of its security should be expanded, such as: citizen housing, education, medical care, transportation, employment, old-age care and other issues related to the basic needs of citizens to take into account. To truly maximize the benefits of the social security system, so that everyone can be radiated by the social security system, care, warmth, benefit.

(iii)The State shall increase its financial investment in the construction of the social welfare security system Whether we want to expand the radiation scope of the social security system or expand the content of the social security system, we can not do without strong financial support. The state should increase its financial investment in the construction of social welfare security and strengthen the reform and construction of the social security system with solid financial backing.

#### IV. Conclusion

To sum up, although China's social security system has been basically established, there is still room for improvement and improvement. According to the principle that the level of social security should match economic development, the government should increase the proportion of investment in the establishment of social security system. More importantly, economic development has always been the premise and strong support of all social security. While perfecting the social security system, the state should always bear in mind that the foundation of economic development is still the focus of all work in any era.

#### **REFERENCES**

[1] Huang Xiuzhen. A Brief Analysis of the Adaptive Relationship between Social Security and Economic Development.of China Chinese and foreign entrepreneurs 2019(19):62.

- [2] Meng Yijun. A study on the adaptive relationship between social security level and economic development[J]. Economic Research Guide, 2018(07):67-68.
- [3] Wang Shaoling. A study on the adaptive relationship between social security level and economic development. in this paper Finance and

Economics (Academic Edition), 2018(16):139.

- [4] Liu Yanbo. A study on the adaptive relationship between social security level and economic development.10 Market Forum 2017(05):12-13+28.
- [5] Sun Yihua. A study on the adaptive relationship between social security level and economic development. Economic Research Guide, 2017(12):35-36.

# Thinking on the Construction of Innovative Entrepreneurship Education System for College Students with Chinese Characteristics

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Absrtact: the high quality development of social economy in China needs the support of mass entrepreneurship and innovation talents. College students are the main force of innovation and entrepreneurship. The education system of colleges and universities determines the quality of training innovative entrepreneurial talents. In order to meet the needs of innovative entrepreneurial talents in today's and future innovative and entrepreneurial society, the characteristics and advantages of foreign innovative entrepreneurship education are studied from the global perspective and the background of the new socialist era.

**Key words:** college students; innovation and entrepreneurship; education system

The innovation and entrepreneurship education in our country develops rapidly, but it starts late. The innovation and entrepreneurship education is only at the level of higher education, and the mature innovation and entrepreneurship education system is still to be explored. In order to meet the needs of innovative and entrepreneurial talents in today's and future innovative and entrepreneurial societies, we should study the characteristics and advantages of foreign innovative entrepreneurship education from the international perspective, take its essence and critically draw lessons from it. Based on the national conditions, the innovative entrepreneurship education system of college students with Chinese characteristics is constructed.

## 1.BRIEF DESCRIPTION OF THE CHARACTERISTIC INNOVATION AND ENTREPRENEURSHIP EDUCATION SYSTEM OF REPRESENTATIVE COUNTRIES

The biggest characteristic of the innovative entrepreneurship education system in the United States is the formation of the innovative entrepreneurship education system in which schools, governments and all sectors of society participate. Innovative entrepreneurship education covers primary to university education and social education, school education as the leading, social education as a supplement, its innovative entrepreneurship education system has developed to a mature stage. The curriculum system of school

innovation and entrepreneurship education is mainly divided into basic education stage and higher education stage. Social innovation and entrepreneurship education mainly constructs the social "creation space" network to cultivate the innovative entrepreneurial consciousness of social citizens and the practice of innovation and entrepreneurship.

Unlike the curriculum system in the United States, Japan emphasizes basic, extended and practical courses, from the popularization of basic professional knowledge to scientific research and academic discussion, and finally to entrepreneurial incubation research. Japan regards entrepreneurship quality education as the basis of entrepreneurship development, and it also lists entrepreneurship development as the core of entrepreneurship development, and experiences entrepreneurship in entrepreneurial atmosphere, educational process and practical training<sup>[1]</sup>.

The curriculum system of innovation and entrepreneurship in Britain focuses on the cultivation of college students' innovative spirit and entrepreneurial consciousness, so the educational model presents the characteristics of opportunity orientation, practical application and diversity of content. In order to satisfy the students' differentiated entrepreneurship education, colleges and universities have also carried out the classification of entrepreneurship disciplines, and have added matching practical skills training courses to the relevant disciplines, and set up excellent teachers' teams to carry out innovative entrepreneurship teaching.

# 2.HE ENLIGHTENMENT OF FOREIGN CHARACTERISTIC INNOVATION AND ENTREPRENEURSHIP EDUCATION SYSTEM TO THE CONSTRUCTION OF CHINA'S INNOVATION AND ENTREPRENEURSHIP EDUCATION SYSTEM

The above three countries represent the characteristics of innovation and entrepreneurship education in three regions, reflecting the value orientation of innovation and entrepreneurship education in different cultural backgrounds of the three regions, which provides important enlightenment to the characteristic

education system of innovation and entrepreneurship in our country: first, we can not copy the system of innovation and entrepreneurship education in one country or region, let alone graft or piece together the so-called advantages or characteristics of innovation and entrepreneurship education system in each country or region; second, we can study the condensed results of its characteristics or advantages through the advantages or characteristics of innovation and entrepreneurship education system in other countries; Third, take the cultural tradition as the core to construct the innovative entrepreneurship education system with the goal of economic development.

## 3.CONSTRUCTION OF AN INNOVATIVE ENTREPRENEURSHIP EDUCATION SYSTEM WITH CHINESE CHARACTERISTICS

(i) Building a diversified environment for innovation and entrepreneurship

The government strengthens the system guidance, the policy guidance, and the social atmosphere construction function of the innovation entrepreneurship, optimizes the unceasingly innovation entrepreneurship policy, improves and consummates the innovation entrepreneurship education environment and the innovation entrepreneurship social environment. The top-level design formulates the government, the society, the school integration university student innovation pioneering support policy, creates the superior innovation pioneering support environment[2]To set up the innovative venture insurance system for college students and increase the support of policies such as innovative venture financing channels, tax relief, hydropower concessions, office rental subsidies, etc., in order to reduce the cost of starting a university student, optimize the entrepreneurial environment and stimulate the enthusiasm of college students to start a business.

(ii) Building an innovative entrepreneurship curriculum system with innovation ability as the core, entrepreneurship as the guide and entrepreneurship incubation as the goal

The achievements of innovative entrepreneurship education for college students in developed countries are attributed to its complete and characteristic curriculum system of innovative entrepreneurship education.On the basis of the achievements of cultivating the consciousness of innovation and entrepreneurship which have been achieved in our country at the present stage, and drawing on the examples and experiences of developing the curriculum system of innovation and entrepreneurship education which is excellent or characteristic in developed countries, and combining with the characteristics and present situation of our society, economy and culture, this paper constructs the curriculum system of innovation and entrepreneurship with innovation ability as the core, entrepreneurship as the guide and entrepreneurship incubation as the goal, which drives the systematic and sustainable development of innovation and entrepreneurship in our country.

(iii) To explore multiple teaching models to meet the needs of innovative and entrepreneurial teaching in different disciplines and specialties

Under the premise of innovative entrepreneurship curriculum system with innovation ability as the core, entrepreneurship as the guide and entrepreneurship incubation as the goal, we should vigorously explore innovative entrepreneurship multiple teaching models.Because of the different disciplines and specialties, the way of thinking, form and path of innovation and entrepreneurship are different, the current innovation and entrepreneurship teaching mode under the leadership of the innovation and entrepreneurship college in our country has played an important role in the completion of innovation and entrepreneurship awareness education, but it is difficult to undertake the needs of innovation and entrepreneurship education and teaching with the core of innovation ability, entrepreneurship as the guide and entrepreneurship as the goal, and innovation and entrepreneurship education should sink into the teaching departments, fully integrate innovation ability, entrepreneurship and entrepreneurship into professional education, and then guide the construction of innovation and entrepreneurship teaching mode with the corresponding professional characteristics and laws of each industry, According to their own professional development orientation, colleges and universities create innovative education teaching mode which belongs to their own professional characteristics.

(IV)Construction of a network of innovative and entrepreneurial practical education linked by schools and enterprises

The construction of mass entrepreneurship and innovation space in colleges and universities in China has developed rapidly, and mass entrepreneurship and innovation society and even mass entrepreneurship and innovation town have begun to appear. The huge laboratories of social enterprises and scientific research institutions also have more space to develop into a shared mass entrepreneurship and innovation platform.But at present, the utilization of these innovative entrepreneurial resources is separate, the degree of sharing is low, and the utilization value of mass entrepreneurship and innovation is running at a low level.At present, how to use institutional innovation and policy design to transform these abundant mass entrepreneurship and innovation resources into a practical teaching sharing platform for college students' innovation and entrepreneurship, and to create a network of innovative entrepreneurship practice education linked by schools and enterprises. Is highlights the Chinese characteristic innovation entrepreneurship education system construction a link. Colleges and universities should take the initiative to pay attention to the new situation of industry development, the development of new industries, actively seek counterpart enterprises, well-known enterprises to establish professional teaching-based innovative entrepreneurship teaching cooperation mechanism, jointly cultivate innovative entrepreneurial talents to meet the needs of new industries and social development; enterprises and mass entrepreneurship and innovation incubation space, using the advantages of industrial development research, product innovation or mass entrepreneurship and innovation project incubation and investment and financing, and establish innovative entrepreneurship platform with colleges and universities<sup>[3]</sup>. Through the cooperation between schools and enterprises, the establishment of cross-department, cross-professional, cross-disciplinary, cross-grade innovative entrepreneurial flexible training base or innovative entrepreneurial team.

(V)Setting up innovative and entrepreneurial teaching staff with equal emphasis on theory and practice

In the characteristic innovation and entrepreneurship environment education system, teachers still occupy the leading position in teaching the theory of innovation and entrepreneurship education, and at the same time, they should guide students' practice in entrepreneurship after completing the systematic knowledge theory course.

In this regard, colleges and universities recruit innovative entrepreneurship education curriculum teachers, in addition to selecting full-time teachers engaged in innovative entrepreneurship research for many years, they can also seek a large number of entrepreneurs with practical experience and good educational background, well-known alumni, managers or technical engineers to serve as visiting professors, and establish a team of excellent innovative entrepreneurship teachers with equal emphasis on theory and practice, so as to improve the overall teaching level of teachers' innovation and entrepreneurship and provide practical guidance, policy advice and services to students.

#### IV. CONCLUSION

To construct the system of innovative entrepreneurship education for college students with Chinese characteristics, to expand the scope of education by taking innovative entrepreneurship education for college students as the center, to popularize innovative entrepreneurship education to primary and secondary schools and graduate students, and then to spread innovative entrepreneurship education to society.

#### REFERENCES

[1]Yan Jiaqi, Guan Xiaoli. A Multi-Case Study and Enlightenment of the Innovation and Entrepreneurship System in American, British and Japanese Universities, Contemporary Educational Sciences, 2015(21):48-53. [2]Wang Xiaoyu. American Innovation and Entrepreneurship Education System and its Enlightenment to the Domestic Innovation and Entrepreneurship Education, Journal of Chifeng University (Natural Science Edition)(9):175-176. [3]Li Zhongshuang. Dynamic Mechanism of Entrepreneurial Education Development in American Universities Changchun: northeast normal University.

## How to Become a Qualified Apparel Design Undergraduate Student

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**ABSTRACT**. With the fast-growing fashion business in Chinese domestic market and the continuously incoming foreign fashion brands, competition have become more and more fierce nowadays from business aspect to human resource, and situation is also same for the young fashion designers to face the competition when they are looking for a job, as an undergraduate after spending years of studies at the universities and colleges. Branding enterprises, both domestic and foreign, they have proposed more new requests for the young degree holders. Meanwhile, based on what we have observed from the enterprises for long, the demand for discovering more local design talents seems to be somewhat difficult to be satisfied. Brands and companies often spend and pay great efforts, extra expense and time from months to several years to help these fresh new undergraduate students newly from campus to be really qualified to do their work, even after years' studies. The fashion industry, the trendy market, high fashion and the garments and apparel brands, always look forward to new fresh ideas for meeting the upcoming consumer demand and somehow, young designers may be lack of branding market awareness and practical design experience, but they may have more original and individual thoughts during transitions from schools to companies, from books to retail stores and websites, and from school workshop to real design and manufactures. How to become a qualified fashion apparel designer, is what we are trying to deal with within this essay.

**KEYWORDS**: Fashion industry and market; Branded apparel design; Education and practice; Undergraduate student

#### 1. INTRODUCTION

For the writer himself of this essay, since over 12 years of apparel design teaching at university, as well as almost 20 years' non-stop first line designer at the business, research and developments, manufactural practices at the garments industry, transferring from both sides of the company design leader and school tutor, fruitful clues and thoughts have already taken place and some points of views hereby would like be tried as listing up kinds of crucial elements for young design freshman in universities and colleges how to become an qualified apparel design skills based on the market and school status-quo, and ways to help more potential design talents to have better understandings of their future

career before they really enters in the society and the fashion industry, as below.

## 2. BACKGROUND INFORMATION OF FASHION DESIGN MAJOR IN UNIVERSITIES AND COLLEGES IN CHINA.

Let's take a look at the recent fashion design education history for over past decades. Fashion design majors have emerged in domestic universities and colleges around the 90s, last century, while used to be known as textile dyeing and weaving in the early 1980s [1]. And then, as years went by, the whole country's export and trading business blooming up, and the domestic market started to be explored and developed, so that, the fashion design major was divided apart from the textile major finally and became individual and independent teaching system. Many companies were in great need of design professionals who could draw design renderings and sketching according to the popular trendy styles from oversea fashion shows and magazines, and the new customers' orders from the foreign trading fairs [2]. Other practical terms of design, such as cutting skills and manufacturing experience, was not really that necessary at that time. During the early decades, most of the fashion students were taught how to master fluent fashion drawing expression and creative sketching, and the practical experience was not emphasized enough.

When time came to the millennium, after China opened mainland market and entering the WTO, the fashion export and trading industry and domestic manufactures started to realize the mass changes in the domestic market and the request for establishing more local original fashion brands.

So as a result, many enterprises, no matter size and scale, big and small, suddenly found the designers who only focus on drawing design renderings based on the orders, could not satisfy the market and customers any more.

But changes always came first in the frontiers and edge lines of the competitive markets, while education tutors at universities and colleges still carried out teaching plan based on the previous understandings of the fashion market. And then problems have occurred.

For a long time ever since we have fashion design majors at the universities and colleges, the gap between the so called academic, institutional or school-prototype teaching system and the model applicable and practical for fashion companies, has never been narrower [3-4]. To find the real causes behind the screen, phenomenon

indicates the traditional teaching mode at domestic colleges is not really matching with the changing fashion world. Design knowledges from school classrooms and books, the research teachers doing on papers, are usually not oriented for developing the young talents to meet the market demand for interns and design trainees.

## 3. THE REASON AND WAYS TO ENHANCE THE DESIGN EXPERIENCE OF THE FASHION UNDERGRADUATE THROUGH CLASSROOMS.

It is with no doubt that, students usually and normally are lack of practical experience, weak at design and cuttings skills when they come into the universities and colleges at the beginning or even after first two years of freshman and sophomore. This is because most of them never do exercising about sewing a clothing or even cutting a fabric, nevertheless to say that they receive any training about fashion design and manufacture before, but just routine studies about the traditional basic and comprehensive programs at the ordinary schools. Some of them may have taken a period of training of drawing and painting so that they may have better presentation when design sketching. However, we usually find an interesting sign that famous and successful designers, they may have been benefit from the sophisticated branded fashion industry as whole world scale, but also they have done pretty much exercises about tailoring, cutting and designing original works from young days before becoming an university and college student to receive formal education about fashion studies, even not, the others may have experience a long time of artistic education ever since being kids at kindergartens. This situation is totally different from our young and new potential design students in the country. Perhaps at the very beginning most of the students never thought about or did not see fashion design as a dream career, and some of them may find it interesting but reluctant and not patient enough to bury so much burden of tailoring, cutting and sewing work which could consume of a lot of time, money and energy to fulfill a work from a creative idea to finishing a real clothing which can be worn on a model. So a result this is the primary cause and then they won't pay enough efforts and spend so much time to achieve the potential professional career and become qualified. Moreover, it could be also difficult to ask them to achieve sufficient art and design education and abundant design practices in just couple of years' studies since the domestic market have been still transforming from "Made in China" to "Design in China". The market space seems to be not enough for individual designers to grow and develop for the first twenty years since 2000AD, which would be talked about at the below paragraph.

So it's more important to put more design experiment courses and design practices into their schedule, developing their design works at the workshop studio, instead of sitting at classrooms day by day. They must learn and feel the process of designing and making original fashion art-pieces by their own hands and then come back to books to study history, knowledge and theories. Only through sufficient design training rapidly for the first half of the college days, young students might find the interest and become self-awareness and positive for sustainable development for fashion design studies. This is very challenging, at least not easy for Chinese students, either for teachers. On one hand, students are used to sit and listen to do what teachers tell them to do. On the other hand, many teachers in schools have not enough working experience in fashion market. Design knowledge from books to books may not come up with the fast-changing industry.

## 4. DESIGN TUTORS SHOULD LEAD THE ROLE BY CO-WORKING TOGETHER WITH DESIGN STUDENTS TO DEVELOP A NEW FORM OF DESIGN TEACHING SYSTEM.

Based on the above, more and more enterprises, nowadays, need practical and functional designers with individual style, but not copying machine to do the copycat design. They are looking forward that the new coming designers can find good balance between personal style and the marketing brand demand.

Now we can say that design experiments and practices are very crucial for young students to have better balance between personal original design style and the trendy demand as business sense and marketing sales benefit. Design courses with projects at workshops are now adopted by many fashion institutions and academic teaching schools in universities and colleges. This can help students to have more enough experiences before they leave campus and enter the industry when undergraduate. They should also receive artistic design knowledge, and meanwhile, develop their own skills, better understand the books and the lectures. All of these combining together in a proper way by school teachers as a system and vivid organic form, may help young designers know how to come up with the trendy fashion and aesthetics with appropriate artistic design interpretations. But this may request the challenge, change or even reform for the institution tutors and school teachers, from their own design abilities and teaching capacity to the education programs. Many of the schools are still adopted with the traditional mode of diving the lessons with several different teachers and the connections between each course are fragile and weak, so as a result students would easily be misery and lost among all the different lessons homework and assignments.

And then a new issue is brought hereby, what kind of the teachers can have both enough design experiences and comprehensive theory knowledges and market sense and vision to guide the students. If so, the teacher may become a successful design director or even an enterprise owner with own fashion brand and lack of time to go

back to the classroom from then. With no doubt, it's not easy for teachers on campus to work in companies at the same time. And if we say, how about the company designers to become a university design tutor? Well, then more issues and problems will occur then. Perhaps they are lack of teaching skills or lack of scholarship or educational certificate if they are looking for a job at colleges and the payment offered by the schools are often far less than what they earn in the companies. And this is kind of doubt sword thing. At least up till now as we can see, the payments for normal university design teachers by only teaching are barely enough for ordinary life expense. So first the student, and then the other leading role of this essay, the teachers also need to grow up and develop themselves because design is along with the market and the demand from the changing consumers. If being far away from them, the knowledge and theory may last from books but the design sense and vision will be out of fashion.

So not just students, but also the teachers, are requested to attend with the workshop, domestic or foreign, improving skills, design projects for particular goals with the enterprise to achieve kind of fashion activities, to maintain as a positive cycle for the whole thing. They could bring potential students together and attend the project. More and more teachers with good market resources have done so and then back to campus they stimulate the project into the teaching program and ask the other students to do so. As the whole industry is still far behind the Europe and American fashion market and brand companies, the growing demand for higher levels of design talents are never stopping. Young teachers should now just focus more on the design experience to keep up with the fashion industry, and then response to the classroom, to the students and to the paper studies based on their own design works and gains.

However, competitions in the fashion market are intense and fierce for teachers to run through companies and have daily teaching at school. The schools need reform to build up a practical design teaching system to meet the market's expectations, to give appropriate guidance and leading towards different student who have different interests and minds, it is definitely difficult for teachers since design is really personal and individual style stuff. A vivid and complementary system perfectly combing different design courses, such as fashion materials, fashion sketching, draping and cutting, creative fashion and apparel design, consumers psychology, marketing display design and branded design planning, including theory lectures and work practices in reasonable form, procedure and agenda, taught by teachers with market experience, good design skills and international trendy vision, and all together may have more chance to develop more professional, qualified young fashion talents with design passion, creative ideas and merchandising minds.

## 5. MORE CONTENTS APPLICABLE TO THE DESIGN COURSES FOR DESIGN TUTORS TO HELP UNDERGRADUATE STUDENT TO DEVELOP THEIR EXPERTISE.

The teaching courses can be also aggressive, by chasing the design activities besides from the company workshop projects. For example, there are many different kinds of design contests every year for discovering new design candidates with the aspects of creative fashion, swim fashion, fabric experimental fashion and knitting fashion etc. Some of the contests can provide professional facilities for special craftmanship and working and sewing space and machines for students to participate with the contest. We can find more and more local government and fashion organizations in Beijing, Shanghai, Hangzhou, Guangzhou and Shenzhen, so called Canton Bay Area to establish such kind of contest to help new individual designers to grow up.

So as a result, teachers can combine the daily teaching contents with the objective of the contests to push the students to find their goal for design study and participate with more related fashion activities. Even if the number of enrollments of the contest is limited for only small group of participants, targeting for the specific contests during a course assignment and then having a collection show or fashion runway presentation show after semester courses is also proved to be very effective for pushing the limits and potential for the young students to concentrate on the design studies and practices, as the matter of fact that many of them would not like to be regarded as failure and loser among the fellows. The institution leaders should understand the upcoming fashion market situation and help the fashion school to continue developing the teaching programe.

To help the young design students to train themselves with good design way and working customs, improve creative design efficiency during design process. Moreover, teacher can play role as project managers, stimulate the design workshop and design project according to the timeline of design development, and carry out once the design plan is noticed by the participant students.

So as for all the above, the fashion industry is in great need of new and fresh design talents. Fashion undergraduate students are the future of the Chinese fashion design society. Made in China is so well know now worldwide, and fashion industry have been very competitive in trading and manufacturing for the over decades once China open the gate to the world and establish considerate numbers of factories with strong production capacities. But as time goes by, with the upgoing production cost and human expenses, pricing margin is not our selling point any more since many new overseas markets have shown up as competitors to chase for the trading, purchasing and manufacturing orders from the brands and big companies. Time is running

short for us. From made in China to Design in China, the fashion people should realize the importance to train more new young professional fashion undergraduates. Last but not least, the changing fashion industry and the developments of the whole market, domestic and overseas, are always welcome for the best of the best design people, the students do have potential to grow even though the beginning may be a bit later than the foreign students, and the teachers should also work and study together with the students to have more market workshop and design contests to bring with the courses and grow together. Even staying in school before undergraduate after years of studies, students need to gain abundant experience by design courses, design workshops and contests, summer and winter design internship, to build up personal abilities and social design resources and networks, to help themselves to have a full category of personal portfolio of design works and collections, and maintain a heathy design logic and working customs to make the best usage of time, better balance between working and living as so many original creative ideas come from daily life, before entering the company as a design trainee. And the teachers would absolutely gain a lot of achievements and developments from doing so together with the students as a positive cvcle.

The classrooms should turn into a real dynamic form and cycle which can vividly combine different courses

together and make them complementary with each and let the students have a full understanding of why and how to become a qualified professional fashion designer in the days to come.

Thanks for all the time reading this essay and hope to receive your suggestions and ideas for improvements.

#### REFERENCE

- [1] Choi Kyung Hee, A Study to Suggest Korean Fashion Design Education Model for a Creative Fashion Design -Focus on Comparative Case Studies in the USA, Europe, and Korea, Journal of the Korean Society of Clothing and Textiles, Volume 36, Issue 1, 2012. PP 68-83.
- [2] Macrothink Institute, Figural Creativity, Creative Potential, and Personality among Taiwanese Fashion Design Undergraduates, Global Journal of Educational Studies, Volume 4, Issue 2. 2018.
- [3] Faerm, Steven, From classroom to design room: the transitional experience of the fashion design graduate, Cuadernos del Centro de Estudios en Diseño y Comunicación. EnsayosIssue 48. 2014. PP 129-152.
- [4] Jeehyun Lee; Jiwon Ahn; Jieun Kim; Jeong-min Kho, Co-Design Education Based on the Changing Designer's Role and Changing Creativity, International Journal of Art & Design EducationVolume 38, Issue 2. 2019. PP 430-4.

# An Analysis of the Romance of Elephant Worship Culture in Thai Language and Literature

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**Abstract:** As a country that produces elephants, elephants play a very important role in the production and life of people there, and they also worship elephants very much. The specific expressions of Thai elephant worship culture can be analyzed from a variety of forms

like Thai language and literature.

**Keywords:** Thailand; language and literature; elephant; worship; romance

#### I. INTRODUCTION

Thailand has beautiful scenery and rich animal resources. Elephants are good partners of Thai people and are worshiped and respected by them [1]. Elephants can be seen everywhere in Thai idioms and films as well as TV and literary works, and they are closely related to people's lives.

### II. ELEPHANT CULTURE RECORDED IN IDIOMS

As the essence of national languages, idioms have a very strong national character and reflect the cultural essence of a nations. Located in a tropical rain forest, Thailand has rich flora and fauna resources. Those refined idioms extracted from people's daily life express their knowledge and feelings about nature. Of course, there are many idioms related to animals. The Thai people process and recreate the image of animals through language, sublimating them into cultural semantics and developing them into classic idioms [2]. And the more profound and migratory meaning given to these idioms makes the psychological characteristics and emotional factors of the Thai people be reflected in the language.

### (i) The figurative meaning of the image of elephants in Thai idioms

Elephants in Thailand are like dragons in China, and they are often regarded as a symbol of Thailand. As a behemoth that can be seen everywhere in Thailand, elephants are a symbol of auspiciousness in the hearts of Thai people, and also a holy animal that people worship and admire. They are regarded as national treasures in Thailand. Unlike the dragon, which is an illusory animal created by the Chinese, the elephant is a real animal in the real nature and is closely related to the life of the Thai people. The emotions of the Thai people are more authentic, and the idioms related to elephants are everywhere in the language. Among Thai idioms about animals, there are as many as 30 idioms about elephants, accounting for 8.36% of all animal idioms [3]. Here are some examples:

- (1) ผู้ชายก็เหมือนขาหน้าของช้าง ผู้หญิงก็เหมือนขาหลังของช้าง (Men are like the front legs of an elephant, while women are like the hind legs of an elephant.). It means a wife is her husband's echo.
- (2) ชี่ช้างจับแมลงปอ (Ride an elephant to catch a dragonfly). It is used as a metaphor for making a fuss.
- (3) คำพูดก็เหมือนงาช้างล้ำค่า (Words are like precious ivory). It is used as a metaphor for a person who cherishes words like gold.

These elephant-related idioms not only reflect the close relationship between elephants and Thai people in daily life, but also reflect their unique humanistic characteristics. It is still necessary to study why there are so many idioms about elephants from the whole construction system of Thai elephant culture. This is inseparable from the reasons for the emergence of the elephant culture mentioned by the author in the previous chapter. Since ancient times, elephants have been a common animal in Thailand, and they are closely related to the daily life of Thai people. The status of elephants in their mind is externalized through idioms. The phenomenon of "animal words", like a mirror, reflects the changes in cultural concepts, social psychology and customs of various languages, and also observes the core of cultures. The cultural connotation is a manifestation of the nationality of the vocabulary, which reflects the historical culture and national customs of the country where the language is used, and it also full of the national cultural characteristics of the country [4].

The related elephant idioms in Thai are an important part in the Thai cultural system. In Thai idioms, elephants are used as a metaphor of making fuss, puffing oneself up at one's own cost, futile effort to stop scandal, robbing the poor to help the rich, etc. They have the individual characteristics of the Thai nationality, and faithfully record the cognition track of the Thai people's understanding of elephants.

It can be seen from the above examples that animal words have a relatively fixed image under the influence of cultural traditions. This relatively fixed image with "cultural inheritance" is different from the general images that change with the context, because it makes a language more vivid in the national culture.

## (ii) The connection between elephant and Thai female worship from proverbs

There are two idioms about elephants in Thai idioms:

①ควรดูซ้างในฤดูหนาว และเด็กผู้หญิงควรดูในฤดูร้อน;
②

ดูช้าง ดูหาง ดูนาง ดูแม่นาง. Why are elephants mentioned in the same breath with women in Thai idioms? It can be analyzed from the following two aspects:

The first is the worship of women by the ancestors of Thailand. For the ancient Thai people who mainly relied on farming, population growth was of great significance to the survival and reproduction, because it not only meant an increase in productivity, but also an increase in state power. In that context, the rulers attached great importance to population, and Thailand always regarded the protection and expansion of human resources as a major issue. Family life also needs labor, and population growth is directly related to women. Therefore, Thai people have established their worship of women in primitive cognition. People respected and even worshiped them very much in the primitive matrilineal clan society. Human reproduction was particularly important in primitive societies featured by backward productivity, because it was not only an important guarantee for life and production materials, but also a prerequisite for human survival and reproduction. In the matriarchal society, human beings were limited by the natural environment and their cognitive level. They believed that females were irreplaceable in the process of human reproduction, and thus developed dependence and worship on females who create and nurture new lives. In Thai dictionaries, "إذا (mother)" is a polysemous word that contains several basic meanings, such as ① mother; ② magnetism; 3 female; 4 the honorific title of the elders to ordinary women; Sleader 6the main part in the supporting stuff, etc. From the inherent thinking formed by the Thais in the primitive period, it can be seen that they worshipped women and believed that "mother" who created life was the main one and respected them as leaders. In addition, there was worship of animism in the primitive society, and thus women became the gender orientation of the primitive gods of the Thai people, such as the kitchen god, the grain god, and the land god. The primitive thinking of the worship of women in history is also reflected in Thai folklore.

"ดูช้าง ดูหาง ดูนาง ดูแม่นาง" means that the quality of an elephant can be judged from its tail, and that whether a girl is suitable for marriage can be judged by her mother. Imitating people with objects and adding the contrast of elephants makes the idioms more vivid and the reasoning is more profound and simple. It can also be seen that elephants have a lofty and irreplaceable status in the minds of Thais. When women are compared with elephants, it can be seen from the other side that women have an important status in ancient Thai society. The idioms show that the Thai people's traditional evaluation criteria about women is not "beautiful", but "capable". In other words, the Thai people believed that elephants are capable animals, and they hoped that women who could give birth to children could also provide guarantees for the reproduction of the nation like elephants. However, this kind of psychology is

reflected in idioms under the condition of poor historical records, making idioms as a unique cultural essence inherited from ancient times, which provides an effective way to study the past of the Thai people. The Thai idioms mentioned above show the forgotten history of the Thai people's worship of women.

## III. ELEPHANT CULTURE IN FILMS AND TV WORKS

Elephants play the leading role in Thai literary works. There are many elephant-related films among Thai movies, such as "The Elephant Keeper (1987)", "Tony Jan", 3D animation "Khan Kluay", and so on. In the following part, the author will give a brief introduction to some of the films to illustrate the image of bravery and kindness that elephants are considered to be endowed in films and television works.

#### (i) "Khan Kluay"

This 3D movie tells the story of a naughty baby elephant Khan Kluay that grows in the forest. On a journey to find his father, Cuba, he suffers many hardships and becomes a war elephant in the end. In this movie, the producer gave the protagonist the little elephant Khan Kluay a very human character, making it both touching and inspiring. After meeting his mother who had been separated from him for many years, Khan Kluay gave up the championship game in order to get together with his mother and frantically attacked everything around which hindered their gathering, showing the kindness of elephants in people's minds. Khan Kluay's bravery was fully demonstrated in the final battle. Although Khan Kluay is not as big as his competitors, he successfully defeated his opponents with the strong energy, fighting skills he had just practiced and the spirit of never giving up. In the crisis, the spiritual encouragement from Khan Kluay's master made him stand up again, which also proves that the driving force of the soul cannot be underestimated.

#### (ii) "Tony Jan"

In the movie "*Tony Jan*", the actor Jan risked his life to go to Australia alone to challenge the bad guys, and finally successfully rescued the elephant who was traded on the black market. The film not only praises the hero's bravery and spirit of mettle, but also reflects the image of the cute and tenacious elephant in the hearts of Thai people.

In almost all Thai film and television works where elephants appear, elephants are brave, kind and friendly, which shows the good image of elephants are in the minds of Thai people. They are not only a wild animal, but a close partner of them, a symbol of bravery, kindness, friendship, and mettle. These films also show Thai people's advocacy of bravery, kindness, and mettle.

### IV. ELEPHANT CULTURE IN LITERARY WORKS

Every nationality has gradually precipitated its unique cultural traditions, customs, religious beliefs and personality psychology that are different from other nationalities in the long history. These cultural factors will inevitably have impacts on literary works. Elephants can also be seen in Thai literary works, such

as the Thai novel "Khunchang Khunbhan", Thai fables such as "The Ant and the Elephant", "The Elephant and the Snake", and so on.

### (i) The elephant worship culture in "Khunchang Khunbhan"

In this Thai masterwork, the name of the male protagonist Khunchang is related to elephants. In this story, Khunchang's mother dreamed of a huge elephant dying on the side of the road when she was pregnant, and a bird bit a piece of elephant meat and approached her. His mother asked a dream interpretation gentleman about the meaning of this dream, and he told the mother that she would give birth to a bald boy who would bring endless wealth for her family. His mother often craved uncooked food very much during her pregnancy. After Khunchang was born, the wealth of his parents quickly accumulated, and the family became rich. Khunchang's grandparents were very happy and thought it was Khunchang that brought good luck, so they named the boy Khunchang. "Khunchang Khunbhan" is a long narrative poem, originally a folk rap story spread in Suphanburi area. It was collected and sorted out to be a long poem during the period of Ayutthaya II. In 1767, it was lost when the Burmese army captured Ayutthaya. By the time of Rama II of the Bangkok dynasty, court conducted successive supplement poets compilation based on the remaining materials and artist narratives. The book was edited and published by Tanlong Ratchanaupa et al in 1917. The long poem expresses the love story of ancient Thai youth and urban social life. The son of the military commander of Suphanburi Province, Paleo, was ordered to lead his troops to fight against the Lao army. The dude Khunchang spread rumors that Paleo had died in battle, and took the opportunity to force his wife Wantong to his home. But Paleo returned triumphantly. He not only was promoted to the title of Khunbhan Shengsartan, but also brought back Laotong, who was born in Laos, as a concubine. Wantong quarreled with Laotong and then married Khunchang. Then Khunchang and Khunbhan repeatedly competed for Wantong. Wantong hesitated between the two men and was executed by the king at last. The plot of the long poem is fascinating, the characters are vivid, and the language is concise and powerful. It is listed as a textbook for liberal arts by the Thai government and is well-known to every family there.

In the novel, the mother of the protagonist took the

dream of an elephant as a sign of good luck and named her son with an elephant. It can be seen that the elephant is a symbol of auspiciousness in Thai society and is loved and admired by people.

#### (ii) The elephant worship culture in "Jakata"

"Jakata" is also known as the Buddha Jatama Sutra, which is widely spread in countries that believe in Buddhism. Jataka is the story about the Buddha's practice of reincarnation when he was a man or an animal in his previous lives. Before becoming a Buddha, Sakyamuni could not escape the cycle of reincarnation. He had to go through countless rebirths before he could become a Buddha. In these countless rebirths, the previous life of the Bodhisattva transformed into a variety of animals, including the fish, elephant, bird and beast, and so on. Bodhisattvas used their mouths, either with actions or words, to preach scriptures and preach, accumulate goodness and gather virtue, so as to get rid of the suffering of reincarnation.

From the perspective of the wide range of themes, there are also many animal-based themes apart from personnel as the center, such as "Deer King", "Magpie King", "Peacock King", "Elephant King" and "Parrot King", and so on. In the chapter "Elephant King", "The Poor Man and the Elephant" are all stories about the Buddha's reincarnation as an elephant and the influence on mankind.

#### V. CONCLUSION

Of the 550 traditional stories in Theravada, a full half (225 stories) mention animals, and they are usually the protagonists of the stories. In these 225 stories, 70 different animals are mentioned, and there are 319 pieces (or groups) of animals appearing. Among them, monkeys appear in 27 different stories, followed by elephants who appear 24 times. <sup>1</sup> It can be seen that elephants are worshipped in Buddhist countries.

#### REFERENCES

- [1] Xu Pian. Stories of Thai Elephants. Yimei Book Company, 1962.
- [2] Thai Blacon, Nimman Hemin. Thai Folktales. Bangkok: Chulalongkorn University Press, 2008.
- [3] Zhou Lihua. Animal Idioms in Thai Language. Bangkok: Chulalongkorn University Press, Thailand, 2006.
- [4] Thai Animal Idioms, Chulalongkorn University Press, 2006.

<sup>&</sup>lt;sup>1</sup> Lin Yanru. Study of Stories in "Six Ways to Pāramitā". http://www.wuys.com/

## Problems and Path Construction of Curriculum Development for Foreign Students in Higher Vocational Education

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**Abstract:** In recent years, the international exchanges of higher vocational education in China is becoming increasingly frequent, and increasing higher The number of foreign students coming to

becoming increasingly frequent, and increasing higher vocational colleges have begun to enroll foreign students. In this context, the development of related courses directly affects the training quality of foreign students, and is also a key link to ensure the healthy development of higher vocational education programs for foreign students. This article analyzed the implementation path of curriculum development based on the current situation and problems of curriculum development for foreign students in higher vocational colleges.

**Keywords:** higher vocational education; foreign students; curriculum

#### 1. INTRODUCTION

China has become the second largest economy, and with it comes an ever-expanding exchange of talents and technologies with countries around the world. From the perspective of the development of domestic higher vocational colleges, the internationalization of vocational education has become an important way to their connotation construction competitiveness [1-2]. In 2019, the "China Education Modernization 2035" issued by the Central Committee of the Communist Party of China and the State Council and the "Opinions on Implementing High-level Higher Vocational Schools and Professional Construction Plans with Chinese Characteristics" formulated by the Ministry of Education and the Ministry of Finance made the promotion of vocational education open to the outside world as a key construction task [3]. It can be seen that internationalization has become an important requirement connotation modernization of higher vocational education. In 2017, more than 400 higher vocational colleges in China carried out more than 900 cooperative education projects with foreign educational institutions, and the higher vocational colleges accepted more than 7, 000 full-time foreign students [4-5]. By 2018, the number of full-time vocational colleges studying in China had reached 17, 000, with a year-on-year increase of 50%. To ensure the quality of teaching for foreign students in higher vocational colleges, the fundamental focus must be on curriculum construction [6].

2. THE CURRENT SITUATION AND PROBLEMS OF CURRICULUM DEVELOPMENT FOR FOREIGN STUDENTS IN HIGHER VOCATIONAL COLLEGES

The number of foreign students coming to China from higher vocational education has increased sharply in recent years due to the guidance of national policies and self-development needs of higher vocational colleges. However, due to that higher vocational colleges carry out the education of foreign students late especially the education about academic qualifications, there are few related theoretical researches and practical exploration. This field is still in the process of practicing, exploring, summarizing, and improving. In terms of micro-level curriculum construction, the research on curriculum objectives, curriculum content, curriculum development, curriculum resources, etc. are still in their infancy, which should be attributed to the lack of investigation and analysis of the source of foreign students. In addition, there are still problems, such as emphasizing enrollment while ignoring training, emphasizing language teaching while ignoring professional courses, emphasizing academic qualifications while ignoring employment. Connotation construction has lagged behind scale development to some extent.

#### (1) Inaccurate training goals

The vocational education in China has always been aimed at serving the regional economy. Under the new situation, higher vocational education for international students has been given a new historical mission, namely, providing technical and skilled talents for the development of the international economy under the framework of talent exchange. At present, domestic higher vocational colleges have not yet formed an explicit international school-running ideas and clear training goals for foreign students, and they unilaterally emphasize the effect of scale. At the same time, the complex situation of the source of foreign students also makes it more difficult for higher vocational colleges to determine talent training goals. They have not yet formed a scientific and unified understanding of what kind of foreign students should be cultivated, which directly leads to an overly macro-level orientation of curriculum for foreign students. Accurate positioning of training goals is the prerequisite for education and teaching, the starting point for developing the curriculum system, and also the logical starting point for determining the curriculum goals.

(2) The lack of scientific guidance in curriculum development

After experiencing a variety of curriculum reform waves, including the practice-based model, the abilitybased model and the work-process-based model, vocational education in China now has basically formed a curriculum development model that conforms to the actual conditions of specific schools and majors based on the guidance of curriculum theories. However, there is no mature methodological guidance for the curriculum development for foreign students, and it is obviously not scientific to directly use the ready-made development model. Most existing researches just system mechanism and student on management. There are only few case studies of the teaching level, and nearly no research on the course construction at the micro level. Therefore, the current curriculum system development of higher vocational colleges lacks scientific guidance, and they are still in the stage of practical exploration.

#### (3) Imperfect curriculum system

According to the survey, foreign students in vocational colleges, whether they are mixed with Chinese students or grouped separately, almost follow the existing curriculum system of the major; the teaching, management and other aspects of them are similar to those of Chinese students of the same major, which obviously ignoring the subject particularity of foreign students in higher vocational schools. At the same time, the domestic professional settings are not the same as the international ones, and there are big differences in training directions, curriculum settings and teaching content. At present, the professional courses designed for Chinese students are simply applied to the education of foreign students, which negatively affect their acceptance and the realization of training goals. In addition, due to related restrictions on the post practice in enterprises by relevant regulations of foreign affairs management, it is difficult for foreign students to obtain professional practice that are exactly the same as Chinese students. The low requirements for the practical ability of foreign students restrict the development and improvement of their innovative and practical ability, and thereby the advantages of domestic practice teaching cannot be reflected in the education of foreign students. Therefore, construction of a scientific and reasonable curriculum system that can achieve educational goals is the key to the cultivation of foreign students.

#### (4) Lack of curriculum resources

The current professional textbooks for foreign students are only suitable for undergraduate colleges, and most vocational colleges do not have the ability to independently develop textbooks for foreign students, which has caused great learning obstacles for them. The lack of curriculum resources in the direction of technology application can easily make foreign students feel bored and even lose interest in studying professional courses. In addition, there are nearly no online bilingual learning resources for foreign students, which is not conducive to developing their ability of independent learning.

#### (5) Insufficient teaching ability of teachers

Since the education of foreign students in higher vocational colleges just started, teachers generally lack related experience. First of all, the lack of coordination among the teacher of Chinese language, teacher of professional courses and practice instructors has resulted in the disconnection of courses and insufficient mutual support. Secondly, teachers generally do not master proficient foreign languages. encountering professional vocabulary involved in professional courses, foreign students often have difficulty in understanding. Then, the lack of effective communication between teachers and students due to language problems is not conducive to achieving the curriculum goals. Third, teachers have insufficient cross-regional and cross-cultural communication skills. Most of them lack self-confidence in participating in foreign teaching and cross-cultural communication, and cannot satisfy the needs of foreign students. In addition, in terms of the construction of the faculty of higher vocational colleges, it is difficult to introduce and self-train international teachers and experts.

## 3. THE PATH CONSTRUCTION OF CURRICULUM DEVELOPMENT FOR FOREIGN STUDENTS IN HIGHER VOCATIONAL EDUCATION

(1) The concept of constructing a curriculum system for foreign students in higher vocational colleges

Curriculum development for foreign students in higher vocational colleges should follow the concepts of "international vision", "project management", and "cultural integration".

Higher vocational colleges should actively develop and implement the "going out" strategy, so as to cultivate technical and skilled talents with an international perspective. It is necessary to determine the objectives, content, organization and evaluation methods of curriculum construction based on the specifications of international talent training and the construction direction of specialized courses, and build a curriculum system in line with internationally accepted standards of professional qualifications, so as to ensure that the foreign students trained under the curriculum system have strong international competitiveness in terms of employment. Higher vocational colleges can cooperate with foreign universities and multinational companies to develop competency-oriented international courses that combine generality and practicality. At the same time, there is a need to consider the situation of different countries to enhance the learning effectiveness of foreign students.

It is necessary to coordinate course modules and teaching resources with the concept of project management, organize teaching teams, and clarify teaching tasks. A large amount of Chinese traditional culture should also be integrated into the curriculum system to strengthen foreign students' understanding and recognition of China. Incorporating cultural elements into the teaching of professional courses is

also conducive to improving the enthusiasm and initiative of foreign students in learning.

#### (2) Clarify training goals

The determination of training goals should be based on the needs of foreign students in higher vocational education. It is necessary to carry out extensive and indepth research on the source of foreign students, and then determine proper learning objectives for Chinese language and professional skills based on their current situation and needs. Under the leadership of training objectives, higher vocational colleges should scientifically and rationally arrange teaching time, coordinate teaching resources, and implement teaching evaluation. Curriculum should fully reflect the culture with Chinese characteristics, so as to realize the training goal of "Know China, Be Friendly to China, and Love China" for international students.

#### (3) Reconstruct the curriculum system

The construction of the curriculum system should reflect the combination of diversification and individualization. In addition to fully respecting the status of foreign students as the subject of learning, it is needed to respect the differences in learning awareness of students under different cultural backgrounds. On the basis of meeting the basic training requirements, more characteristic elective courses should be set up to consolidate students' knowledge foundation and increase their interest in learning. It is feasible to support foreign students to participate in skill competitions at all levels and promote the individual development of them. Higher vocational colleges should give full play to their unique advantages in training conditions, focus on optimizing practical teaching links, and scientifically and rationally arrange foreign students to participate in beside-the-job internships and on-the-job internships. It is also needed to construct professional curriculum standards that match the vocational qualification certificates accepted internationally.

(4) Speed up the construction of teaching resources Higher vocational colleges should increase their investment in excellent textbooks, high-quality online open courses and the construction of network teaching resources for foreign students. With different majors as units, it is necessary to rely on vocational education

groups, industry alliances and other organizations to jointly develop teaching resources such as textbooks, teaching plans, teaching videos, exercise banks and other teaching resources for foreign students.

#### 4. CONCLUSION

The internationalization of higher vocational education is developing rapidly, and more and more foreign students come to China for higher vocational education. All higher vocational colleges should actively cope with the challenges brought by the education of foreign students. Exploring courses with the characteristics of higher vocational education for them is the key to improving the training quality of foreign students, and it is also the core link to ensure the healthy development of higher vocational education for them. At present, curriculum development is still in the stage of self-exploration by the teachers, and further exploration is needed.

#### REFERENCES

- [1] Li Wei, Li Jianqiang, Tian Yue. The Construction of Effective Classroom for International Students in Higher Vocational Education under the Background of "One Belt One Road". Economic Relations and Trade, 2019, 6: 115-118.
- [2] Shan Min. An Analysis on the Establishing Principles for Foreign Students Curriculum System in Higher Vocational Colleges. Journal of Nantong Textile Vocational Technology College, 2013, 13 (3): 98-100.
- [3] Mou Li. To Explore the Chinese Curriculum for Foreign Students in Higher Vocational Colleges. Journal of Ningbo Polytechnic, 2015, 19(1):53-55.
- [4] Lu Ying. "The Belt and Road Initiative" and Higher Vocational Education for International Students in China: Status Quo, Problems and Paths. Chinese Vocational and Technical Education, 2019, 13: 64-67.
- [5] Liu Xing, Li Chengzhong, et al. Research on Curriculum Construction of International Students Majoring in Landscape Architecture in Higher Vocational Colleges. ZHIYE JISHU (Vocational Technology), 2019, 18(6): 36-51.
- [6] Chen Rongming. Research on Management Strategies of International Students in China from Countries along the "Belt and Road". China Higher Education, 2017, 11: 69-71.

## An Exploration of Yongzhou Local Culture Integration into the Teaching of "A Survey of China" for International Students in China

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Abstract: "A Survey of China" is a course with rich cultural connotation. It is designed for introducing and spreading Chinese culture to international students in China and realizing the cultural function in educating international students. For international students, Chinese excellent culture is very attractive and that is the main reason why they are attracted to study in China, to a great extent. But for international students who have come to China for study, facing the riches and splendor of Chinese history and culture which is so broad and profound, they often lose themselves in such a cultural learning process. Therefore, integrating local culture into the teaching of "A Survey of China", better spreading Chinese cultural concept to international students in China with the excellent attraction and inspiration of local culture will help students fully understand local culture, effectively reduce misunderstanding and contradiction caused by cross-cultural differences, and enhance the effectiveness of cultural education.

**Keywords:** Yongzhou Local Culture, A Survey of China, International Students in China; Culture Education

#### 1. INTRODUCTION

Yongzhou is an ancient city with more than 2100 years of history. It has a long history and rich cultural relics. It has a unique pattern of "two mountains, one water and one city" [1]. The historical block has distinctive characteristics and rich intangible cultural heritage, which has important historical and cultural value.<sup>[1]</sup> As one of the four national historical and cultural cities in Hunan Province, the local traditional cultural resources are especially rich, but limited by the location factors and insufficient external publicity, most of the international students who come to China know little about the local culture of Yongzhou, which affects the recruitment of students in China to a certain extent and imposes great threat to the sustainable development of the education of international students in China. As a local university, through the refinement of the "A Survey of China" curriculum, the students who come to China will be educated in Chinese culture,

and the local culture of Yongzhou will be introduced into classroom teaching, so as to fully explore the charm of local culture in Yongzhou, and effectively improve the connotation and quality of talent training for international students in China [2]. It will become a cultural consciousness for international students to participate in telling Chinese stories and Yongzhou stories in the end.

## 2. THE SIGNIFICANCE OF YONGZHOU LOCAL CULTURE INTEGRATION INTO THE TEACHING OF "A SURVEY OF CHINA" FOR INTERNATIONAL STUDENTS

The integration of local culture in Yongzhou into the teaching of "A Survey of China" for international students is the inevitable requirement to spread Chinese culture and tell good Chinese stories. The colorful Chinese culture is inseparable from the colorful local culture, and the main body of Chinese culture is closely related to the regional culture [3]. Chinese culture is the main symbol of the Chinese regional culture; the regional culture of China is the diversity of Chinese culture. As far as cultural learning is concerned, local culture is the closest cultural resource that is available to international students in China. We should adopt the ways and means that students can understand to introduce local culture into the classroom, actively spread Chinese culture through the window of local culture, and display Chinese style, explain Chinese elements, make Chinese culture live, vivid and concrete. Above all, international students can feel the unique charm and excellence of Chinese culture by learning about local culture in a silent but effective way, thus taking the initiative to tell good Chinese stories.

The integration of local culture in the teaching of "A Survey of China" for international students is the inevitable requirement to spread the local culture of Yongzhou and tell a good story of Yongzhou. Yongzhou has rich local cultural resources, but is limited by location conditions and limited external exchanges. It is in an awkward situation as "deeply buried gold cannot shine". The excellent local culture belonging to Yongzhou has not been effectively spread, and the overall international influence is very small. Based on this,

we explore the integration of local culture into the teaching of the "A Survey of China" for international students in China, and promote the spread of local culture of Yongzhou to international students, so that they really fall in love with the unique local culture of Yongzhou, and take the initiative to act as the cultural envoy to tell the story of Yongzhou, thus expanding the international influence of Yongzhou local culture [4].

The integration of local culture in Yongzhou with the teaching of "A Survey of China" for international students can effectively address the cultural conflicts in cross-cultural communication. For international students in China, it is essential to fully understand their surroundings and learn about local culture by integrating into the local living environment and lay a solid foundation for further development. The introduction of local culture in Yongzhou into the classroom will help international students adapt to the local living environment and prepare themselves for the cultural conflict.

## 3. AN EXPLORATION OF INTEGRATING THE LOCAL CULTURE OF YONGZHOU INTO THE TEACHING OF "A SURVEY OF CHINA" FOR INTERNATIONAL STUDENTS

We try to integrate Yongzhou local culture into the curriculum teaching, introduce the Harmonization Culture, Yongzhou Food Culture and, Yongzhou Geographical Culture topics into our classroom, and unearth the beautiful and moving stories behind the culture to international students in China, thus enhancing the infection of local culture of Yongzhou and the recognition of Chinese culture among international students. At the same time, we will actively promote Yongzhou cultural brand, realize the positive interaction between the training of international students and the culture "going out" of Yongzhou, and enhance the popularity of local culture.

Harmonization Culture or He Culture and its teaching in classroom. "The cultural spirit left by the southern tour of Emperor Shun is still a very valuable heritage. Among these heritages, the Harmonization Culture is the most precious. From the national harmony established by the national fusion between Han and Miao, to the harmony of individual personality cultivated by Shao Music, and to the goal of material and spiritual harmony established by the ancient song of Southern Wind by Shun, the rich heritage left by Emperor Shun not only spread the He Culture gene for the local culture of Yongzhou, but also for the whole Chinese nation and Chinese traditional culture. Eventually, the cultural characteristics of seeking universal harmony of Chinese culture were established. The idea of "building a community of shared future for mankind" has been embodied in the essence of He Culture, of the concepts like harmony between heaven and man; harmony with diversity, harmony is the most precious and so on, demonstrating the inheritance and innovation of He Culture. Based on the full understanding of the historical development of Yongzhou He Culture, we carry out related teaching practice to enhance the recognition on the development path and concept of China in the new era among international students' groups.

Yongzhou Food Culture and its teaching in classroom. If students want to study and develop in China for a long time, it can be said that it is more important to adapt to local diet than language. In fact, China's food culture is fascinating and you can easily find the typical food in any area of China. For us, it is necessary but not the ultimate goal to introduce diet. More importantly, it is important for international students to understand the local culture hidden behind the diet which can assist them in learning Chinese culture better. For example, when you first arrived in Yongzhou, you will see that the menu provided by many restaurants reads "Dong'an Chicken". Most people will ask why it is called "Dong'an Chicken" when they hear the name for the first time. Foreign students will also have this confusion. At this time, we can start with introducing the specific food of "Dong'an Chicken". It is a famous dish of traditional culture with a long history, which has experienced three dynasties of evolution. It was called "Mature Vinegar Chicken" in the Western Jin Dynasty, "Guan Bao Chicken" in the late Qing Dynasty, and "Dong'an Chicken" in the Republic of China. It has a history of more than 1700 years and is listed as one of the state banquet recipes and the top of the eight Hunan dishes. There is another story that "Dong'an Chicken" was included in the state banquet. In 1972, U.S. President Nixon visited China, Chairman Mao treated him with "Dong'an Chicken" at the state banquet. President Nixon greatly praised "Dong'an Chicken" after eating it. After returning home, he still kept thinking about it. This dish was soon introduced to the South Ocean, North America, Jordan, Malaysia, Japan, Singapore and other countries. Since then, "Dong'an Chicken" has been listed as a famous state banquet dish, the first of the eight Hunan dishes, and also listed as China's material and cultural heritage. In this way, we can integrate the food culture with local characteristics into the class of international students in China, and tell the historical and cultural stories behind Yongzhou cuisine to them, which can deepen the understanding of the local food culture and the understanding of Chinese traditional culture among international students in China.

Yongzhou geographical culture and teaching. In addition to its rich cultural heritage, Yongzhou's important transportation location has attracted the

most attention since ancient times. Yongzhou is located in the south of Hunan Province, at the confluence of Xiao and Xiang rivers, so it is called "Xiaoxiang", which is a famous historical and cultural city of China. Yongzhou is an important transportation fortress since ancient times. It can reach the Yangtze River through Xiangjiang River in the north and the Pearl River system through Lingqu in the south. Geographical location is difficult for international students to understand, but this cannot rule out their relevant thinking. What do these two Chinese characters represent in Yongzhou? Why the place where the school is located is called Lingling? In fact, Lingling and Yongzhou are two places, which refer to the same place. As far as the meaning of Chinese characters is concerned, the word "Yong" has two meanings: one is a long river, the other is long and forever; "Zhou" is a hieroglyphic character. The zigzag lines on both sides are like rivers, and the small dots in the middle are like land in the water, indicating that there is a river passing through this place, which has also been confirmed. In addition, the name of Yongzhou first appeared in the Sui Dynasty. Since the Sui Dynasty unified China, Yongzhou has existed for more than 1400 years, from the establishment of Yongzhou governor's office to now. Lingling, as a place name, first appeared in the Historical Records of the Five Emperors by Sima Qian, a great historian of the Western Han Dynasty. Emperor Shun "went hunting in the southern China, died in the field of Cangwu, and was buried in Jiuyi in the south of the Yangtze River, namely Lingling. In this way, we should combine the geographical and cultural knowledge with the connotation of Chinese characters, tell the culture behind the words to international students, guide them to explore Chinese culture actively, and improve the effect of our cultural education.

#### 4. CONCLUSION

As a local university, it is our mission and responsibility to integrate the local cultural elements of Yongzhou into the teaching of "A Survey of China", light up the local cultural characteristics in the teaching of international students in China, and set up the general education course of international students in China with local characteristics. Through the excellent local culture, we can arouse the enthusiasm of international students to tell Yongzhou stories, enhance the educational value of local culture course teaching, and strive to build Yongzhou local culture course into an excellent course for international students in China. Based on the promotion and dissemination of Yongzhou local culture, we can deeply promote the connotation and level of talent training for international students in China.

#### REFERENCE

[1] Reply of the State Council on agreeing to list Yongzhou City of Hunan Province as a famous historical and cultural city of Hunan Province. 2016-12-16.

http://www.gov.cn/zhengce/content/2016-12/26/content 5152877.htm.

- [2] Ning Jiming. A Survey of China. Beijing Language and Culture University Press, 2013.
- [3] Sima Qian. Historical Records. Zhong Hua Book Company, 2019.
- [4] Li Yu. On the Basic Characteristics of Regional Cultural Diversity in Chinese Culture. Jianghan Forum. 2009 (09).

## Scientific Implication of the Sinicization in Marxism

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**Abstract:** Sinicization in Marxism is the actual integration of Marxism and China, It mainly combines the principle of Marxism with the actual situation of China. At the same time, it is also the practice of Marxism in China. The integration of Marxism and China 's traditional national culture also reflects the timeliness of Marxism and the characteristics of the times.

**Key-words:** Sinicization in Marxism; principle of marxism; china's practice

#### 1. INTRODUCTION

The practice of Marxism in China has been the subject of exploration and research in China, and it is also the focus of academic research. It is necessary to guide the majority of scholars to deeply explore and analyze various problems.

After the Sinicization of Marxism was proposed, its original intention was to use Marx's principles to develop China, to integrate the theory with China's actual national conditions, to deal with various problems in China's development, and to promote my country's steady development. When Marxism is integrated, it will also make a certain transformation of the theory, forming a theoretical system that is integrated with the domestic national conditions. Universal truth is the guiding principle of this thought, and it is also a key component of Marxist thought. China's actual national conditions and the problems in China's real society are China's actual conditions and also include people's actions. From the perspective of ideological development, the integration of Marxism with China's actual national conditions was first proposed by leaders such as Mao Zedong. As a result, they all studied in their works how to integrate Marxism into Chinese practice. my country must persist in combining the principles of Marxism-Leninism with the Chinese revolution, and use Marxism-Leninism as a powerful ideological weapon to transform China, so that this weapon can dissect the actual development of China and find and explore the fundamental way to solve China's problems. In the struggle of China's new democratic revolution, my country's Communist Party leaders have continuously deepened their deep understanding of Marxism-Leninism and recognized the necessity of the integration of Marxism-Leninism and China's actual national conditions in a lot of practice [1].

#### 2. SIGNIFICANCE OF SINICIZATION OF

#### **MARXISM**

(1) Sinicization of Marxism promotes ideological development

Marx's thought is a new type of scientific socialist theory, which originates from social practice, reflects the actual situation of society, and guides the development of social practice. The integration of Marx's thought and social practice, Comrade Deng Xiaoping once said that seeking truth from facts is the soul of Marx's thought. Marx's thought is an important theoretical support guiding the current social and economic development, and can respond to the development and changes of the social world and make effective improvements. China is currently one of the few major countries in the world that adhere to the path of socialist development. The deep cultivation development of Marxism in China is a continuous improvement of Marxism, promoting the development of Marxism in China, and enriching content methods to promote social reform and In my country's development. development, it is necessary to take the existing problems in the modernization of the economy as the basis, and the application of modern Marxism mainly focuses on handling the actual problems in China at present.

(2) Sinicization of Marxist ideology to promote the development of Chinese society

Chinese social practice will test Marx's philosophy, which is the guiding ideological content that our country needs to adhere to for a long time. In the past revolutionary cause, the Communists insisted on taking Marx as their guide, leading the whole nation to overthrow the three mountains, and establishing New China, the public became the masters of the country. In the journey of socialist construction, it is necessary to use Marxism as an independent weapon. Solve the different problems we have in practice. In the development of contemporary China, Marx has become a key component of the core values of society and will guide the construction of a well-off society in an all-round way in our country and build a harmonious society.

(3) The Sinicization of Marxism has promoted the development of the Communist Party of China Without Marxism, there would be no establishment of the Chinese Communist Party, and without Marxism, the entire social and economic construction would be hindered by

many. The Communist Party is the product of Marx's sinicization development, and Mao Zedong Thought is a typical theory and plan of Marxist philosophy practiced in China. However, Marx's philosophy needs to be continuously integrated with the development of national conditions, and the Communist Party has made indepth explorations of applying Marx's ideas to party building to promote the steady development of the party. The Communist Party is the core interest in leading the development and construction of socialism, facing the current development of my country's national conditions, party conditions, and world conditions. In the modernization of the country, we must continue to improve our own system construction, deeply understand the law of implementation, and improve the ability to govern, further strengthen the construction of the party's governing ability, maintain the party's advanced nature, and continue to promote the roots of Marx in China.

## 3. COMBINING THREE ASPECTS IN THE SINICIZATION OF MARXISM

The Sinicization of Marxism refers to the integration of Marxism with Chinese practice, combining Marxist standpoints, methods, and viewpoints to analyze problems in various stages of China's development, constantly sum up experience, and formulate a basic line that is in line with the current national conditions of our country. Development guidelines and policies enable Marxism to take root in China, to deal with China's economic construction problems, and to solve China's actual problems. Only in this way can success be achieved. Comrade Mao Zedong once pointed out Marxism profoundly in his study article on reforming us. Connect with China's reality. Compare this to targeted targeting. Some of the targeting is to aim the arrow at the bar. The connection between Marxism and the Chinese revolution is the connection between the arrow and the target.

In the construction of China's economic development, to deeply integrate Marx into the Chinese economy, it is necessary to point out the characteristics of China's national conditions, and it is necessary to flexibly use Marx's relevant theories to deal with economic development issues. Efforts to make use of some innovative things, the integration and two-way interaction of Marxist principles and Chinese practice, under the Chinese practice, also verify Marxist ideological theories, and refine the practice of Marxist theories. It is necessary not only to study the theory and in-depth practice, to study how to use Marxism to guide China's practical research, how to summarize the accumulated experience of China in various periods, so that it can conform to the basic principles of current Marxism, but also can be integrated into the actual Come from Chinese

experience. This is also a dialectical relationship for the innovation and practice of theoretical Marxism in China. In the current Chinese revolutionary construction, we have accumulated a lot of rich experience. With Marx as the guide, we must summarize and summarize through these experiences and improve the rich practical experience. To the theoretical height.

Combining Marxism with our country's history, our country has a history of 5, 000 years of development, and these histories are our country's precious cultural heritage. Mao Zedong once proposed in the new stage of the discussion that studying our historical heritage and using Marx's thinking methods to make objective critical summaries is another task of our study. Our great nation has thousands of years of development history. In the course of thousands of years of development, we have our own national characteristics and our own laws of development. But we are still elementary school students in the application of Marx. In my country's nearly 5, 000 years of history, there have been a large number of national heroes, and they have also formed my country's unique national character, with deep historical accumulation. The domestic national style and historical development experience are the crystallization of the great wisdom of the social masses, and they are also inspiring the nation. The source of spiritual strength. Under the guidance of Marx's thought, the national style and experience handed down in the country are objectively summarized, so that Marx's thought can be integrated into the domestic historical development and gradually become a key component of Chinese historical tradition [2-3]. Here, the Sinicization of Marxism is the integration of the current Marxist theory and the popularization of China. Through a large number of historical research and analysis, it is found that foreign cultures have taken root on the domestic soil and must be integrated with the current domestic culture and gradually be able to integrate into it. In the development trend of the country's culture, it will eventually exist in the form of the country's culture. Chinese culture is very tolerant. In the long history of our country, it attracts outstanding things from foreign cultures and continuously develops itself to expand its cultural strength. In Chinese culture, Marxism is also a kind of foreign culture, and it will also encounter localization problems when it merges with China. If Marx is to be regarded as a dogma, it will not be able to guide domestic development. For the cultural builders of new democracy, this kind of culture is inseparable from the ideological guidance of our proletariat and the leadership of domestic Marxism. Therefore, it is necessary to further strengthen the vigorous propaganda and indepth integration of Marxism.

#### 4. CONCLUSIONS

The Sinicization of Marxism requires targeted learning and integration in combination with my country's national conditions, history and culture, and domestic realities, so as to be able to use Marx's desire to guide domestic economic development and construction. Arm the mind with Marxism, carry out innovative practice to verify ideas, and continuously promote the integration of Marxism and Sinicization. my country's Mao Zedong Thought and Deng Xiaoping Theory, the Three Represents, and the relevant theories of leaders at all levels within the party are all Marxism in China. The result of the innovation of

practice.

#### REFERENCES

- [1] Yumin Gu, Jinglan Yu. Upholding and improving the basic economic system is a new expansion of Marxism in China. Economic Aspects, 2020, No. 413(04): 2+26-31.
- [2] Xiaohui Yang. An important position for the epoch and popularization of Marxism in China. Journal of Ideological and Theoretical Education, 2019, 242(02): 9-10.
- [3] Li Yu. On the Basic Characteristics of Regional Cultural Diversity in Chinese Culture. Jianghan Forum. 2009 (09): 16-18.

## Interaction Between the Construction of Campus Culture and the Innovation of Ideological and Political Education in Higher Vocational Colleges

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Abstract: The university stage is the key period to promote the formation of College Students' Outlook on life and values, which requires each higher vocational college to do a good job in students' Ideological and political education. In this paper, the implementation of Ideological and political education in Higher Vocational Colleges into the construction of campus culture. Therefore, starting from the interaction between campus culture and ideological and political education in higher vocational colleges, combined with the necessity of promoting the interaction between campus culture and ideological and political education, this paper focuses on the measures to do well in the interaction between campus culture and ideological and political education.

Keywords: Interaction; Ideological and Political Education; Higher Vocational Colleges

#### 1. INTRODUCTION

Since entering the 21st century, with the continuous progress of science and technology, the development of information technology has reached unprecedented height. With information technology, Internet technology and mobile communication technology as the core of new media swept [1-2]. As a platform for information sharing, dissemination and acquisition, new media has penetrated into all walks of life and corners of the society. It not only has a profound impact on people's life and mode of thinking, but also has a tremendous change in the way of information dissemination [3]. New media, with its characteristics of immediacy, interactivity and sharing, provides more abundant information resources and convenient communication environment, which makes it popular among netizens, especially teenagers. The network can become an important means to carry forward the theme and carry out I&P education" [4]. At the same time, "we should pay close attention to the online trends, understand the ideological situation of college students, strengthen the communication and exchange with college students", "strengthen the construction of the network I&P education team, and form the network I&P education work system" [5-6]. It emphasized that we should "carry out the special pilot work of campus network culture construction" and "build a network propagandist team composed of

students and young teachers. We will build a demonstrative ideological and theoretical education resources website, a student theme education website and an online interactive community, and "promote the construction of new network media such as counselors' blogs, I&P Theory Teachers' blogs, school affairs microblogs, and campus wechat public accounts." The information publisher has a strong monopoly and control. The interactivity of new media makes the role of user alternate between publisher and receiver. In the interactive environment, information is formed in the process of communication between the two sides, the audience's dominance and sense of participation have been fully affirmed, and the interpersonal interaction of new media communication is also active, which is exactly where new media welcome people. Figure 1 shows the relationship between new media culture and the application of web tools.



Figure 1 The relationship between new media culture and the application of web tools

Thus, the use of new media in I&P education teaching has become a trend and inevitable, how to make full use of new media to maintain the inexhaustible vitality of I&P education has become a major issue we are facing.

2. PRACTICAL CONSIDERATION OF THE APPLICATION OF NEW MEDIA IN THE I&P EDUCATION OF COLLEGE STUDENTS

Students' learning state in the I&P theory class is also a problem of great concern. 42.59% of the students can listen carefully and take notes. 42.36% of the students just listen to the lectures and have no habit of taking notes. 12.27% of the students choose to do things unrelated to the course or other things. So the current situation of college students is not optimistic, most of them are passive in class. There are two possible reasons for this phenomenon: first, most of the I&P education examinations are open book, and the types of

examinations over the years are the same. Students are more confident that they can successfully pass the examination, and naturally their attention in the classroom will decline. Second, the current college students are more concerned about their own development and current affairs and politics, the Table 1 What's your learning state in the I&P theory class

traditional ideological indoctrination is difficult to stimulate students' interest, so the I&P education should be close to the development law of the times and the actual needs of students, and gradually change students' views on I&P education. The learning state in the I&P theory class is shown in Table 1.

Option	Listen carefully and take notes	Listen only, not take notes	Do things that have nothing to do with the course	Other
Proportion (%)	42.59%	42.36%	12.27%	2.78%

Some teachers are not flexible enough to use new media technology

Although the new media has been widely used in people's study and life, the application of the new media in the teaching methods of I&P education is still in the primary stage. "What are the performances of your I&P Theory Teachers in using new media technology in teaching?" In this problem, 13.08% of the students chose to use the new media to teach distance; 57.75% of the students chose to show the network resources in class; 11.34% of the students chose to establish new media community assisted teaching; 37.62% of the students chose to communicate with the students through the new media; 4.75% of the students chose to use the network language; 1.97% of the students chose other performances. From the feedback of students, it is found that the new media technology has been used in the teaching process, but the use of it is relatively simple, in order to show the network resources in class is mostly, which far from the real value of the new media reflected. There are many reasons for this situation, such as distance teaching and new media community building may be time-consuming and costly, and additional maintenance costs will be incurred; Teachers are difficult to change the traditional authority role, unwilling to actively learn new media technology and so on.

Based on the above survey report, this paper makes an in-depth analysis of the current situation of the teaching methods of I&P theory course for college students, and finds that the lecturing style is still the mainstream method throughout the I&P education classroom. College students are a generation growing up with the rapid development of information technology, monotonous preaching can not meet the diverse personality needs of college students, so most students hold a conservative attitude to the evaluation of teaching effect. Although the new media is coming fiercely, it is still a simple application in the I&P teaching. Colleges and universities and teachers have no awareness of opening up new media learning positions, which makes the rapid development of new media technology and the slow reform of I&P theory teaching methods form a clear contrast. In addition, many educators in Colleges and universities have a relatively weak understanding of new media technology knowledge, and the use of new media is only limited to the production of teaching ppt or projection of video materials, especially for older teachers. Therefore, not only teaching methods need to be reformed, but teachers' media literacy must also be strengthened.

The opportunities and challenges brought by the new media to the I&P theory course of college students are obvious. How to deal with the changes of the new media environment and build a qualified teacher team is the current problem of I&P education. According to the feedback of the middle school students to the teachers' use of new media resources, the teachers of I&P theory have obviously insufficient use of new media. Most educators can not fully adapt to the changing rhythm of new media, still adhere to the traditional way of propaganda and one-way instilling, and do not face up to the changes of College Students' cognitive mode, communication mode and receiving information channel in the new era. In the content of education, "the sense of the times and the pertinence of the teaching content are not strong enough. Although the content of I&P theory course is constantly enriched and rich, it still lags behind in the face of rapid changes. There is a big gap between teaching content and students' needs and expectations, which is not closely related to the ideological and practical combination of students. " At present, many teachers of I&P theory are restricted by traditional ideas, and they can not use new media resources flexibly to improve their education work. This situation tends to be serious with the increase of teachers' age. I&P educators should examine the situation, skillfully integrate new media resources into the education practice, design various new media teaching methods to improve the classroom effect, make full use of the dissemination and infiltration function of new media, integrate I&P education into all aspects of students' learning life, and then give full play to the great advantages of new media environment on I&P education.

The information age has changed people's cognition of many traditional fields. All walks of life are using Internet technology to promote the development of the industry. It will be an irreversible trend to use new media to carry out I&P education. But at present, some colleges and universities have not fully realized the importance of new media to I&P education. Instead, they focus on the negative impact of new media. Colleges and universities are more willing to believe in the traditional teaching mode formed for a long time, and have always been skeptical of the new working mode of new media. On the other hand, if we want to make up our mind to vigorously implement new media

teaching means, we need to invest a lot of money in equipment, operation and maintenance and personnel training, which inevitably makes some universities with limited funds flinch. Therefore, although the Party Central Committee and the State Council attach great importance to strengthening the I&P education network position, and have issued various relevant guidelines for many times, they have achieved little success. In the face of online teaching assessment, some schools are only engaged in image engineering, and a lot of work is still on the slogan, trying to solve practical problems. I&P education is a complex and systematic subject. If university leaders and educators do not realize the importance and urgency of integrating new media resources, it will lead to the fragmentation of educational resources; If we can't make clear the development direction of I&P Education under the new media environment, we can't guarantee the healthy and sustainable development of education. In a word, at present, colleges and universities generally do not pay enough attention to the new media environment, which makes the development of new media in I&P education slow. Only by fundamentally changing the understanding and attitude of new media, can we better realize the application of new media in I&P education.

#### 3. CONCLUSION

In modern society, all citizens should have certain new media literacy to meet the needs of social life. For I&P educators, it is a major challenge to carry out I&P education in the new media environment, which puts forward higher requirements for their own media literacy. Teachers' media literacy is mainly reflected in the following aspects. First, teachers need to learn the basic knowledge and operation technology of new media, and have the ability to skillfully apply new media technology in teaching. Second, we should be keen to analyze and evaluate media information, and master the ability to use and disseminate media information. Third, carry out media literacy education to help students improve media literacy. However, in the current situation, the media literacy of I&P educators generally lags behind the development of media technology.

First of all, educators' ideological understanding is not enough to keep pace with the times. The traditional teaching habits hinder them from paying attention to and learning new media, which makes them unable to objectively view the positive role of new media in education. Secondly, teachers' acceptance and mastery of new media technology are not balanced, and some educators lack the necessary technical reserves for the use of new media, which is limited to the production of teaching ppt and other work. At present, there are few systematic technical training for I&P educators in Colleges and universities. Many teachers acquire new media knowledge through self-study, which leads to the low level of practical operation of using new media in I&P education. Moreover, the teaching task of I&P theory course teachers in Colleges and universities is relatively heavy, in addition to completing the teaching of the course, they also have to undertake a lot of scientific research work. Due to the limited energy of teachers themselves, they are unable to update the teaching methods. These reasons contribute to the phenomenon that the media literacy of I&P educators is low, so strengthening the quality training is a very urgent problem at present.

#### **REFERENCES**

[1]Zhao Jiefang, Li Haipeng. Striving to Establish the Organizational Guarantee and Long-term Mechanism of I&P Education for College Students -- a Survey Report on the Construction of College Counselors and Class Teachers. Journal of National Institute of Education Administration, 2006 (02): 75-82.

[2] Wang Dongli. Construction of Content System of Humanistic Care in I&P Education. Teaching and Research, 2005, V (2): 85-90.

[3] Wang Kai. New Challenges of New Media to the I&P Education of "post-90s" College Students. Ideological Education Research, 2010, 1: 71-74.

[4]Zhang Yaocan. Analysis of the Characteristics and Laws of I&P Education. Ideological and Theoretical Education, 2005, 2: 4-10.

[5]Zheng Yongting. on the Essence and Development of I&P Education. Teaching and Research, 2001 (3): 49-52. [6]Feng Gang. Study and Implement the Spirit of the 18th Cpc National Congress and Strive to Improve the Quality of I&P Education for College Students. Journal of Ideological and Theoretical Education, 2013, 2: 44-49

# Present Situation and Thinking of the Theory of Composition Technology of Music Teachers in Normal Universities

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Abstract: At present, the theory course of composition technology in China is based on the development of music. Generally speaking, it also refers to the foreign music curriculum, which has historical timeliness. At the time of development, the academic research ability of music teaching in schools has also been established, and the art of music has also been studied. Therefore, the previous course of composition technology theory will also face some new challenges. This paper expounds the new teaching methods of music learning based on the new mode exploration and selection model.

Key Words: Music teachers; composing techniques; music learning; teaching methods.

#### 1. INTRODUCTION

With the rapid development of science and technology, the standard of living of the people has been significantly improved, and the way of life has changed greatly. Instead of focusing only on the quality of life, they have put more emphasis on spiritual pursuit. The emergence of electronic music has greatly satisfied the spiritual needs of people. Electronic music is a music form with unique connotation in the new period. It has more novelty and diversity than the traditional composition in terms of composing ideas and techniques. Electronic music has a variety of manifestations, which not only improve people's life taste, but also fully reflect the real life of emotion

First, the traditional composition, integrated with the previous music experience and modern composition skills, effectively proved that the traditional music composition concept is not only limited to the traditional repertoire, it will also be integrated into the modern musical techniques.

Second, electronic music, also known as electronic music, can be divided into broad and narrow forms of music, in which the music created by the use of electronic devices is called generalized electronic music, and at the same time, Electronic sound produced by using some electronic synthesizers or related computer music software is also a kind of electronic music. The type of music created by special technology is called electronic music in narrow sense. Composition is the effective combination and packaging of some materials in music creation. In the process of traditional composition, composers have

strict requirements for the notes of music scores, which are subject to rigorous organization and examination. Only through musical instruments can it be played out. The emergence of electronic music composition initiated the music art of our country and effectively coordinated the music relations among composers, conductors and performers. It provides a good condition for the inheriting and popularizing of music art and culture in our country.

## 2. PRESENT SITUATION OF MUSIC TEACHERING IN NORMAL UNIVERSITIES

Traditional composition is corresponding to modern music composition, which is composed mainly of the style of creation from the middle Ages to the Romantic period. Traditional composition does not mean sticking to tradition, but a form of creation [1]. When we look at traditional composition, on the one hand, we should put our vision on "tradition", on the other hand, we should look squarely at it from the perspective of development. From this level, the traditional composition has the broad nature. Professor Zhao Xiaosheng, a famous musicologist in China, believes that the range of pitch, rhythm and other factors of traditional composition are not beyond the scope that can be explained by quantitative notation. We can also follow this view when we understand the concept of traditional music [2]. The development of traditional composition was first in the early middle Ages. During this period, music became main stream, but there were still some improvements in rhythm.

European composers created polyphonic music, the high tone of the melody is very gorgeous, and the bass is relatively flat and simple, which forms a set of rhythmic contrast. In later music creation, musicians pay more attention to the combination of melody and rhythm [3]. In the Renaissance, the creation of traditional music became more prosperous, which had a deep influence on western music, followed by the Baroque period. During this period, musicians made a lot of attempts on traditional music, such as the main tone music, polyphony music and so on, and appeared the concept of "form". Musicians pay more attention to playing skills, began to start symphonies, concertos and other subjects of music writing; again, the classical period and romantic period. During the period of classicism, the balanced and symmetrical style was emphasized, the small step dance was born, and the symphony developed rapidly [4]. During the Romantic

period, the pursuit of unique musical structure and concise musical structure, there are variations and cycles and so on.

Electronic music is a general term for music created by composers using electronics. Electronic music is generally created in the laboratory, the style is more fantasy, and the general concept of music has a greater difference [5]. In electronic music, "electronics" defines the types of music, including electronic synthesizers, etc., as long as these devices emit sound, they can be called electronic music. The development of electronic music, first of all, is the embryonic stage. During this period, tape recorders play an important role. Musicians electronic processing of sounds in nature, the establishment of electronic music laboratory and technology platform, to promote the emergence of the electronic music industry, followed by the growth stage.

In this stage, the emergence of electronic synthesizer, musicians use digital audio technology and electronic synthesizer to create music, so that electronic music ushered in the era of computer music. During this period, the record companies produced, and had a profound impact; again, the stage of development. With the development of computer music, musicians rely on computers to create electronic music. The invention of digital docking converter makes the sound effect more outstanding, and soon swept the world. Until today, electronic music has become an important part of people's lives. The development of science and technology has changed our lives, but also changed our aesthetic way, our audiovisual requirements for music have been constantly changing, resulting in electronic music. Electronic music is the perfect combination of art and technology, which makes music radiate new vitality.

### 3. THOUGHTS ON THE DEVELOPMENT OF MUSIC CREATION

In addition, to develop electronic music, we must increase the investment in electronic music research. With the development of electronic information technology, an unprecedented innovative environment has emerged in the field of electronic music, and the network environment has provided a new way for scientific research laboratories. Path and platform, rely on the network, draw lessons from the existing international scientific research foundation, constantly develop and innovate electronic music, combine with other specialties, form the intersection and integration of disciplines, and make the development of electronic music more in line with the times and society. Hope that the majority of musicians and electronic music lovers to adapt to the times, On the basis of popularization, a large number of audible electronic music works with their own national characteristics have been created.

Development of electronic music, must also be widely supported by the state, especially the improvement of equipment and environmental education, in addition to

professional solid, the actual operation and training is the best way to strengthen learning. Computer, essential equipment and electronic digital recording equipment, which require countries invested a lot of material support, give supporting the teaching equipment accordingly. Although China's domestic colleges and universities have established music laboratory. But the lack of hardware, it is difficult to adapt to the trend of the development of electronic music, only in the era of scientific and technological progress to keep pace with the times, in order to adapt to the demand of electronic music. In the era of electronic music works, a large number of the use of unique sound together without logic, that the use of more unique, more and more use of sound can fully reflect the inner works, this is a common misunderstanding. Easy to create an overwhelming feeling, and will become as simple music together sound, ultimately difficult to reflect the art of their own ideas. Composing electronic music is actually belongs to the music creation, music concept in electronic music art, and it has a close relationship with scientific skills. And in the music creation reflects the soul of the coat. In general, when the electronic music art concept is lack of skills, there is no music.

Music works produced under traditional music creation mode gradually moved out of private space whose audience and spread gradually restricted while electronic music audience gradually expanded and spread speed also correspondingly accelerated. Electronic music has characteristics of easy storage and virtual character during transmission process therefore it becomes easier to spread while music creator's listeners and communicators can enjoy electronic music information simultaneously. Electronic music is produced under Internet technology. technology interaction also applies to electronic music so electronic music can realize resource sharing and information interaction. **Traditional** music communication mode is relatively fixed. Much traditional music communication has been restricted to music halls concert halls and other places affecting music dissemination efficiency. Again is the universality of social communication. Electronic music works are more popular than traditional music works. Firstly electronic music works are composed of organizational sounds so it needs more sound materials; secondly. Electronic music creates more innovative ways to create unheard-of sounds. Therefore compared with traditional music electronic music is more popular in modern society.

Electronic music is a general term for music created by composers using electronics. Electronic music is generally created in the laboratory, the style is more fantasy, and the general concept of music has a greater difference. In electronic music, "electronics" defines the types of music, including electronic synthesizers, etc., as long as these devices emit sound, they can be called electronic music. The development of electronic music, first of all, is the embryonic stage. During this period,

tape recorders play an important role. Musicians electronic processing of sounds in nature, the establishment of electronic music laboratory and technology platform, to promote the emergence of the electronic music industry, followed by the growth stage. After entering the new era, traditional composition and electronic music composition should be innovated and perfected in terms of creative concepts and creative skills. From the perspective of the overall situation, we should continuously carry out in-depth research and analysis in order to fully grasp the needs of the current music market. Seek new music material; this can satisfy people's spiritual pursuit, accord with the development of the times. Electronic music is a new musical form, the subversion of the traditional concept of music and creative techniques, fully embodies the connotation of modern music art and aesthetic characteristics. At present, in the university music colleges in China, electronic music technology development is still in initial stage, various promotion form and the education system is not yet mature, therefore, in order to the popular music, the colleges should actively and effectively promoted and applied in a wide range, and the traditional music thinking and creative thinking as the foundation, the development of electronic music technology development talent, this is not only the need of social development in the future, is also the inevitable means of electronic musical heritage.

Electronic music and traditional music have convergence in teaching effect. Firstly, electronic music and traditional music can improve listening and moral cultivation of listeners. Music has the function of silent silence, can expand the spiritual space of appreciation, enhance its spiritual realm; secondly, electronic music and traditional music can enrich the appreciation of emotional experience. Music must inject strong emotion during creation therefore brings great spiritual touch to listeners and causes emotional resonance; thirdly electronic music and traditional music can expand appreciation ability of audience. Music creators record their aesthetic feelings towards the world by musical forms and listeners can find beauty feeling beauty appreciation beauty in music.

With the development of science and technology, the popularity of new media technology makes electronic music more obvious advantages, electronic music appears can let more people love music into music creation, create more personality music. It can be said that electronic music appears to subvert traditional music art, add more luster to music world expand music category and content, increase music creation mode. Traditional music has become a classic human art in the history, and modern composers have innovated in the process of creation. However, the creators should know clearly that traditional music is no longer a necessary part of music creation. The rules to be followed are rather a kind of music creation, which has its own unique flash of light, and the

composer only needs to inherit and innovate it on this basis, while preserving the charm of traditional music art at the same time. Show the new vitality of music, so that traditional music can last forever.

#### 3. CONCLUSION

In conclusion traditional music is not only inheritance of history but also reproduction of artistic classics. Meanwhile it must pay attention to traditional music while giving attention to electronic music. Showing more excellent music works for people is a common goal for every musician. With the continuous development of our society, people's aesthetic demand changes constantly, electronic music emerges in this background, satisfies people's aesthetic demand for music. Electronic music composition is a breakthrough in traditional composition, expanding musicians' thinking and plays an important role in music development. Electronic music composition is the product of information technology era and artistic sublimation under the popularity of new media. However, with the improvement of human aesthetic level and development of times, it has been accepted by most people and gradually becomes a new trend of future music development. With the unremitting efforts of composers and music appreciation people, there will be more excellent electronic music works to enrich modern music in China. Although electronic music has great differences between traditional music and traditional music writing ideas and composing techniques it is historical inheritance art classics on the other hand is innovation of times and call for freedom. While taking emphasis on the development of new musical forms such as electronic music we should not forget tradition and need to make both integrated and blending parallel together promote the overall development of music art in China.

#### **REFERENCES**

- [1] Cristian, B. M. (2013). Information technologies used in composing golem for clarinet, piano and electronic music. In the Musical Field (1), 12.
- [2] Collins, N. (2016). Composing electronic music: a new aesthetic by roads. Music & Letters, 97.
- [3] Collins, N. (2017). History of electronic music. Leonardo Music Journal, 27, 47-48.
- [4] Edwards, M. (2011). Algorithmic composition: computational thinking in music. Communications of the Acm, 54(7), 58-67.
- [5] Edmund J.Campion. (2012). Fitting music composition studies for the 21st-century American university. Contemporary Music Review, 31(4), 277-282.

## The Formation and Development of Yan'an Spirit and Its Contemporary Value Analysis

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Abstract: The Chinese nation is a great nation, and the strong national spirit maintains the survival and development of the nation. During the Anti Japanese War, Yan'an spirit became an important spiritual guidance. This paper will explore the development significance of Yan'an Spirit in today's era from the formation, development and contemporary value of Yan'an spirit.

Key words: Yan'an spirit; Formation; Development; Contemporary value

#### 1.INTRODUCTION

Yan'an spirit is an important part of the construction of the party and government thought in China, which contains profound revolutionary significance. The spirit of tenacious resistance, hard work and perseverance has a profound impact on the society. At present, China is in the critical stage of modernization construction. It is of great significance to carry forward the Yan'an spirit for the development of our country at present, and can provide some ideological guidance.

### 2. THE FORMATION AND DEVELOPMENT OF YAN'AN SPIRIT

Yan'an is one of the important revolutionary bases and plays an important role in the development history of new China. The formation of Yan'an spirit can be divided into three stages. First, the initial formation stage. In October 1935, the central red army arrived at Wuqi town in Northern Shaanxi. In September 1938, the Sixth Plenary Session of the sixth CPC Central Committee was held, and the Yan'an spirit was initially formed during this period. During this period, the party determined the correct political direction, adhered to the work style of hard work and plain living and the spirit of benefiting the people. Second, the formal formation stage. The period from the Sixth Plenary Session of the Sixth Central Committee in September 1938 to the Seventh National People's Congress in 1945 was the formal formation stage. In this stage, the guiding ideology of integrating theory with practice, seeking truth from facts, criticism and selfcriticism was determined. 1941-1942 was an extremely difficult period in the war of resistance against Japanese aggression. The Japanese army raided the Shaanxi Gansu Ningxia border region crazily. The Kuomintang diehards surrounded and blockaded the base areas militarily. North China suffered natural disasters again. The war situation was severe and financial and economic difficulties. Under such conditions, the CPC Central Committee put forward "ten major policies" and launched rectification and mass production movements, It provides spiritual and material guidance for the party's revolutionary cause. Third, mature development stage. From the Seventh National People's Congress in 1945 to the Party Central Committee's departure from northern Shaanxi in March 1948, Yan'an spirit gradually developed and matured.

## 3. THE CONTEMPORARY VALUE OF YAN'AN SPIRIT

#### 3.1 It is conducive to restraining formalism

In the new democratic revolution in China, the principle of "emancipating mind and seeking truth from facts" proposed by Comrade president changed the situation that dogma copied Soviet experience for a long time, and only the Communist International indicated that he should be the first to look forward. Through the ideological line of seeking truth from facts, combining Marxism theory with China's actual situation, it has opened up a new revolutionary path, determined the revolutionary strategy of encircling the city in rural areas and seizing power by armed forces, and finally leading the Chinese revolution to win. It also plays an important role in the development and construction of new China, which lays a theoretical foundation for socialist market economy. It also promotes the party members and cadres to make scientific decisions in combination with the actual situation of our country, and has a certain restraint on dogmatism and formalism. 3.2 It is conducive to improve the service spirit of Party

3.2 It is conducive to improve the service spirit of Party members and cadres

In February 1939, comrade chairman put forward the proletarian moral concept of serving the people. In September 1944, he delivered a speech on serving the people at the memorial service of Comrade Zhang sider, which took serving the people as the code of conduct of Communists. At the Seventh National Congress of the Communist Party of China held in 1945, it elaborated the ideological connotation of serving the people in detail, emphasized that everything should proceed from the interests of the people, not be divorced from the masses, be responsible for the people, and put the idea of serving the people wholeheartedly into the party constitution. At the same time, it also established the mass line of "all for the masses, all relying on the masses, from the masses to the masses". Today, the spirit of serving the people also plays an important role in the construction of Party style. Vigorously carrying forward the spirit of serving the people can correct extreme egoism, but also to a certain extent ease the money worship formed under the market economy environment, so that the party and government staff can put the interests of the country and the people first, serve the interests of the people, improve people's quality of life, and maintain social stability.

3.3 Conducive to the development of socialist market economy

Self reliance and hard work are the important spiritual ACADEMIC PUBLISHING HOUSE

guidance of the Communist Party of China in the revolution and development. In order to be independent and survive, the Communist party carries forward the spirit of hard work, self sacrifice Zong wanting and selfless dedication. In the Anti Japanese War and liberation war, the production and development are carried out while fighting blood, meeting the basic needs of clothing and food on the front line. This is a model of learning in the present era. In the current situation of the development of socialist market economy, although people's overall living standards have been greatly improved, but the fierce social competition also brings great pressure on people. There are huge challenges and crises hidden in the prosperous material life. The desire for ease and enjoyment cannot be based in the fierce competition. Therefore, it is necessary to take Yan'an spirit as the ideological guidance, live in peace and think about danger, adhere to the style of hard work and simplicity, improve social productivity through constant struggle, and at the same time improve the vitality of economic system, Can better deal with the risks and crises in the market economy. No matter the development of individuals or society, they will encounter difficulties and bottlenecks. We should have the revolutionary spirit of fearless hardship, and face difficulties in the revolution of economy, science and technology and culture, and solve the problems and seek development.

Self reliance and hard work are the important spiritual guidance of the Communist Party of China in the revolution and development. In order to be independent and survive, the Communist party carries forward the spirit of hard work, self sacrifice Zong wanting and selfless dedication. In the Anti Japanese War and liberation war, the production and development are carried out while fighting blood, meeting the basic needs of clothing and food on the front line. This is a model of learning in the present era. In the current situation of the development of socialist market economy, although

people's overall living standards have been greatly improved, but the fierce social competition also brings great pressure on people. There are huge challenges and crises hidden in the prosperous material life. The desire for ease and enjoyment cannot be based in the fierce competition. Therefore, it is necessary to take Yan'an spirit as the ideological guidance, live in peace and think about danger, adhere to the style of hard work and simplicity, improve social productivity through constant struggle, and at the same time improve the vitality of economic system, Can better deal with the risks and crises in the market economy. No matter the development of individuals or society, they will encounter difficulties and bottlenecks. We should have the revolutionary spirit of fearless hardship, and face difficulties in the revolution of economy, science and technology and culture, and solve the problems and seek development.

#### 4. CONCLUSION

To sum up, Yan'an spirit has been playing an important role in the party's ideological construction since its formation. The spirit of seeking truth from facts, the combination of theory and practice, and the spirit of hard struggle in Yan'an spirit are of great significance to the development of today's society. Carrying forward Yan'an spirit can not only make people remember the history of Chinese revolution, but also alert people to think of danger in times of peace, work hard, face difficulties and strive to create greater social value.

#### REFERENCE

- [1] Zhao Yaohong. Drawing infinite power from Yan'an Spirit [J]. Red flag manuscript, 2021 (07): 37-41.
- [2] Zhu Hongliang, Guo Xin. The contemporary value of the spirit of self-reliance and hard struggle in Yan'an period [J]. JOURNAL OF NORTHWEST UNIVERSITY (PHILOSOPHY AND SOCIAL SCIENCES), 2020, 50 (06): 23-29.

# A Practical Study on The Integration of Fine Arts in Primary Schools Focusing on Cultural Understanding

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Abstract: Art is a form of visual culture, which has the distinctive characteristics of appreciation and popularization. Under the background of the development of visual culture, the teaching of primary school art needs to update the teaching thinking, and cultivate students' cultural and visual aesthetic ability through the expansion and innovation of teaching methods and teaching contents. In this paper, through the analysis of primary school art practice teaching, combined with the perspective of culture, in order to improve students' visual image ability as the goal, put forward relevant strategies for cultivating students' comprehensive quality.

Key words: Traditional culture; Primary school fine arts; Teaching strategy

#### 1.INTRODUCTION

With the development of visual culture, many complex and diverse visual images have been added to our lives. As the viewers of visual texts, we accept these visual images out of habit, and do not actively explore the analysis and identification of images. And humanistic education should not be a passive way of acceptance, but the concept of human development to enhance the ability. Therefore, in order to ensure the effectiveness of art education, it should be combined with humanistic spirit to develop students' aesthetic quality.

### 2. CULTIVATE STUDENTS' ABILITY TO READ IMAGES BY CREATING SITUATIONS

The cultivation of image reading ability is mainly through the students' ability to recognize the art creation techniques and art value of images when they are exposed to art works, images and other forms and contents with aesthetic connotation. There are many factors in this process. It is not only necessary to make the readers understand the identification of various art elements in art images, such as color distribution, modeling construction, pattern style, etc, We also need to understand the creation background, thoughts, emotions and art value of art images [1]. Therefore, the image literacy is very important for art teaching, which requires the art appreciation subject to have a diversified understanding of the art works, have a certain appreciation ability of the art works, and have unique views on the ideological cognition of the works. If we want to cultivate students' image literacy, teachers can create a good teaching situation when carrying out art teaching activities, use situational teaching methods to guide students to actively think about art image elements, think about the art emotion and value, and let students analyze the image content from the perspective of art appreciation. For example, when teaching the course of landscape painting in ink and wash, the teacher can create a comparative analysis situation, and make a comparative analysis with the work of river painting at Qingming Festival, so that the students can think about the image characteristics of scenery description, and guide the students to think about the poetry and art characteristics of scenery at all times and abroad. With regard to the content of art images related to traditional culture, teachers can adopt the strategy of "by analogy", so that students can understand art skills based on the specific image in art works, and understand the role of artistic techniques and aesthetic elements in art images on the subject performance.

## 3. PAY ATTENTION TO THE CONNECTION OF CULTURAL AESTHETIC EDUCATION OF DIFFERENT DISCIPLINES THROUGH PRACTICE

Teachers need to pay attention to practical teaching methods, actively guide students to change from simple "watching" to active thinking, and use structural knowledge and methods as well as self-awareness to "see" the world [2]. Culture contains multiple elements, combined with the language system, natural environment, social relations, history and culture, religious beliefs and so on, people identify and understand the culture based on these levels, so as to construct the content of aesthetic culture curriculum. Teachers can carry out teaching activities from two aspects: one is to carry out practical teaching through community culture teaching. Teachers can use their spare time to carry out community cultural activities, pay attention to the penetration of traditional culture aesthetic education, and make students interested in traditional culture learning. For example, teachers can lead students to visit the cultural landscape, and perceive the culture and characters of different historical stages from the rich cultural atmosphere. Such as the white marble statue of Tao Xingzhi, the expression is solemn and kind, amiable and harmonious, modest wisdom makes people respect; Lei Feng statues and cultural series of bronze sculptures vividly restore the shapes of different historical periods, different historical identities and different characters. In addition, teachers can also allow students to carry out cultural practice activities during the winter and summer vacation, browse and enjoy scenic spots and cultural sites with their parents, so as to design art image works with traditional cultural connotation. The second is to broaden the way of art teaching, find the connection between various disciplines, promote the art learning content to present multiple elements, so that students can improve their comprehensive ability in the process of mastering art knowledge and skills. For example, when teaching "Chinese dragon", teachers can integrate the song "descendants of the dragon" in the music course, deepen students' understanding of "dragon image" and "dragon culture" through the similarity of cultural content, and stimulate students' national pride and patriotism.

## 4. USING INFORMATION TECHNOLOGY TO SHOW ART IMAGE CONTENT

At this stage is the era of information and network technology development, the display of art image visual culture is not only a single way of presentation in the past, it can use the digital virtual form to simulate reality and show the image content. When designing classroom teaching, teachers can use technical means to arouse students' enthusiasm and convey their unique vision through multimedia media. Network can provide rich humanistic knowledge content and a large number of art image elements for art teaching, which is a way for students to quickly acquire knowledge and enhance skills. Through visual media, it can bring students new experience and further expand their learning vision and thinking cognition. For example, when teachers teach students the course "visiting the wonders of nature", they can use network technology to collect pictures and videos about natural landscape, and integrate multiple contents such as the process from seed germination to growth, the formation of natural landscape and the operation of different galaxies. For art teaching, it is like the "key" to "open the door", changing the single teaching mode in the past, Stimulate students' thinking innovation. At the same time, teachers can infiltrate traditional culture in the use of technology teaching. Art is a form of multi-cultural integration. If students want to deeply understand the ideological connotation of art works and the creative emotion and value of art works, they need to have a certain cultural foundation and the ability to tolerate and understand culture. Therefore, on this basis, teachers should strengthen the infiltration of traditional culture,

draw nutrition from the traditional Chinese culture, help students establish cultural confidence, and appreciate and inherit the Chinese culture. Not only that, teachers should also introduce the national culture of other countries, through the comparative analysis of Chinese and foreign cultures. To help students broaden their cultural horizons and understand the art works and cultural spirit all over the world, so that students can understand and perceive art from a multicultural perspective.

#### 5. CONCLUSION

"There is a long way to go, and I will go up and down to seek it.". To explore the methods of art teaching in primary schools from a cultural perspective, we need to fully explore the teaching content, find the cultural connotation of art works, and the relationship between different disciplines, enrich the content of art teaching, improve students' cultural understanding ability, and develop aesthetic education. Teachers need to constantly update teaching methods, integrate into the current network information technology means, broaden the road of art teaching development, and improve students' core quality of art discipline. At the same time, teachers can also use situational teaching method to fully understand the content, background, emotion and value of art creation through the comparative analysis of different art works. In addition, teachers should combine the actual situation of students to carry out teaching activities step by step, avoid over strengthening practice, and combine with life practice, use spare time to carry out activities of experiencing nature and perceiving history and culture.

#### REFERENCE

- [1] Zhang Rui. Exploring the strategies of strengthening the cultivation of students' core quality of art discipline in primary school art teaching [J]. Art education research, 2019 (24): 126-127.
- [2] Xie Lili. Cultivation of students' core quality of Fine Arts in primary school art teaching [J]. Quality education in Western China, 2019, 5 (15): 59-60.

## Risk Analysis and Prevention of EPC Mode in University Infrastructure Projects

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Abstract: To carry out the construction of infrastructure projects in Colleges and universities needs to carry out a number of links, and the degree of internal operation difficulty is relatively high. It is easy to change under the influence of some factors, and the construction can not be completed within the specified time, which is not conducive to the smooth development of the related work of infrastructure projects. Therefore, it is necessary to innovate the mode of infrastructure engineering, and apply EPC mode to promote the construction of university infrastructure engineering. This article briefly introduces the EPC mode, analyzes the common risks of EPC mode in university infrastructure projects, and puts forward the preventive measures, hoping to maximize the role of EPC mode in university infrastructure projects.

Key words: University; Infrastructure projects; EPC mode; Risk; Preventive measures

#### 1.INTRODUCTION

From the analysis of the current situation, it is found that EPC mode is widely used in university infrastructure projects, and has been widely concerned by people. However, due to the influence of some factors in the application process, it is easy to have risks, leading to its failure to achieve the expected goal, which requires relevant staff to strengthen risk research and formulate appropriate measures, so as to maximize the role of EPC mode in university infrastructure projects and provide support for the long-term stable development of universities.

#### 2.EPC MODE

The effect of EPC mode is more prominent. When it is applied to university infrastructure projects, we can analyze the advantages from the following aspects: first, we can obtain the relevant policies of our country as a guarantee. In recent years, China pays great attention to the development of EPC mode, and has introduced more policies as support. As a common EPC mode in the international market, it will become a common mode in the university infrastructure projects in China [1]. Second, the funds can be used more fully. In the traditional mode, the administrative work of colleges and universities does not plan the funds from a systematic and comprehensive perspective. When problems arise, various departments shirk from each other, and do not strictly regulate the investment according to the requirements, so they can not obtain the expected economic benefits. And the use of EPC mode, can be more effective for overall planning, to ensure that infrastructure projects can achieve the desired results, improve the utilization of funds, prevent waste of resources. Third, it can make the university project management work more smoothly. Under the influence of some factors, the infrastructure capacity of colleges and universities is relatively poor, unable to provide support for the development of related management work. In addition, due to the differences between management and construction work, a small number of infrastructure management personnel do not have the ability to promote the smooth development of infrastructure management, which leads to the decline of the overall ability of the infrastructure management team.

## 3. RISKS OF EPC MODEL OF UNIVERSITY INFRASTRUCTURE ENGINEERING

3.1 Analysis from the cost perspective

Because the total price will be used to complete the project management. When the contractor carries out EPC mode, it needs to take into account the management investment funds, economic income, risks and other aspects. Therefore, the cost of this project is often relatively high, and the engineering changes are easy to occur due to the cross development of design, construction and procurement links, This results in the expenditure of funds exceeding the budget [2].

3.2 Analysis from the perspective of quality

At present, when carrying out the EPC project, it is very likely to carry out the design while carrying out the construction, which is a more serious problem of the EPC project. First, because the procurement work is relatively tight, and the design carried out does not meet the requirements, it is difficult to carry out the quality control work smoothly. Second, in the process of project procurement, more types and quantities of materials will be purchased, and the general contractor needs to carry out division of work. If the procurement is not scientific, it is likely to form greater risks.

- 3.3 Analysis from the perspective of construction period Although the EPC mode has reasonably controlled the construction period, it has carried out the bidding, bidding design and other work under the permission of the policy, but it will be affected by many factors, resulting in the failure to complete the construction on time. Moreover, the opening time of the school will have an impact on the development of infrastructure project management, resulting in the relevant degree can not be implemented.
- 3.4 Analysis from the perspective of clean government In the process of project bidding, supervision and contract design, due to bidding price limit and budget, some low-cost materials and equipment with no obvious price will be selected in the process of design, and the quotation will be made at will, which will pose a serious threat to the development of university infrastructure management work [3].
- 4. MEASURES TO PREVENT EPC MODE OF UNIVERSITY INFRASTRUCTURE PROJECTS

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#### 4.1 Establish perfect rules and regulations

Colleges and universities are the main places for personnel training, which can provide support for the smooth development of innovation work, and have obvious advantages in the process of establishing rules and regulations. Before using EPC mode, we should make preparations, scientifically control the capital payment, internal audit and other links, ensure that they can meet the requirements, reduce the probability of corruption, and ensure that the relevant work can be carried out more standardized.

4.2 Make the purchasing management more standardized In the process of purchasing materials for EPC project, it is necessary to reasonably arrange the procurement project, prepare bidding documents, contract management and other aspects, so as to reduce the adverse impact of human factors and ensure that all aspects can be carried out more smoothly. To this end, the procurement department should increase efforts to negotiate and solve the problems in the work process at the first time. Only in this way can we reasonably control the key content, ensure that the project quality can meet the requirements, and complete the construction within the specified time.

#### 4.3 Do a good job in the follow-up audit of all links

We should pay attention to tracking the audit organization's review work, project planning, design, implementation, settlement audit and other work, fully show the value of audit work and supervision work, which can more effectively solve the probability of problems in the management process of infrastructure management department, make the work more smoothly, and control the cost within a certain range, Make sure the cost doesn't exceed the budget.

#### 4.4 Staff training

First, in the recruitment of staff, it is necessary for the management department to build a sound assessment system to ensure that the professional level of the staff recruited is relatively high. In this process, third-party organizations can be invited to recruit to ensure that the recruitment is scientific and reasonable. Second, more efforts should be made to train the staff to improve their

professionalism. In this process, we should also start from the actual situation of the staff and design targeted training measures, which can improve the overall strength of the staff [4].

#### 4.5 Timely disclosure of information

In order to avoid corruption in the capital construction projects in universities, we should choose appropriate measures to make public information. This requires publication of information about tenders, alteration of engineering information and payment of official account. It is also posted to campus information columns, websites, and micro-blog and public numbers to listen to the opinions of staff and teachers and solve problems in time. Reduce the probability of risk.

#### 5. CONCLUSION

According to the above analysis, the application of EPC mode in university infrastructure project is inevitable, which can be connected with international management mode and reduce the risk probability of infrastructure project. Therefore, we must pay full attention to the EPC mode, strengthen the research, and formulate appropriate measures to prevent risks, which can effectively improve the effect of risk prevention of university infrastructure projects, and provide guarantee for the smooth development of university infrastructure projects.

#### REFERENCE

- [1] Xu Xiaofeng. Research and application of university infrastructure project management mode [D]. Xi'an University of architecture and technology, 2019.
- [2] Li Bin. Material management risks and Countermeasures for the owner of new campus construction under EPC mode [J]. Housing and real estate, 2020 (03).
- [3] Huang Yuanzhi. Discussion on the characteristics and management mode of university infrastructure [J]. Modernization of building management, 2017 (03): 5-8.
- [4] Ren Yingying. Research on user demand analysis of university infrastructure management information system [D]. Tsinghua University, 2015.

# An Analysis of The Teaching Concept of Comparative Literature Based on Cultural Confidence

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Abstract: Cultural self-confidence is the most important cultural soft power of a country, and it is the internal expression of a country's comprehensive ability. Comparative literature is not simply literature comparison, nor is comparative literature a certain kind of literature, but viewing literature from the perspective of the world. Students can improve their literary accomplishment and cultural comparison consciousness by learning comparative literature, All this can only be completed under the background of cultural self-confidence. Based on this, this paper makes a research and Analysis on its teaching philosophy.

Key words: Cultural confidence; Comparative literature course; Teaching philosophy

#### 1.INTRODUCTION

The course of comparative literature helps to enhance students' cultural self-confidence, which can help them better understand Chinese and Western culture, and then enable them to accept the edification of excellent culture. Cultural self-confidence is also a cultural concept and viewpoint that the country has been practicing. It can not only enhance the comprehensive strength of the country, but also cultivate students' enthusiasm for loving the motherland, Therefore, in the teaching process, we should pay attention to the cultivation of students' cultural self-confidence, so as to improve students' cultural compatibility ability.

### 2. HIGHLIGHT THE CULTURAL CHARACTERISTICS OF THE COURSE

2.1 Comparative literature should start from the national culture

The study of comparative literature should be based on the culture of our nation. Therefore, at present, the study of comparative literature of Chinese students should take China as the main body, make students fully aware of cultural self-confidence, so that they can have greater confidence to learn the world culture. If this is to be done, teachers should implement the culture based on their own national characteristics, Let the historical origin and connotation of China give full play to, in order to better guide students' learning.

2.2 The atmosphere of comparative literature should be created from the present

Students study in the classroom every day, and almost all their daily activities are carried out in the school. Therefore, the influence of the school on students is very huge. To a certain extent, the school is the epitome of the society and the world. Therefore, the cultivation of students' comparative literature should first be carried out in the school, Teachers play a very important role, which requires teachers in teaching should be based on the present, improve their literary literacy, so as to better influence students, and then better cultivate students' cultural compatibility ability.

## 3. CULTIVATE STUDENTS' CULTURAL IDENTITY CONFIDENCE AND COMPATIBLE ABILITY

To some extent, cultural identity is just like our personal identity, which is inherent since birth, and its characteristics are also innate. If we want to practice cultural self-confidence better, we can not ignore the construction of cultural identity. In terms of scope, comparative literature course belongs to cross-ethnic and cross-cultural communication activities, which requires students to understand and compare different cultures, and find out the differences and contact points. The learning of comparative culture is an active learning course, which can give full play to its inherent cultural charm. Therefore, both teachers and students should first stabilize their cultural position when they study comparative literature.

#### 3.1 Curriculum implementation

The study of comparative literature should be based on the cultural self-confidence of the nation. The cultivation of the cultural self-confidence of the nation needs the help of curriculum implementation. Curriculum implementation refers to a process of teachers in teaching, including specific teaching methods, teaching attitudes and teaching ideas. The design of these courses will affect the teaching results, In order to promote students to learn comparative literature better, teachers need to develop a set of targeted teaching strategies. In the specific teaching process, we should not only pay attention to the knowledge in textbooks, but also make students understand the differences between Chinese and Western cultures by combining with specific examples. For students' response in class, teachers should also give timely feedback, make targeted teaching evaluation, and encourage students to bring this cultural self-confidence from the curriculum into life practice.

#### 3.2 With the help of reading experience

Comparative literature is to look at literature from the perspective of the world, and the purpose of world literature is to recognize the advantages of other national literature, and then stimulate their own inspiration, so as to better guide their own literature. Based on the background of cultural self-confidence, students can learn many advantages from reading world literature. The aesthetics and values contained in their literature can

effectively guide students. Students can find out the similarities through reading, so that they can understand that world literature is also interlinked; On the other hand, students can find many differences through reading, so that they can find out the differences, which is convenient for students to think about the differences between Chinese and Western cultures. This requires that teachers can use western literature works as teaching materials in the process of teaching, so as to guide students to learn Chinese and Western culture. Under the background of Wenhua self-confidence, teachers can also better serve the mother school.

#### 3.3 Subject research

The teaching idea of comparative literature needs the help of subject research. From subject research to basic education, both teachers and students should connect their self-confidence of individual subject with that of national culture, so as to realize cultural self-confidence fundamentally.

On the other hand, the whole educational idea and teaching process of teachers always affect the development of students. Teachers should pay attention to their own diversified learning, and strengthen their own main body education, that is, to enhance teachers' cultural self-confidence with the help of discipline research, so that teachers can transmit this idea and idea to students in the process of teaching, In the process of teaching, teachers are more receptive to the diversified development of students, and can also accommodate students from different cultural perspectives, so that students can better establish cultural self-confidence.

## 4. CULTIVATE THE BELIEF OF CULTURAL CONFIDENCE AND CULTURAL DIVERSITY

With cultural self-confidence, students can effectively enhance their tolerance, so that they can learn and accept the advantages of other cultures with confidence. Therefore, teachers should provide students with rich world literature works in the process of teaching, so as to improve their literary literacy.

4.1 National context cannot be ignored in discussing world literature

Among the numerous literary works in the world, except for the multi-cultural literature, other literature basically comes from the national culture and belongs to the national literature. Although the literature of our nation will go through a lot of reading, research and even change, it is still the literature of our nation after all, and no country or nation can take it away. This is the national characteristics in our bones, so we can't ignore the national context when discussing the world literature.

4.2 Chinese cultural elements cannot be ignored in understanding world literature

Strong Chinese culture endows us with strong cultural confidence. When learning comparative literature, teachers should remind students not to ignore the elements of Chinese culture. When reading world literature, teachers should find out the shadow of excellent traditional culture, so as to help students establish the literacy of comparative literature.

4.3 Cultivate cultural confidence and belief in cultural diversity

Based on the national culture does not require students to blindly identify with the national literature, teachers should help students to establish a diversified literary thought, in the process of learning should also see the advantages of other countries' culture, so as to identify with the literature of other nations, Chinese and Western cultures learn from each other, in order to achieve better development.

#### 5. CONCLUSION

The purpose of "comparison" in comparative literature is not to cultivate students to discover the significance of literary theory in Chinese and foreign cultures. In the process of teaching, teachers should pay more attention to students' participation and interaction, and cultivate students' literary cultivation and divergent thinking ability, so as to guide students to seek the common "literary heart" and "poetic heart" of world culture.

#### REFERENCE

- [1] Qi Jianling. Research on the teaching concept of comparative literature in the context of cultural confidence [J]. Education observation, 2018, 7 (15): 8-10 + 64.
- [2] Zhuang Xumei. The development of high school Chinese curriculum resources from the perspective of comparative literature [J]. Culture monthly, 2017 (04): 114-115.

# Analysis Of Intelligent Medical System and Big Data Platform Construction

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Abstract: With the popularization of electronic products and the development of information technology, human society has entered the era of intelligence. Many production activities are carried out on the network platform, and the intelligent production mode has penetrated into all sectors of society. This paper will analyze the role of big data technology in the medical industry, focusing on the construction strategy of intelligent medical system and big data platform from the aspects of intelligent medical network community and personalized medical system.

Key words: Intelligent medical system; Big data platform; Platform construction

### 1.INTRODUCTION

With the advent of the information age, information in various industries are stored and transmitted through the network, which improves the efficiency of information management and brings convenience to people's work and life. In the medical industry, a lot of medical information also needs to be managed through the intelligent big data platform. Through this way, the service efficiency of the medical industry can be higher, and the development of the medical industry can be promoted.

# 2. THE SIGNIFICANCE OF BIG DATA IN THE MEDICAL INDUSTRY

Big data refers to the data set that is difficult to store, manage and process[1]. At present, there are many problems in the medical industry, such as the shortage of medical personnel, high medical expenditure and so on. The results show that China's medical expenditure accounts for a large proportion of the total social expenditure, but part of the medical expenditure does not play a role in improving the medical conditions, there are some waste phenomena, such as administrative waste, medical fraud, unnecessary services and so on. Therefore, in order to improve the competitiveness of the industry, medical institutions need to strengthen the analysis and management of data, reduce the waste of medical resources, and improve the efficiency of treatment and accuracy of diagnosis. The construction of big data platform can help doctors improve the accuracy of clinical diagnosis, and scientifically predict the treatment plan and cost. Personalized treatment can also be taken according to the individual situation of patients. It can also analyze population health data and predict disease outbreaks. Through the big data platform to collect users' health data, help users achieve health management, reduce medical expenses. Through the analysis of gene data and clinical data, we can assess the risk of cancer, provide conditions for cancer prevention and treatment, and predict the effect of treatment.

- 3. CONSTRUCTION STRATEGY OF INTELLIGENT MEDICAL SYSTEM AND BIG DATA PLATFORM IN THE MEDICAL INDUSTRY
- 3.1 Establish a professional data collection and processing system

Big data processing is completed through the joint work of multiple servers, and large-scale parallel software is needed in this process. Medical data mainly comes from hospital information system, which includes electronic medical record system, medical image archiving and communication system, radiation information management system, laboratory information system, clinical decision support system, etc. Among them, the amount of information is huge, showing the characteristics of timeliness, redundancy, polymorphism, privacy and incompleteness. Timeliness means that a certain data is only useful in a certain period of time; Redundancy refers to the existence of a large number of valueless or repetitive information in medical information; Polymorphism means that doctors' description of patients is subjective and cannot be standardized; Privacy means that the user's personal medical information can not be leaked, otherwise it will cause unnecessary harm to patients; Incompleteness refers to the doctor's deviation and deficiency in the analysis of patients' status. In order to make big data platform technology play a role in the medical industry, we should design a special data collection and processing system according to the characteristics of data. Iepi is a system which is convenient to collect user's location information and contact information. The system includes two parts: the first part is the data collection part, and the second part is the auxiliary processing part. The data collection part includes task manager, data flow and filter, data log and data cache, data transporter and so on. The task of data collection is mainly reflected in data reading, uploading and transmission. There are two scheduling methods: periodic and continuous. For periodic tasks, the duration should be set. In addition, task manager can also provide some other services. Data stream and filter can help users to filter useless data and provide standard interface for data transmission and access. The function of data log and data cache is to collect and store data. Data cache can temporarily store the collected information and provide help for data log. Data conveyor is a kind of file uploader, through which data can be transferred to the server. Medical researchers without programming experience can control data collection through iepian. Therefore, users can complete the design of data collector even without any programming experience. The system also provides users with Bluetooth interface, which can collect data from other devices. After the system collects the user's data, it will be stored in the server as a file. The

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system will automatically check the new file periodically and analyze the data. In order to ensure the accuracy of location information, the locator of the system determines the user's location by signal strength and access point location.

3.2 Establish a patient oriented health network community For patients, the medical health network community is very necessary, can provide online services for patients, reduce the time consumption of patients in the process of medical treatment, provide simple medical consultation services for patients through the medical health network community, and provide effective treatment. The service should include the following aspects: first, provide a platform for patients to exchange and share medical experience. Relevant forums can be opened to allow patients to share and communicate freely in the forum. Second, the tracking and visualization of the disease condition are realized. The medical community should collect and store the medical data of patients, and generate visual reports to enable the patients to understand their health. Third, early warning of disease risk. Through analyzing the data information uploaded by patients, the risk of disease that may occur is predicted and the health management of patients can be helped. Fourth, provide suggestions. The network community should make valuable suggestions for recuperation according to the patients' condition and health status, and encourage the patients to cooperate with the treatment. For some patients with long-term diseases, psychological counseling should be done so that they can maintain a happy mood and face the condition optimistically. In addition, in order to meet the needs of users, intelligent medical system needs to develop personalized intelligent medical tools. Collect the information of patients' treatment, drugs used and lifestyle, and provide preventive suggestions for patients. At the same time, disease management tools need to be developed. Through this function, the patient's condition parameters are recorded, and a visual report is formed to help the patients to manage themselves. It is also necessary to have the education function, provide

authoritative research reports, medical articles and healthy recipes beneficial to the patients, and provide relevant knowledge search engines to enable patients to fully understand the prevention and control of diseases and rehabilitation and recuperation methods, and scientifically manage their health status.

# 3.3 Establishing personalized medical system

Patients with the same disease have common characteristics, but also personalized differences. A treatment plan can not solve the problems of all patients, so it is necessary to develop personalized treatment plan according to the specific situation of patients. In this process, it is necessary to collect the treatment experience, genetic information, genetic information, lifestyle, environmental information and other information of patients, so as to develop an effective treatment plan. The biggest problem in the process of establishing personalized medical system is the acquisition and protection of data sources. In order to ensure the safety of data sources, effective measures should be taken to protect the personal information of patients.

# 4. CONCLUSION

To sum up, the construction of intelligent medical system and big data platform is of great significance in the development of the medical industry, and it is also the inevitable direction to adapt to the development of the times. In the future development, medical institutions should establish intelligent medical system through big data technology to provide more convenient medical conditions for patients and promote the development of medical industry.

- [1] Heng Jingzhi, He Qi, Zhong NANPENG, Xu Rong. Research on Development Dilemma and Countermeasures of intelligent medicine in China [J]. Medicine and law, 2020, 12 (06): 47-52.
- [2] Liu Huan. Construction of intelligent medical integration system based on network big data [J]. Network security technology and application, 2020 (10): 147-148.

# On The Importance of Historical Knowledge Base in The Volunteer Work of Cultural Relics and Museum

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Abstract: Under the new situation, in the process of public service, Museum volunteers need to adhere to the main idea of the scientific outlook on development, maximize the promotion of history and culture, enhance people's self-cultivation, and popularize the basis of historical knowledge. In the process of practice, we need to establish a complete service system, expand publicity, use their own advantages, improve the effect of service, and embark on a virtuous circle. Therefore, this paper needs to be based on the volunteer work of Cultural Heritage Museum, first put forward the problems that need to be explored, then analyze the importance of historical knowledge base publicity, and according to the current situation, put forward the work development measures.

Key words: Historical knowledge base; Volunteer of cultural museum; Importance

# 1. QUESTION RAISING

Judging from the current situation, the volunteers of Cultural Heritage Museum are one of the main executors of cultural heritage museum work. In the overall operation, they need to receive visitors, complete the daily explanation, and solve the difficult problems of visitors. Therefore, on the basis of professionalization, the society has higher requirements for Cultural Museum volunteers. They not only need to have good historical knowledge literacy, but also need to have insufficient cognition to improve historical knowledge literacy and avoid the disadvantages of "macro narrative generalization"[1]. For some small and medium-sized museums, the urban population is limited, and the literacy of the local people is slow to improve, and some museums are located in a biased position. Many residents have insufficient understanding and contact with Museum volunteers, so there are many limitations when recruiting them [2]. And the service form is single, the service quality needs to be improved. In view of this, how to sort out the relevant theoretical knowledge based on practical problems and improve the effectiveness of practical application? What is the importance of historical knowledge base in the work of Cultural Museum volunteers? It has become the main content that needs to be explored in the current state.

# 2. THE IMPORTANT VALUE OF HISTORICAL KNOWLEDGE BASE IN THE VOLUNTEER WORK OF CULTURAL MUSEUM

# 2.1 Improvement of core business capability

In essence, Cultural Museum volunteers need to have a certain amount of historical knowledge and certain internal quality, calm, objective values, and the ability to

deal with emergencies. Historical knowledge base is the main business of Cultural Expo volunteers. The content of the volunteer work is complex and diverse, which needs to convey the thinking and language of history. Class background is not suitable for volunteers, but some history lovers are suitable for the role of volunteers. They not only have the basic knowledge of history, but also have active thinking, less constraints [3]. For example, in terms of explanation, the cultural relics of the cultural relics museum have a long history, but the audience basically does not understand the historical situation, and they do not know the cultural connotation or unique charm behind the cultural relics. Cultural Expo volunteers can explain the historical and cultural stories behind the cultural relics according to their own basic historical knowledge, and add some active elements, which can narrow the distance between the audience and the cultural relics, more deeply perceive the charm of cultural relics, and increase the construction of good experience.

# 2.2 Shaping of personal values

In the process of work, Cultural Museum volunteers need to maintain a calm and objective attitude, improve their work ability and shape different values. On the basis of the original, it is necessary to minimize the inner conflict and disgust of visitors. It is not allowed to evaluate history in a radical way. It is necessary to maintain a good political point of view, learn some history books and understand the details of history. And the content is not static, need to be on the basis of dynamic, continuous extension and correction, maintain a positive impact. Clarify the relationship between the square cultural relics and history, reduce personal emotions, lay a solid foundation of historical knowledge, maintain impartiality, and lay a good foundation for the interpretation work [4].

# 2.3 Strengthen personal inner cultivation

For the volunteers of cultural heritage, they need to combine the needs of reality and constantly enhance their inner temperament. The external image is also one of the key points to improve, but using a lot of reading to optimize can also change the audience's view of the Cultural Expo volunteers. For example, if volunteers of cultural heritage and Museum read some literature about Chiang Kai Shek, they can feel his thoughts and living habits, and become more rigorous in his speech and behavior. When reading historical classics, we should strengthen the historical knowledge base and improve the humanistic atmosphere.

# 3. STRATEGY

Therefore, according to the importance of historical

knowledge base, we need to build a scientific strategy to improve the historical knowledge literacy of Cultural Museum volunteers. First, we need to establish a systematic training system. Strengthen the historical knowledge literacy of Cultural Museum volunteers, strengthen the foundation, and analyze the problem of insufficient core business ability. According to the characteristics of strong liquidity, build a systematic system. Whether it is a professional commentator or etiquette, announcer, etc. need in the short-term training, perception of the importance of historical and cultural knowledge. Establish expert lectures on cultural heritage, so that volunteers can learn more accurate historical knowledge in the explanation of experts, analyze the tricky problems of a few audiences, and improve the recognition of audiences [5]. Second, we need to improve the selection criteria of volunteers. Volunteers should not have incorrect values, and they need to maintain a high comprehensive quality. In order to assess the language expression ability and the mastery of historical knowledge, we need to explain and train the material objects. In practice, we can not involve some political and subjective problems. On the basis of the overall view of history, we need to set up a correct guiding system and carry out the construction in strict accordance with the professional standards of museums. We should recognize the responsibility and significance of volunteer work, establish a sense of responsibility, combine our own standards with the standards of museums, improve the dissemination of knowledge, carry forward traditional culture, and complete the task. Third, change the volunteer selection strategy. In the process of practice, on the basis of meeting the professional standards, the volunteers need to be audience-oriented and meet the real needs of visitors. In the short term, it is difficult for volunteers to meet the requirements of the museum. We need to establish a volunteer selection system on a long-term basis. Cultural relics museum needs to cooperate with colleges and education departments under reasonable guidance to guide more students to join the volunteer team. It can not only help students form good study habits, but also improve their professional ability in practice, form a good humanistic atmosphere and enhance their inner cultivation. At the same time, it can also inject more fresh "blood" into the museum to meet the current development needs and the real needs of the audience.

## 4.CONCLUSION

With the progress of society, Cultural Museum volunteers need to have a high level of basic historical knowledge, show the spirit of silent dedication, maintain the perseverance of long-term service, and carry forward the construction of socialist spiritual civilization. Use the advantages of basic historical knowledge to improve, shape their own values, enhance their business ability, maintain the scientific development path, and enhance the ability to adapt to circumstances. In order to maintain the sustainable development of Heritage Museum, we should pay more attention to historical knowledge, enhance the level of specialization, pay attention to their own civilization, correct their values. optimize interpretation of cultural relics.

- [1] Hong Jingshu. Research on the practical path of Cultural Expo volunteers' participation and development in the new era -- Based on the project practice and investigation analysis of cultural volunteer service of Jiageng [J]. Fujian Cultural Expo, 2019, No.109 (04): 84-87.
- [2] Zhang Shiwen. Return to "necessary knowledge" and improve "core literacy" -- Research on the cultivation of core literacy of history discipline in senior high school [J]. Wen Cun Kan Kan, 2019 (20).
- [3] Zhang Li. Exploration on the teaching method of combining basic knowledge of social science with history in secondary vocational preschool education [J]. Chinese youth, 2020 (20).
- [4] Xu Dongbo. Research on college entrance examination and imperial examination: external characteristics, hot issues and knowledge base -- bibliometric analysis based on CNKI [J]. Education and examination, 2020, 000 (001): 42-47, 55.
- [5] Su Hang. Chinese history and historical China -- on the historical basis of modern China and the modern narrative of historical China [J]. Journal of southwest university for nationalities (humanities and social sciences), 2020 (10).

# Application Of Intelligent Wearable Technology in Fashion Design

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Abstract: With the development of human beings and the progress of science and technology, more and more modern devices appear in front of people, wearable intelligent clothing is one of them. As wearable intelligent clothing is more and more popular, researchers pay more attention to it and improve it. This paper analyzes the intelligent wearable clothing technology, expounds the application of intelligent wearable technology in clothing, hoping to give some inspiration to relevant personnel.

Key words: Smart clothing; Wearable technology; Medical field

# 1.INTRODUCTION

Nowadays, the development level of science and technology is high, and many high-tech technologies are integrated into daily life items, such as the integration of modern clothing and high technology to develop a new type of intelligent wearable clothing. This new type of clothing can not only meet the daily use, but also add some high-tech functions to facilitate people's daily travel. Intelligent wearable technology has become the mainstream trend of future development, which has been widely used in life, medical and military aspects, and has a broad prospect.

# 2. APPLICATION IN MEDICAL FIELD

Traditional wearable technology has many defects, such as long-term wearing is easy to produce more errors, which reduces the accuracy of medical devices, and the comfort of some wearable devices is poor. People often cause discomfort when wearing, and can not effectively carry out real-time health monitoring and management on people's bodies, which has strong limitations, These problems affect the development of traditional wearable technology. In view of this situation, it is necessary to improve the existing wearable technology and make it develop in the direction of intelligence. It is urgent to develop a new type of intelligent wearable technology. Intelligent wearable technology can be applied to medical monitoring. By collecting the vital signs data of human body, it can realize the function of real-time detection of human body. It is convenient for children, pregnant women, the elderly and some groups with inconvenient physical factors to collect the body index data. With the popularization and promotion of the Internet, the hospital can establish the network database, upload the real-time data collected by patients, and transfer it to the database. As the most original data of patients, it can promote the development and progress of medical industry. Nowadays, there are more and more people suffering from heart disease in our country. Because heart disease often occurs suddenly, there is no corresponding early warning, so it is difficult to prevent it. It is easy to fall off when using 24hour ambulatory ECG and sticking electrodes on people's body. It is not convenient for people's normal life when monitoring data. Nowadays, some scientists have developed a new type of intelligent medical wearable device. Patients can monitor the dynamic ECG in real time when wearing it. By collecting the user's single lead ECG signal, they can comprehensively collect and monitor the heart signal, and analyze and evaluate the data in the database, which can effectively identify the occurrence of arrhythmia and other diseases [1]. This new type of intelligent wearable device is more convenient, has no impact on the human body, is more comfortable, and the error is small. It has been gradually improved and promoted to hospitals.

# 3. APPLICATION IN LIFE

### 3.1 Smart watch and bracelet

In life, people often wear watches and bracelets on their wrists, which can be used as clothing accessories and practical tools to facilitate people's life and travel.

Now, by adding more technology to watches and bracelets, we can upgrade them to new intelligent watches and bracelets. Add mobile phone functions to the smart watch, such as wechat, Gaode map, call, Siri, etc. It can be used as an abbreviated version of the mobile phone. Because the watch is often worn on people's wrists, it is not easy to lose because of forgetting to a certain extent, so as to avoid the trouble of data and information caused by the loss of mobile phone, and its volume is smaller than that of mobile phone, so it is easier to carry. Moreover, the smart watch also adds some functions that the mobile phone does not have, such as health assistant, which can analyze the heart beat speed in real time through the human pulse beat, measure the heart rate, and record the data in the smart watch. The smart watch can also record people's walking steps in a day, analyze people's sleep quality when they sleep at night, monitor the body electricity and pressure index, and let people better understand their own physical condition through the data, so as to prevent physical diseases in time [2]. In the case of physical problems, be able to go to the hospital in time for further examination and treatment. Smart watch also has positioning function, children carry smart watch, parents can know the specific location of children in real time, if accidentally lost, parents can quickly find. Smart bracelet is also a kind of recording memory device tool, which is often used in teenagers and children, so that parents can better monitor and understand their children's growth and development. When children carry the smart bracelet, it can record and extract some basic data of children. Through big data, it can make a comprehensive analysis of children's physical development and physical quality, and give specific measures. Children are at a critical

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moment of growth and development. In order to ensure the normal development of children, the smart bracelet also records other data of children's growth, such as children's walking and running speed, children's body strength and explosive, agility, flexibility and balance ability. It can sort out the amount and time of children's daily exercise, and can know whether children's exercise is reasonable and scientific. Children are in a stage of development, sleep quality determines children's development, smart bracelet can effectively record children's sleep quality, bracelet will be measured data upload analysis, and then will produce reasonable reference suggestions for people to use, can let young people grow better.

# 3.2 Smart glasses

Ordinary glasses are just decorations, and have no practical function to facilitate people's life. The intelligent glasses are optimized on the traditional glasses, adding many functions to facilitate people's travel and use. For example, the voice control function is added to the glasses. The intelligent glasses can be operated by voice command. In travel, the intelligent glasses can listen to music to relax and cultivate sentiment. In the case of high sunlight intensity, the intelligent glasses can be used for shading and other operations. It is widely used in travel, self driving and play. Moreover, it occupies a small volume and is easy to carry, Not easy to lose, more convenient for people to travel, solve people's problems. Nowadays, people's myopia is more serious, intelligent glasses are not only used in the shade lens, but also can change the lens style, which is convenient for the public group of myopia. Adding Bluetooth call function in smart glasses can replace the phone to communicate with friends and relatives, and even send SMS, making people's life and

travel more convenient.

# 3.3 Women's intelligent reminder jewelry

Nowadays, the intelligent wearable technology has better considered the needs of women, so we have developed the female intelligent reminder jewelry. This kind of jewelry can be used as decoration items to match with the body, but also has many practical intelligent operation functions, such as integrating the daily equipment software operation such as telephone voice message, alarm bell, note to-do, physiological cycle reminder and other daily equipment software into jewelry such as ring and ear nail, which can facilitate women's travel and highlight the beauty of women through decoration.

# 4. CONCLUSION

In summary, the clothing is developing towards the direction of intelligence, not limited to the daily use of decoration in life, but towards the direction of diversification and intelligence. Nowadays, intelligent wearable technology has been applied to all aspects of medical and life, which provides the possibility for human development and progress. In the future, more and more intelligent wearable clothing will appear in various fields, which can better benefit human beings and promote the development and progress of society.

- [1] Zhuxiangcheng, liuyaxia, liuhuaxin. Research on intelligent clothing platform based on wearable technology [j]. Textile technology progress, 2019 (08): 60-64.
- [2] Liu Chengyang. Application of fiber based flexible intelligent wearable technology in intelligent sports clothing [j]. Wool technology, 2020, 48 (05): 66-70.

# Application Of Power Battery System In The Field Of New Energy Vehicles

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Abstract: With the development of science and technology and the prominent problem of energy shortage, new energy vehicles have gradually become the main force of the automobile market, and as the core technology, the application of power battery system is the top priority. In this paper, combined with market research and analysis, the main types of new energy vehicle power battery system are briefly introduced, and the specific application is analyzed in detail, in order to meet the development needs of automobile manufacturing and enhance the power of new energy vehicles.

Key words: Power battery system; New energy vehicles; Battery type

# 1.INTRODUCTION

The emergence of new energy vehicles is an important measure to promote the transformation of transportation energy and relieve the pressure of exhaust emissions. Due to the fundamental changes in the structure of the power system, all kinds of power battery systems have become the key components, so the relevant technical research should also be paid attention to. In fact, as the core part of new energy vehicles, the power battery system has an obvious effect on the stability and safety of driving, so it must be matched scientifically.

# 2. MAIN TYPES OF POWER BATTERY SYSTEM IN THE FIELD OF NEW ENERGY VEHICLES

# 2.1 Lead acid battery

Throughout the current automotive new energy market, in the choice of power battery system, lead-acid battery occupies a certain advantage, and through years of market practice, the technology is relatively mature and perfect. Judging from the past experience, lead-acid battery used in the process of automobile often has the problems of low efficiency, incomplete reaction and environmental pollution. However, with the continuous improvement of technology in recent years, lead-acid battery has been widely used in the field of new energy vehicles, and the relevant performance indicators have also made a big breakthrough, and has a wide development space. Taking the discharge power as an example, the original index is 20wh / kg, which can reach 40wh / kg after optimization, which means that the service life of lead-acid battery has been greatly extended, and the discharge times can reach more than 4000 times. At the same time, the recycling technology of lead-acid battery has also made breakthrough progress, and the recycling rate can reach more than 90%, which is undoubtedly a great promotion for the development of power battery system, and also a representative of traditional battery replacement [1].

# 2.2 Ni MH battery

As one of the main categories of batteries, the most

important characteristic of Ni MH battery is its stable performance. Generally, Ni MH battery includes two parts: high voltage Ni MH battery and conventional Ni MH battery, and it has distinct advantages in the application of new energy vehicles. For example, small memory effect, long cycle life and high discharge rate. After market research and analysis, manufacturers in the field of new energy vehicles are very inclined to the use of Ni MH batteries, such as Toyota brand. For China's new energy market, through the introduction and benchmarking of technology, the development and application technology of Ni MH battery has been relatively mature, and has been transferred from the application in the automotive field to various production activities.

# 2.3 Lithium battery

With the development of modern electronic technology, the production of lithium battery has been gradually largescale, and all kinds of performance has been stabilized. By analyzing the composition of lithium battery, we can understand that the power cell system usually uses lithium metal or lithium alloy as anode material and chooses non water electrolyte battery, which can build the foundation for enhancing the conductivity and reducing the power loss. At the same time, the use of lithium battery in new energy vehicles also shows superior performance, such as the enhancement of some common indicators, and the specific power is 1600wh/kg. In addition, in the process of continuous development of lithium battery technology, all kinds of parameters of power cell system are continuously optimized, and from the original research direction to polymer lithium battery research, the formation and expression of power can be roughly divided into lithium manganate and lithium ternary. It is worth noting that the performance difference of various lithium batteries is not large, but it is only necessary to make reasonable selection according to the needs of new energy vehicle manufacturing[2].

# 2.4 Fuel cell

The working principle of fuel cell is to convert the chemical energy of raw materials into electric energy needed by new energy vehicles through chemical reaction. Its device itself is also called electrochemical generator. According to the data, the main advantages of fuel cell system as a new energy vehicle are good stability, high efficiency, low noise and less harmful gas, etc., so the power cell system has a good development prospect in the field of new energy vehicles. It is worth noting that, in terms of the current development level of fuel cell technology in China, there is still a clear gap compared with western countries. Especially for the technical supporting aspect, the overall development, design and manufacturing are difficult. Therefore, the state and

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relevant new energy enterprises are also required to increase their investment, through the distribution of funds and the cultivation of talent team, It has the basic ability of technological innovation, so as to ensure the sustainable development of the power battery system of new energy vehicles in China, and to be more clean and reliable.

# 3. APPLICATION ANALYSIS OF POWER BATTERY SYSTEM IN NEW ENERGY VEHICLE FIELD

# 3.1 Application of lithium battery

As one of the most used batteries in the new energy automobile market, lithium battery has obvious advantages, such as good safety and balanced power density. However, there are also various problems in the practical application process, among which the most prominent is the problem of automobile puncture. In general, battery protection measures can be taken to prevent the battery from being damaged after severe collision, which leads to explosion of the car. BYD is the largest car factory with a large new energy market in China. Its power battery system adopts lithium iron phosphate battery. Its advantages have been mentioned above. Next, it introduces its disadvantages. The most obvious deficiency is low energy density, which leads to poor endurance of new energy vehicles, especially in the case of low temperature, the consumption of electricity will increase dramatically. In this regard, targeted improvement should be made, such as the preference of qinacid file as the negative material, so as to enhance the recyclable function and control the manufacturing cost. At the same time, the maintenance personnel of the power battery system should actively do a good job of maintenance, and identify the major problems such as the battery becoming larger in time to prevent the occurrence of greater safety faults.

# 3.2 Application of Ni MH battery

In the field of new energy vehicles, Ni MH battery belongs to alkaline battery, its advantages are also described in detail above. Now, the specific application essentials of Ni h battery are analyzed. First, the manufacturing cost of Ni

MH battery is high, so it is difficult to carry out large-scale production. But in essence, its own recyclability is better, if in the long run, its average cost is reasonable. Secondly, the specific energy value of the battery is higher, which directly promotes the growth of service life. According to the relevant data, when the new energy vehicle with Ni MH battery is fully charged, the driving distance can reach 350 km or more. In addition, Ni MH battery has been widely used in national defense and various new energy sources with its excellent chemical and physical properties, and plays a key role in saving traditional fuel. In the process of selecting and matching the power battery system, we should also do well in the running in of power index and the selection and match of heat dissipation device, so as to create good working conditions, so as to give full play to the advantages and performance of the power battery.

# 4. CONCLUSION

To analyze the application of power battery system in the field of new energy vehicles, we should first understand the characteristics of all kinds of power battery system, and then combine with the power index of new energy vehicles for scientific matching, so as to give full play to the function of power battery. In addition, we should also do a good job in technological innovation and continuous improvement. On the basis of ensuring stable power performance, we should improve the endurance ability to meet the development needs of new energy vehicles.

- [1] Wang Youfang. Research on Optimization Design of power battery heat dissipation management system for new energy vehicles [J]. Nanfang agricultural machinery, 2020 (24): 170 + 173.
- [2] Zhang Wei. Bottleneck analysis and countermeasure research of new energy vehicle battery technology development [J]. Metal functional materials, 2021 (01): 78-84.

# One Belt, One Road, International Cooperation, Sustainable Development of International Chinese Education

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Abstract: This paper one briefly analyzes one belt, one road to the international language education sustainable development opportunities and challenges, and by adhering to the "introduction, go out" way and innovative international Chinese education mode three measures, in order to achieve the sustainable development of international Chinese education.

Key words: One belt, One road; International Chinese language education; Sustainable development

### 1.INTRODUCTION

One belt, one road, will be developed and implemented to further reform China's education and meet the needs of internal development while achieving external cooperation, so as to achieve common profit and common development. Based on this development background, the development and innovation of international Chinese language education is particularly important.

2. ONE BELT, ONE ROAD BRINGS OPPORTUNITIES AND CHALLENGES FOR THE SUSTAINABLE DEVELOPMENT OF INTERNATIONAL CHINESE LANGUAGE EDUCATION.

One belt, one road of deep development and promotion, can promote cooperation and exchange between China and other countries. Under the impetus of this development, a large number of Chinese teachers need to build communication bridges. Meanwhile, the demand and quality of international Chinese language education talents have been improved, which has promoted the development of Chinese language education in the country.

The main purpose of the construction of this major is to cultivate talents with solid Chinese foundation and high quality, who can skillfully use Chinese as a second language teaching skill, and realize the dissemination of Chinese traditional culture while strengthening communication and cooperation. Through presentation of this advantage, the cross-cultural communication ability of professionals can be further improved, To achieve the purpose of promoting international Chinese. One belt, one road, and one policy related to the other countries, has promoted the development of international Chinese education. Many Chinese teachers have also realized the importance of establishing and developing Chinese and foreign friendship. By developing international Chinese education, we can not only improve China's overall soft power, but also create a good image of China [1].

3 ONE BELT, ONE ROAD, INTERNATIONAL

COOPERATION, AND THE STRATEGY OF SUSTAINABLE DEVELOPMENT OF INTERNATIONAL CHINESE EDUCATION

3.1 Adhere to the strategy of "going out"

First, one belt, one road of thinking from the government's point of view, is to deepen the culture and language institutions in the area along the way and encourage the participation of social resources in the construction of institutions. At the same time, efforts should be made to build up the team of Chinese teachers to meet the needs of overseas countries for Chinese and cultural learning. One belt, one road, is to lay stress on the macro layout of the University. By drawing on the successful experience gained from successful foreign language and cultural institutions in the course of construction, we should make a scientific layout of the language and culture institutions in the countries along the way, and create a distributed pattern of cooperation between the trade and industry. The implementation of one belt, one road to education, can fully meet the needs of overseas Chinese for Chinese learning, promote the promotion of Chinese culture overseas, and promote the "national integration" in an effort to promote the construction and development of the whole area.

Second, we should build a perfect and high-quality team of full-time Chinese teachers. At present, many language and cultural colleges lack a full-time team of teachers, which aggravates the flow of teachers in Colleges and universities. Teachers who work in international Chinese education can not devote themselves to Chinese teaching. One belt, one road, should be encouraged to participate in the "going out" education plan. With the support of colleges and universities, the students will be able to study the local language in depth along the way, and further understand the local culture and lay stress on learning and grasping basic theoretical knowledge. As many as possible, we should train professional Chinese teaching talents as a foreign language, and make up for the shortage of talents in the education industry. In addition, we should pay attention to the training of Chinese teachers, and pay attention to the combination with the actual situation of other countries' economic and trade cooperation industries, and train more comprehensive talents for the international Chinese education specialty. To promote Chinese in the international education market, this approach is not only a simple education and teaching, but to a deeper level, language is a special product, especially in the international market, but also a product that can reflect the national culture. Therefore, in the promotion and

dissemination of Chinese, it is necessary to develop towards the direction of marketization and industrialization.

Third, one belt, one road to help more institutions go out. In the process, the promotion of international Chinese as the focus of sustainable development of colleges and universities, and encouraging institutions to participate in the construction of the whole area, and strengthening cooperation with overseas institutions, while focusing on improving economic efficiency, and integrating language resources and developing Chinese teaching classes for college teachers, Organize basic knowledge competition activities regularly, and let teachers of international Chinese language education organize activities with Chinese learning as the theme, such as singing Chinese songs and reading Chinese articles, so as to achieve the purpose of Chinese publicity. At the same time, let the students use two or more languages to communicate, to further understand each other's language. This way can carry one belt, one road, and further promote the sustainable development of international Chinese education.

# 3.2 Adhere to the strategy of "bringing in"

One belt, one road, should be added to the government to encourage the development of the teaching of the whole country. The Chinese teachers will be encouraged to further their studies in China to enhance their Chinese proficiency and teaching level. This way can ensure that Chinese teachers can teach Chinese to students after they return to China. As one belt, one road, the countries along the way are quite different in culture and Chinese level is not equal. In this situation, China needs to further improve the international Chinese education in universities and do well in the construction of Chinese education disciplines, so as to enhance the overall level of Chinese teachers' team in Universities, and on this basis, draw up a variety of reward systems. To attract advanced talents to study in China.

Secondly, one belt, one road and one another, universities and colleges should play their advantages in regional and Chinese language education, and actively carry out the "one belt" thinking in the process of education, strengthen cooperation, conduct overseas cooperation in running schools, and communicate with overseas institutions in culture and academics. We can also organize enrollment promotion activities and open overseas classes for overseas students. In this way, we can promote domestic universities and publicize Chinese culture and Chinese, so as to attract more overseas students to study in China [2]. 3.3 Innovating teaching methods of international Chinese One belt, one road construction, is the key to ensure sustainable development of international Chinese education. The way of teaching and learning is to focus on the development of the "one belt" construction and to serve as a focal point for the cultural and linguistic exchanges between China and foreign countries. With the improvement and development of information technology, a variety of digital teaching platforms have been derived in the field of education, and the teaching mode has also been innovated, among which MOOC teaching is one of

them. Through the application of big data technology to analyze the results of education, on this basis, continue to optimize the teaching content, promote students with different languages and cultures to communicate and share Chinese learning experience with each other, so as to improve the quality of Chinese learning and realize the sustainable development of Chinese education while innovating International Chinese education methods.

# 4. CONCLUSION

One belt, one road one belt, one road to provide a guarantee for Chinese language popularization, and an increasing number of overseas personnel have an interest in learning Chinese. This trend indirectly promotes cooperation between China and other countries, and also reflects the importance of international Chinese education. Therefore, we need to rely on the initiative of one area to expand new areas of education and promote the sustainable development of international Chinese education.

- [1] Liu Xu. Research on the development of international Chinese occupation education [J]. Guangxi Social Sciences, 2020 (11): 175-179.
- [2] None. school's "one belt, one road" international cooperative education is also a new chapter. [J]. Journal of Zhejiang international shipping Career Technical College, 2020 (1): F0002-F0002.

# The Research on The Image Building of College Counselors in The Perspective of Collaborative Education

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Abstract: This paper mainly expounds the connotation of the image of college counselors, and also explains the measures to build the image of college counselors, such as strengthening their own construction, optimizing the image of the guide, and paying attention to public feedback, and the value of the image building of college counselors.

Key words: Collaborative education; College counselors; Image building

### 1.INTRODUCTION

The image building of College Counselors in the perspective of collaborative education has become the primary problem for college counselors at present. Counselors should actively improve their scientific research and learning ability, strengthen their own construction, become good teachers and friends with students, help students to solve the problems in life and study properly and create a good image of counselors.

# 2. CONNOTATION OF THE IMAGE OF COLLEGE COUNSELORS

The image of college counselor mainly refers to the behavior performance of counselors themselves and the overall impression on others. The image of counselor can be reflected in organization, theory, system and cultural construction. It is an important basis for counselors to publicize the outside world, and also the external understanding and feedback to the counselor team and their profession. The image of counselor is characterized by daily and interactive. The image of counselor outside the classroom is mainly constructed by dealing with daily affairs, guiding students carefully and paying attention to students' life. After the accumulation of their own image, it becomes more three-dimensional, so that the image of counselor is more authentic. When counselors contact with students, they can better understand the needs and expectations of students in learning, accumulate more rich experience, and optimize the image of counselors by working experience. In addition, the interaction of counselor image is mainly reflected by the evaluation of the performance of the counselor. The shaping of counselor image usually needs objective and subjective composition. The social requirements for students are the basic basis for the image building of counselors.

# 3. THE VALUE OF THE IMAGE BUILDING OF COLLEGE COUNSELORS

Based on the background of collaborative education, college counselors should first position their image building so that they can have a deeper understanding of

the professional requirements. Shaping the image of college counselors is conducive to promoting them to adapt to the professional requirements and making them clear the direction and scope of self-learning. Let tutors know that they should make continuous efforts to become students' life tutors, and have a more detailed understanding of counselors' career according to students' feedback, so as to adapt to counselors' work faster. In addition, the image building of counselors can urge counselors to overcome job burnout, make counselors set up a good image in the mind of students, be more strict with self-interest, and take the initiative to improve their comprehensive quality [2].

# 4. MEASURES TO CREATE THE IMAGE OF COLLEGE COUNSELORS

# 4.1 Strengthen self construction

The image of counselor is formed spontaneously when the instructor carries out teaching work, which has fragmentation and uncontrollability. Therefore, colleges and universities should help counselors to establish image consciousness, change spontaneous phenomenon into self-centered phenomenon, and guide them to understand the importance of image building. In the background of collaborative education, counselors should fully recognize the importance of image building activities, play their own active role and do a good job in collaborative education. For example, we should adopt the method of "both internal and external", strictly require themselves to collect the leading theories of counselors' work at present stage. We should learn the other excellent counselors' practices constantly, transform them according to their own characteristics, form their own educational style, so as to better implement the collaborative education work. Colleges and universities should constantly improve the practical ability of counselors, strengthen the level of scientific research and teaching, make full use of the spare time to improve the teaching level, so as to better serve and students in the school, and can solve problems at any time. Counselors should give full play to their own advantages, try to become the object of students' talk, do a good job in school education, use invisible ideological education power, and help students to establish healthy psychology. Counselors should strengthen their practical ability, find problems and solve problems in teaching practice, provide students with a good learning environment and living atmosphere, and actively implement collaborative education. counselors should improve their learning ability and learn mature experience to be good. Counselors should be good at using abundant resources to broaden their work ideas, strengthen their own construction, and lay a solid foundation for building a good image of counselors.

# 4.2 Optimize the image of guide

It is necessary to improve the basic system of college counselors, standardize the behavior of counselors, optimize the image of counselors, urge counselors to be more strict than self-interest, and provide preconditions for shaping the image of counselors. Improving the counselor system can help counselors to clarify the work content and work style, and help counselors to establish a better image. For example, in order to establish a highquality counselor team and create a good image of the counselor team, we should take moral education as the goal, strictly control the counselor entrance according to the counselor professional ability standards and relevant documents, and ensure that the personnel ability is consistent with the relevant requirements. In addition, we should strengthen the construction of counselor training system, carry out regular counselor training by using the existing counselor training base and mode, and strengthen the Counselor's working ability and scientific research ability. Colleges and universities should scientifically formulate the development mechanism of college counselors according to the actual situation, so as to establish a positive image for counselors and transmit power, so as to stimulate their enthusiasm for scientific research and learning, and create a positive image of counselors. In order to better shape the image of counselors, colleges and universities should establish a counselor communication system, strengthen the communication between counselors, and jointly explore new teaching modes and working methods, so as to provide help for the change of counselors' personal image. When counselors communicate with each other, they should not only exchange work ideas and work experience, but also refine the professional connotation of counselors, carefully sort out the discussion results, and promote the recognized results, so as to help other counselors establish a good image of counselors.

# 4.3 Attach importance to public feedback

The image of college counselors mostly exists as a kind of subjective spiritual image, which can only be expressed with the assistance of carrier, and then the spiritual existence can be transformed into material. For example, we can strengthen the image of counselors by creating a billboard. The billboard is a kind of professional culture

with the characteristics of counselors. In addition, we can also organize various activities in the space with the characteristics of counselors, and transform the spiritual image of counselors into material through the space and activities with the characteristics of counselors. Tiktok can also be used to promote the image of counselors, enhance the social influence of instructors, and create more authentic counselors' images through the form of condensed work with instructor characteristics, such as short video of jitter, WeChat official account, etc. It is necessary to create a platform that can highlight the characteristics of counselors, absorb excellent counselors from colleges and universities, and refine their work philosophy, so as to form a systematic counselor work mode and strengthen their own construction. We should pay attention to students' feedback on counselors, and constantly improve counselors' image according to students' feedback. We should appropriately reduce the distance between Counselors and others, especially the distance between students and counselors, and try to make counselors become good teachers and helpful friends of students. We should guide others to evaluate counselors, use various media channels and platforms to provide convenience for others to evaluate counselors, and encourage more people to evaluate counselors. Counselors should take a dialectical view of others' evaluation, actively accept the reasonable evaluation and feedback, and timely reflect on the poor evaluation, so as to help create a good image of counselors.

# 5. CONCLUSION

To sum up, college counselors and other counselors communicate with each other to explore new working methods and provide better services for students. Counselors should take the initiative to learn the relevant knowledge about counseling, accumulate rich work experience, and lay a solid foundation for shaping a better counselor image.

- [1] Hu Zhonghao. Research on the path of image building of college counselors [J]. School party building and Ideological Education (Higher Education Edition), 2020000 (009): 34-36.
- [2] Deng Zinian. Research on the path of image building of college counselors from the perspective of establishing morality and cultivating talents [J]. Journal of Yueyang Polytechnic, 2020 (3): 24-27.

# Analysis On the Current Situation and Strategies of Sports Skill Teaching In The New Curriculum

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Abstract: Based on the new curriculum concept, the reform of physical education teaching can promote the all-round development of students' comprehensive quality. The reform of physical education teaching methods and the cultivation of sports skills can also improve students' physical quality. This paper makes the following analysis of the problems existing in the teaching of sports skills, and puts forward several teaching strategies based on the new curriculum concept, such as paying attention to skills training, reforming teaching methods and cultivating sports interest, in order to provide reference for relevant personnel. Key words: New curriculum; Sports skills; Physical education

# 1.INTRODUCTION

Based on the theory that life is sports, physical education is added to students' curriculum learning, and the cultivation of sports skills is a problem of social thinking. The traditional sports teaching methods have poor quality of sports skills training, too monotonous and untrue teaching methods. These problems make students not interested in sports skills learning, which not only lowers the physical quality index of the people in China, but also is not conducive to the overall development of students.

# 2. PROBLEMS IN THE TEACHING OF SPORTS SKILLS

2.1 The teaching of sports skills is weaker

Some colleges have misunderstood the true meaning of sports skills in physical education courses. Their teaching ideas about sports skills are too thin and their consciousness of skills training is weakened. First, because teachers in various colleges are deeply influenced by traditional education concepts, the idea of sports skills training is not mature enough, so there can be no correct concept of sports. The students' guidance to teachers is dependent on. Once the idea goes deep into the students' thoughts, it will affect the development of students and will not be conducive to their independent physical exercises. People will never discover the essential characteristics of physical ability. Secondly, some colleges will teach students that sports skills are mostly based on the examination of the course. Which sports skills will be taught by the school will focus on which professional skills will be taught, which makes students know little about sports skills and only know the relevant skills in the physical education examination, which is extremely detrimental to the improvement of students' Physical Education [1]. 2.2 Lack of innovation in sports skill teaching Sports skills involve a wide range, so teachers should pay attention to teaching methods, enrich teaching content, fresh teaching methods can not only stimulate students' interest in learning, but also let students devote themselves to sports skills. The problems existing in the teaching of sports skills in some schools can be divided into the following points: first, some teachers still do not understand the importance of vigorously cultivating sports skills for the development of students' quality, and some teachers in some colleges and universities will apply the established teaching design to other sports projects, so as to truly "follow the book", This will speed up the students' boredom about a subject. Due to the lack of novelty, students will give up developing motor skills. Second, due to the lack of innovation of physical education teaching methods in Colleges and universities, the teaching efficiency of sports skills is relatively low. Physical education teachers blindly preach according to their own syllabus and do not pay attention to communication with students. This teaching method is generally not suitable for students and will not be accepted by students, which also affects the quality of teaching. 2.3 The name of physical education is not true

The teaching of sports skills should be aimed at all students, but the teachers and leaders of some colleges and universities have not enough understanding of sports skills, which makes their positioning inaccurate, which leads to the phenomenon that physical education is not in line with social development and is contrary to students' thoughts. The above problems can be summarized as follows: first, colleges and universities are too much to pursue competitive honor. No matter what knowledge you learn, there will be corresponding competitions, which aims to assess the students' mastery of the skills and theories of the subject. The main purpose of some colleges and universities to train sports skills is to pursue the competition rank, but ignore the real purpose of sports competition. The real meaning of sports should be to mobilize students' enthusiasm to participate in physical exercises independently, so as to improve their physical quality. Some colleges are too much to pursue the position, which not only gives students the burden of burden but also increases their pressure. Secondly, the input mode of physical education is not correct. The college did not fully consider the actual situation of students, and did not stand in the perspective of students to determine the number of sports skills.

# 3. TEACHING STRATEGIES OF SPORTS SKILLS IN THE NEW CURRICULUM

3.1 Attach importance to the teaching of sports skills

Sports skills should not only be steadily implemented in physical education, but also ensure the smooth completion of the new curriculum teaching objectives. The leaders and teachers of colleges and universities should pay attention to the development of students' sports skills and increase their investment in sports teaching. Based on this theory, colleges and universities can start with the following suggestions: first, the education management departments in various regions should take the lead in making corresponding changes, fully understand the educational concept of the new curriculum, make the physical and sports skills into the key teaching content, and organize the propaganda activities regularly. The activities should include the content of the students' learning sports skills Watch the relevant campaign video. Secondly, the leaders of each university should make a thorough teaching plan by example, and at the same time, they should make reasonable and scientific teaching plans in combination with the relevant regulations on physical education management. Finally, the school appropriately increase the teaching of sports skills of the guiding meeting. Teachers can make different training programs according to their development ability, analyze the problems of their own development and follow up and guide them. There are significant teaching results [2].

3.2 Appropriate adjustment of physical education teaching methods

Teachers can reasonably arrange sports skills based on sports teaching activities. Junior middle school students should consider their physical fitness, adjust the intensity of exercise appropriately, and play the role of strengthening physical fitness. Due to the high school students need to deal with the college entrance examination, learning pressure, learning time is more compact, so the lack of physical exercise, and strengthen their physical quality is the primary problem. In order to make

the sports skill training better match the current stage of students, colleges and universities should make appropriate adjustments from their physical quality, personality characteristics and actual needs, and reasonably arrange the training tasks. At the same time, we should master the training intensity, so that students can adapt well, and reduce the frequency of risk. Let the students do the corresponding exercise can relax the mood, and promote the learning efficiency.

# 3.3 Cultivate students' interest in sports

There are many kinds of sports skill teaching, different sports skills may create different athletes, so in sports classroom teaching, paying attention to teaching methods, teaching ideas, teaching process can play a strong effect. Teachers and leaders of colleges and universities should introduce sports skills into sports teaching activities, which not only enriches the teaching content and widens the teaching ways, but also helps to cultivate students' interest in sports, make them participate in sports training independently, and constantly improve themselves. At the same time, we should combine the students' ability and personality characteristics to increase their interest in sports learning. Under the teaching concept of the new curriculum reform, the reform of teaching methods can not only improve the efficiency of students' learning, but also improve the quality of teaching, and promote the healthy development of all aspects of students' quality.

# 4. CONCLUSION

Through the analysis of the current situation and development strategy of sports skills teaching, this paper makes it clear that the reform of sports teaching methods based on the new curriculum concept can not only improve the quality of sports teaching in Colleges and universities, but also further cultivate the richness of students' sports skills. In view of the problems existing in physical education teaching, this paper puts forward the corresponding solutions, which can not only make the physical education curriculum have obvious effect in practice, but also make the students' physical quality evaluation reach the standard.

- [1] Wu Kechang. On the current situation and Strategies of sports skill teaching under the new curriculum [J]. College entrance examination, 2021 (15): 165-166.
- [2] Zhao Qunying, Yang Bingxiong. Analysis of teaching strategies of high school physical education classroom under the new curriculum reform [J]. Famous teacher online, 2021 (06): 73-74.