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CONTENTS

Research on Evaluation and Countermeasures of High-level Talents in the New Era Based on T City Survey

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Abstract: The country has implemented an innovation-driven development strategy. High-level scientific and technological talents are the primary driving force for innovation and development. This article takes the performance evaluation of high-level talents in T city as the research object. It expounds the necessity of cultivating and introducing high-level scientific and technological talents, analyzes the main problems of current high-level talents introduction, and it also proposes the standards and indicators for high-level talent evaluation and evaluation implementation methods. The reseach puts forward countermeasures and suggestions for talent introduction, which can provide reference for relevant cities and talent introduction and scientific evaluation.

Keywords: high-level talents; talent introduction; analytic hierarchy process; effectiveness evaluation index system; policy suggestions

1. INTRODUCTION

Talent is an important resource in economic and social development. As a strategic scarce resource, high-level talents have the obvious characteristics of high knowledge level, strong ability and creativity, which is the key to lead innovation-driven development [1]. In recent years, the state and local cities have issued a series of talent policies, implemented the important talent projects, attracted high-level talents at home and abroad, and also achieved certain results.

In the process of continuous development and improvement of the market economy, the general public also recognizes that talents can produce the economic benefits widely. In practice, in response to strategic and economic development needs, the local governments have also actively launched a series of talent policies in order to improve the talent situation in the region, optimized the talent structure in the region and enhanced the talent competitiveness. The policies also improve talent comprehensive quality to improve the comprehensive competitiveness of local governments and cities [2]. Among the talent policies, it mainly describes the measures of the talent policies, the implementation of talent incentive policies, the selection of talent use policies, and so on. However, there is little analysis and demonstration of the output effects after the implementation of various talent policies. There is no scientific, reasonable and objective effect evaluation system for talent policies that have been implemented.

2. STATUS AND PROBLEMS OF HIGH-LEVEL TALENT TEAM CONSTRUCTION IN T CITY

T city is full of manufacturing vitality, with obvious advantages. It has formed a highly competitive industrial cluster such as automobiles and motorcycles and their accessories, medicine and chemicals, household appliances, clothing machinery, water pump valves, etc. The industrial cluster has a large number of famous manufacturing brands such as Geely, Star Group, Hisun Pharmaceutical, and Supor. Behind the industrial transformation and the formation of famous brands is a development strategy led by science and technology and driven by innovation. It is also a scientific plan for T City to seize the most critical resource of talent.

With the adjustment and optimization of the economic structure of T city and the transformation and upgrading of the industrial structure, the competitive advantages built on the high consumption of resources and low labor costs in the past have come to the end. The structural contradictions of talents are more prominent. There is a shortage of high-level innovative talents and high-skilled talents, especially the high-end talents and leading talents. The talent development system and mechanism are not perfect. The main role in talent development has not been brought into full play [3].

Talent is the first support for development. T city urgently needs to build a talent team that matches the manufacturing industry to change the current shortage of talents and shortage of high-level talents effectively. It needs to form a talent training system that serves local economic construction, matches the adjustment and optimization of economic structure.

In recent years, with the continuous advancement of the industrialization process, economic structural adjustment and industrial optimization and upgrading, the municipal party committee and municipal government will from a strategic and long-term perspective, comply with corporate needs and industrial development [4]. It focuses on targeting high-level innovative entrepreneurial talents. The introduction has gradually formed a new mode of recruiting and attracting talents with the characteristics of "Taizhou hunting talents, intensive attracting talents, and recruiting talents organically" as the main features.

It brings talents to the industry in T city and realizes the industry smoothly [5]. The transformation and upgrading have laid a solid foundation and provided solid talent policy support for the economic transformation and development. Based on the analysis of the new mode of recruiting talents and attracting talents in the T city in recent years, some explorations have been made in the 500 Elite Talent Conference, but the problems still exist to some extent as follows:

2.1 The Introduction of Talents is so Formal

When some talents were introduced, they paid too much attention to formalized hard indicators such as talent rank, title, and academic qualifications, without investigating their scientific research capabilities and potential skills. In addition, many universities have a single evaluation mechanism when investigating talents.

In addition, the introduction of some talents has a tendency to be operational, regardless of their actual needs or meeting the needs of current talent policies, lacking a deep understanding of the current status of local talent resources, blindly introducing high-level overseas talents [6]. There is a lack of talents due to "personal mismatch". The uselessness of talents leads to the waste of talents. The end result is a sad breakup without the actual effect of high-level talents.

Even to a large extent, there are “professional job-hopping” talents who promote housing and policies, drill system holes, and let national resources flow into their own pockets. There are also some talents with deep qualifications, good academic standards, and extensive social relationships. They often take projects and publish dissertations locally during the employment cycle, but rarely come to their posts. Their scientific research results are often repetitively accepted in various places. It can't effectively train the talent team and can't serve the role of facilitation.

2.2 The Platforms for Innovation and Entrepreneurship are Backward and the Geographical Advantages are not Strong, so it is Difficult to Introduce

The platform and environmental quality of attracting high-level talents are not high. Lacking of first-class research institutions and research universities, and so on, which maked it more difficult to attract high-level talents and live and work in peace.

In addition, some universities are affected by their own conditions and various factors, which have no academic advantages or are affected by factors such as the regional environment and geographical location. They can't provide a good scientific research platform for high-level talents. The introduction of talents is equally difficult.

The environment for high-level talents to live and work is not optimistic, and they have encountered many problems in exerting expertise, scientific research funding, and so on.

3. DESIGN OF PERFORMANCE EVALUTION SYSTEM FOR HIGH-LEVEL TALENTS

The introduction of high-level talent introduction performance evaluation aims to find and solve the problems through a systematic evaluation of talent introduction, focusing on providing factual basis and strategic guidance for the scientific management of talent introduction. The author analyzes the current situation of the introduction of high-level talents in T City. Based on the AHP talent evaluation model, qualitative problems that are difficult to quantify are quantified mathematically, and consistency tests are performed [7].

According to the existing related research methods, this article has extracted the key elements of high-level introduction of performance evaluation, and organized a number of experts to conduct in-depth discussions. Experts unanimously believe that as an element of effectiveness evaluation, such as the level of talents, education, quantitative evaluation of basic conditions [8]. On this basis, the evaluation experts need to contribute to the talent group, including the hidden characteristics of talent stability, continuous contribution of talents, team collaboration capabilities, industry matching, innovation, social adaptation, and leadership promotion.

3.1 Determine Evaluation Criteria

Determining the evaluation standards is the basis for the development of the entire evaluation system and the premise of implementing the evaluation system. Because any evaluation activity revolves around the corresponding evaluation standards, the general direction and principles should be reflected in the development of the standards, and the recognized standards should be reached [9]. For example, the company's evaluation of the ability of imported high-level talents mainly considers whether its comprehensive attitudes such as work attitude, professional ability, key ability, and innovativeness in professional positions meet the actual talent requirements of the enterprise. Therefore, when formulating the evaluation criteria, it is necessary to clarify why the evaluation should be performed and what purpose the evaluation should achieve, and the evaluation system constructed according to the evaluation standards is more targeted and practical. The design of each evaluation index should reflect the characteristics of high-level talents and build an evaluation system based on enterprise and industry talent evaluation standards.

3.2 Determine the Main Content of the Evaluation Index System

The factor decomposition method is mainly used to determine the main evaluation index units in the evaluation system. The determination method is as follows: (1) determine the evaluation standard structure; (2) analyze the capability element units that constitute the evaluation standard structure; (3) design an "evaluation questionnaire" based on the characteristics of high-level talents, analyze the impact factors; (4) determine the evaluation index system through factor analysis and expert consultation. The evaluation index system is a three-level system. The evaluation index system is divided into three levels: first-level index, second-level index, and third-level index. It divides the level of each capability element unit from high to low and decompose it layer by layer. The capability element units at the upper level include the capability element units at the next level. Each capability element unit is clear from level to level, and the scope is gradually shrinking and easier to quantify. The lowest level units are more independent and more independent. All ability elements ensure the completeness of the evaluation index system.

3.3 Determine the Weight of Each Indicator

In the process of constructing an evaluation system, it is particularly important to select and determine indicators. The determination of the weight of each indicator also has a significant impact on the construction of the entire evaluation system. With the same set of index systems and different weights, the conclusions of the evaluation are vary greatly. Therefore, the weight of each evaluation index is determined based on the analysis of survey data. The weights represent the degree of importance of specific evaluation indicators in the entire system. Values are assigned to distinguish the role and importance of each evaluation factor in the entire evaluation system. The principle of determining the weight of each evaluation index in the evaluation system is: the value range of each index weight is between 0 and 1; the sum of the weights of each index is 1.

3.4 Determine the Number of Evaluation Levels

There is no uniform rule on how many levels are set in the evaluation standard, but it can be set according to actual needs. In general, as the number of evaluation levels increases, the more detailed the index, the higher the corresponding accuracy, but the complexity of the overall evaluation also increases, so in general, the number of evaluation levels does not exceed 5.

3.5 Seek Opinions of Relevant Expert

After constructing the evaluation index system according to the above steps, it needs to seek the opinions of relevant industry experts, enterprise engineering and technical experts and so on, in order to identify problems or unreasonable points in the evaluation system as early as possible. Thus, it continuously can improve the system is more in line with the actual situation and more operable.

4. EMPIRICAL ANALYSIS

T city was selected as the research object. The professional ability and innovation ability were used as the first-level evaluation indicators to construct the evaluation system.

4.1 Determine the Evaluation Index System

The survey statistics method is used to determine the contents of the secondary evaluation indicators, the steps are as follows:

Step 1 Prepare the questionnaire

In order to reduce the amount of calculation in the evaluation process and enhance the operability of the evaluation, the research team set the evaluation index into 2 level, namely professional ability and innovative ability, and compiled a questionnaire to investigate.

Step 2 Issue survey

The research group selected T city as the survey object and distributed 300 questionnaires, which has certain working experience in recruiting and evaluating talents.

Step 3 process the findings

The research team collected 286 questionnaires, and then analyzed, sorted and classified the survey results, and obtained the evaluation index system shown in Table 1.

Table 1. Evaluation index system

First-level indicators	Secondary indicators
Professional competence	professional skill
	Expertise
	Professional attitude
Creativity	Analysis and problem solving skills
	Teamwork and organizational skills
	Access to knowledge and information
	Technological innovation capability
	logical thinking ability
	communication ability
	Mental capacity
	Other capabilities

4.2 Assign Evaluation Index Weights

The research team uses the Delphi method to determine the weights of the indicators in the evaluation system. First, it determines the weights of the two first-level indicators.

Step 1 Prepare the inquiry form

Based on the results of the weights of the two first-level indicators obtained from the previous survey, a weight allocation consultation table was prepared as shown in Table 2.

Table 2. Consultation table for the allocation of weights of first-level indicators

professional opinion / Weight / First-level indicators	Previous statistics	your opinion
Professional competence	60%(0.6)	
Creativity	40%(0.4)	

Step 2 Select experts and form the issue consultation

The research team selected six enterprise management experts, eight enterprise engineering and technical experts, and six government functional departments, and then issued the consultation forms to them.

Step 3 Recover the inquiry form and perform corresponding statistical processing

After recovering the consultation form, first it calculates the estimated average value of each index weight according to formula (1), and then calculates the average difference between each expert's average weight of each index according to formula (2). Finally it uses statistical analysis software to the corresponding evaluation indexes which are processed statistically. The statistical results are shown in Table 3.

$$\overline{w_i} = \frac{1}{n}\sum_{j=1}^{n} w_{ij}\,(1 \le i \le m) \qquad (1)$$

$$\Delta w_{ij} = w_{ij} - \overline{w_i} \qquad (2)$$

In formula (1), $\overline{w_i}$ represents the estimated average value of the weight of the first index, and w_{ij} represents the estimated value of the weight of the evaluation index by the second expert.

In formula (1), $\overline{w_i}$ represents the estimated average weight of the index of item i, and w_{ij} represents the estimated weight of the evaluation index of item i by the j expert.

Table 3. Statistical results of the first round of consultation indicator weights

Evaluation index / statistical results / Expert Number	Professional competence		Creativity	
	Weight	Deviation from the mean	Weight	Deviation from the mean
1	0.7	0.07	0.3	-0.07
2	0.63	0	0.37	0
3	0.65	0.02	0.35	-0.02
4	0.75	0.12	0.25	-0.12
5	0.68	0.05	0.32	-0.05
6	0.58	-0.05	0.42	0.05
7	0.55	-0.08	0.45	0.08
8	0.65	0.02	0.35	-0.02
9	0.67	0.04	0.33	-0.04
10	0.63	0	0.37	0
11	0.59	-0.04	0.41	0.04
12	0.7	0.07	0.3	-0.07
13	0.63	0	0.37	0
14	0.58	-0.05	0.42	0.05
15	0.6	-0.03	0.4	0.03
16	0.62	-0.01	0.38	0.01
17	0.55	-0.08	0.45	0.08
18	0.6	-0.03	0.4	0.03
19	0.62	-0.01	0.38	0.01
20	0.65	0.02	0.35	-0.02
$\overline{w_i}$	0.63		0.37	

Step 4 Recycle consultation and statistics to obtain consistent results

Based on the statistical results of the first round of consultation, a second round of weight allocation consultation table was prepared which is shown in Table 4 and distributed to the above experts. Then, according to step 3, the results of the second round of surveys are statistically processed, and the results of the second round of statistical processing are used as the third round of mean value comparison to conduct the third round of consultation and statistical processing.

Table 4. Consultation form for the allocation of weights of first-level indicators

Weight / professional opinion / First-level indicators	Previous statistics	your opinion
Professional competence	63%(0.63)	
Creativity	37%(0.37)	

After three rounds of consultation, the opinions of the experts on the weights of the two first-level indicators in the evaluation system tended to be consistent. The results are shown in Table 5.

Table 5. Table of weight allocation results for primary indicators

First-level indicators	Professional competence	Creativity
Weight	64%	36%

After determining the weights of the first-level indicators, we used the same steps and methods to prepare a second-level indicator weight allocation consultation form and distribute it to the previous 20 experts. After multiple rounds of consultation and statistical processing, we obtained consistent weight allocation results as shown in Table 6.

Table 6. Table of weight distribution results for secondary indicators

First-level indicators	Secondary indicators	Weight
Professional competence (64%)	professional skill	28%
	Expertise	20%
	Professional attitude	16%
Creativity (36%)	Analysis and problem solving skills	8%
	Teamwork and organizational skills	6%
	Access to knowledge and information	6%
	Technological innovation capability	5%
	logical thinking ability	5%
	communication ability	3%
	Mental capacity	2%
	Other capabilities	1%

5. SUGGESTIONS

First, it needs to build a complete innovation platform to continuously improve the innovation environment. It can integrate the technology and market elements and resources of universities, research institutes and high-tech zones in the city, which can gather and attract high-level scientific and technological talents.

Second, it needs to improve policies and guarantee systems and continuously improve the living environment. Whether talents can be brought in and retained depends to a large extent on environmental support, including treatment, children's education, medical care, and living support. Actively provide a living environment support for high-level innovative talents through a sound policy system and guarantee system.

Third, the city has further improved its scientific talent evaluation system. To achieve the effective implementation of the introduction and cultivation of high-level talents, it is also necessary to actively construct a scientific talent evaluation system in order to avoid the flow of high-level talent introduction work and the waste of talent resources caused by improper talent evaluation indicators.

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REFERENCES

[1]Huang Rongjie. Research on the Construction of Performance Evaluation System for the Introduction of High-level Talents. Journal of Taiyuan Urban Vocational College, 2019, 210 (01): 19-23.

[2]Wang Yan. Research on Local Government Talent Policy Evaluation Mechanism. Anhui University. 2011(05).

[3]Pan Wangui, Lin Haibo. Exploring New Paths for Training High-skilled Talents in Higher Vocational Colleges. Vocational Education Forum, 2013, 000 (018): 26-28.

[4]Wang Weilin, Fang Ying, Lin Haibo, et al. Exploration of the development mechanism of higher vocational education and regional economic integration in the new normal state——the talent demand and design based on the transformation and upgrading of SMEs. Economic Research Herald, 2018, (012): 134-136.

[5]Zheng Ruyuan, Yuan Yongzhi, Feng Ying. Research on the innovation model of Suzhou International Elite Entrepreneurship Week // The 2nd China Talent Development Forum and 2012 National Personnel Talent Research Conference. 2012.

[6]Ding Qiming. Discussion on the Performance and Promotion Strategies of Local Government's High-level Talent Introduction Model: Taking Wujiang City as an Example. 2012.

[7]Wang Yong, Lu Changjiang, Ren Hui, et al. Research on the evaluation index system for the effectiveness of scientific and technological innovation in talent projects. China Human Resources Development, 2016(8):44-49.

[8]Zheng Qingyun. Study on the spatial-temporal difference of economic benefits of land use in Beijing, Tianjin and Hebei based on the degree of coupling and coordination.2018.

[9]Yang Qiong. Research on the Vocational Ability Evaluation System of Higher Vocational Students. Scientific Research, 2010.

Research on the Teaching Mode Reform of "Three-Seven Class" Based on Projects

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Abstract: An important professional course of "computer-aided circuit design" plays an important role in the process of electronic design for students majoring in electronics. The status of this course, the current situation and disadvantages of teacher centered education are described. In order to change this situation, the reform mode of reverse curriculum design and teaching activities is established, which starts with the ultimate goal (students' learning effect). The teaching reform is student-centered, active learning, driven by students' continuous feedback. Learning results are emphasized in this reform, and the project-based online and offline mixed "three-seven class" mode is realized. The guarantee system including teaching institution, educational resources and teaching supervision is introduced, which guarantee the progress of reform. The position of teachers and students is clarified in teaching. The concrete "three-seven class" proportion distribution in classroom teaching is expounded. Taking electronic information engineering students of grade 2018 as the object, the teaching effect is fed back through three ways: student feedback, peer teacher feedback and student work innovation. The evaluation results are given. That is to say, students and teachers are satisfied with this reform, and students' innovation ability has a great improvement, which meets the social needs and graduation requirements.
Keywords: teaching reform; three-seven class; the course "computer-aided circuit design"

1. THE IMPORTANT POSITION AND IMPORTANT POSITION AND STATOUS OF THE COURSE "COMPUTER-AIDED CIRCUIT DESIGN"

"Computer-aided circuit design" course is an optional course for undergraduates in electronic information engineering, and is a part of the automation course of electronic design. Its total duration is 54, of which 40 is in practice, with strong practicality. The mission of this course is to enable students to master Protel software proficiently. This course cooperates with the theoretical knowledge of circuit design, improves primary practical ability, self-study ability of software and engineering practice ability. It lays the necessary theoretical foundation for the professional work related to circuit design. It is the basis of the follow-up course, for example, "microcontroller principle and application", "programmable logic device", "intelligent hardware application development" and "course design of electronic technology" and "professional comprehensive design", and is the bridge between professional courses and practical courses.

Because electronic graduates are mostly engaged in circuit design and analysis, drawing the correct, formal circuit diagram is the premise of employment. The course is an important part of graduates' employment skills, a necessary tool for students to work smoothly.

In the traditional teaching mode, teachers mainly explain software operating skills, and most students are only mechanically passively following the teacher [1]. When they encounter problems, they can't think independently, but eager to let the teacher solve the problem. From the student's point of view, this situation is not good for students to master the basic theory, and it is not good for students to develop the practical ability applicable to enterprises. From the teacher's point of view, the lack of teaching communication, the role of teachers is not proper. Teachers see themselves only as "knowledge imparters" but not as "event organizers" or "learning consultants". This mode does not fully stimulate students' interest in the course, and increases the teachers' burden, but gets half the results with double the effort.

2. THE ESTABLISHMENT OF THE CURRICULUM REFORM GUARANTEE SYSTEM

The course "computer-aided circuit design" starts with the ultimate goal, students' learning effect. Then the effect determines curriculum design and teaching activities in reverse. Classroom teaching is student-centered, active learning, and driven by students' continuous feedback. It emphasizes learning results. The reform of the three-seven teaching model mixed on-line and offline is realized [2]. The course's security system is shown in Fig.1.

(i) Based on the concept of OBE, according to the National Standard for the Quality of Electronic Information Teaching, industry and social needs, the curriculum training
objectives, graduation requirements and quality stand ards are clearly defined, which are the important basis for curriculum design.

(ii) Establish a reasonable resource guarantee system. Increase the construction of PCB laboratory, which provide hardware guarantee for the quality of teaching. Strengthen the training and construction of teachers' team, which provide teacher guarantee for teaching quality. Create a comprehensive practice laboratory to provide a guarantee for improving students' engineering practical ability.

(iii) Establish a complete teaching monitoring and support system, including the quality evaluation system, information feedback system, and quality improvement system. They have gradually formed a whole process monitoring, circular feedback, closed effective system.

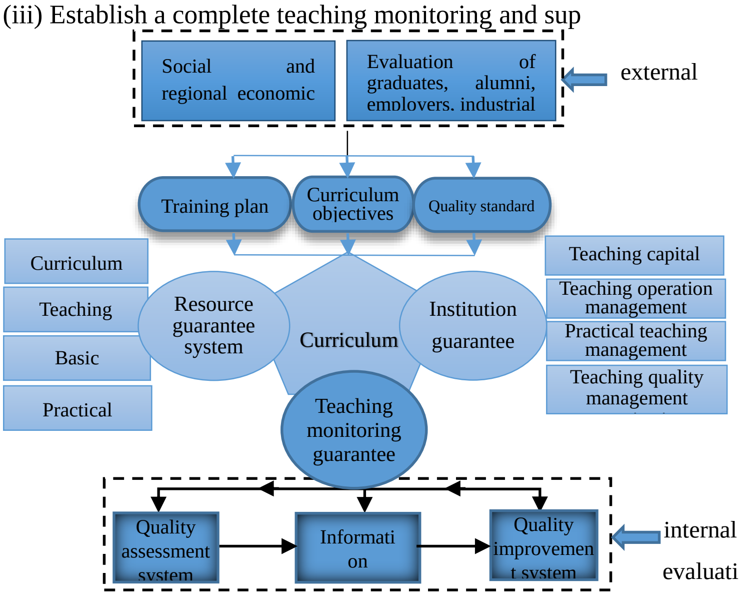

Fig.1 Curriculum quality guarantee system

3. CONSTRUCTION OF COURSE CONTENT

The course divides the class hours into 30% for teachers and 70% for students. The teacher's position is adjusted appropriately in the entire teaching process. Teachers play the role of guidance and add the finishing touch to student. The course gets rid of the teaching mode that only focused on "input" in the past, and aim to cultivate applied potential talents [3]. Application software is used by the course. Students already have basic knowledge of computer, C language, etc. Therefore, they have certain self-learning ability to learn application software. In the teacher's lecture, the teacher only teaches students the conceptual, unique knowledge, for example, the software's features and functions. Teachers, the organizers of teaching activities, guide the teaching contents, help solve the difficult problems, and evaluate learning results [4].

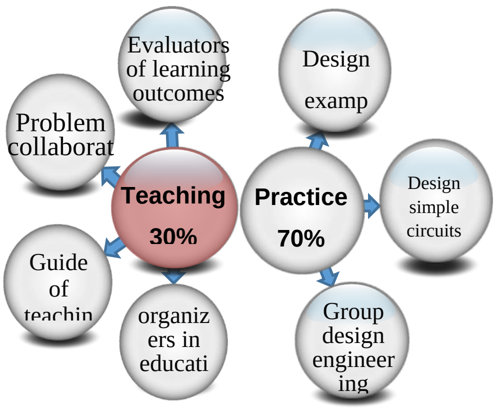

Fig.2 Class time

Most of the class hours in the teaching process are dominated by students, and the class is taught in a large class with a group discussion mode. 3 or 4 students in group design and make fixed topics or optional items given by teachers, as shown in Fig.2. The practice is presented in the form of project-based teaching reform. Students should choose multi-choice experimental projects that adapt to the development of The Times and students development. This reform fully mobilizes students' initiative and enthusiasm for learning, gives consideration to the systemic of electronic information engineering major, and arranges students' learning burden evenly. The teachers adjust the teaching plan through the student feedback, the graduate feedback and the employer's opinion. The purpose is to evaluate the comprehensive performance of learning knowledge, ability and quality. The specific contents are as follows.

(i) Construct a complete and scientific syllabus to support the goals and requirements of the training plan including the ability to independently design comprehensive practice and experiments in the field of electronic information, the ability to solve complex engineering problems such as engineering design and analysis, the ability to acquire knowledge independently, and the ability to continue learning and to adapt to development. Through the project-based teaching method, students have the ability to analyze engineering practice problems independently, change the status of students in teaching, and change passive learning into active learning, which reflects the reform philosophy of student subjects. In addition, in the syllabus design, the curriculum ideology and politics are integrated into the curriculum teaching, and each chapter is designed with corresponding links. The idea that "practice is the only standard for testing problems" is gradually infiltrated into every project, so that students can explore concepts and theories in practice and understand basic theorems. The course is combined with the knowledge of analog electronic technology foundation, digital electronic technology foundation and circuit analysis course, and give full play to the instrumental role.

(ii) The mode of online and offline hybrid teaching enriches teaching content. Online teaching is mainly based on the network teaching platform. Use micro-lectures, online discussions, and online tests to run throughout the class. Offline teaching is mainly carried out in classroom or practical sessions. Classroom sessions account for 30% of the whole class time. The reform gets rid of the teaching mode that only focused on "input" in the past, and aims to cultivate applied potential talents. In practice, teachers choose multi-choice experimental projects that adapt to the development of The Times to mobilize students' initiative and enthusiasm for learning, which not only takes into account the systemic of electronic information engineering major but also allocates students' learning burden evenly. The practice realizes the reform of project-based teaching.

(iii) The project-based teaching reform combined with online teaching is focus on learning effect of students. The preliminary courses of this course include "foundation of analog electronic technology", "foundation of digital electronic technology" and "circuit analysis", etc. Combined with these courses, students are able to design small circuits in form of the project library by using this software. This not only improves the software proficiency, but also improves the comprehensive application ability of professional knowledge. Teachers encourage students to choose their own projects, supervise students to complete independently, and ensure fair assessment.

4. ANALYSIS OF CURRICULUM TEACHING EFFECT

The teaching reform for "computer-aided circuit design" course is applied to students majoring in electronic information engineering of the grade 2018. The teaching effect can be measured by student feedback, peer teacher feedback and students' innovative works.

Because students are the entities of educational reform, students who participate in educational reform have the best say. Through discussion and design in groups, the awareness of cooperation is improved. Organize regular group leader meetings, which emphasize teaching communication between teachers and students. In the meetings, the teachers summarize typical problems which are the students encountered during the design projects, and solve them. The reform enables students to acquire knowledge, improve ability and get creative inspiration in the process of equal communication. Among the 60 students surveyed, 99% of the students were satisfied with the curriculum reform to improve the awareness of group cooperation, promote student communication, and allow students to gain knowledge in practice.

Peer teachers regularly exchange reform experiences and feedback teaching results. During the semester of 18-19-2, teachers communicated with each other once a month through activities in the teaching and research section and lectures to each other. In order to enhance the effect of practice, two teachers were arranged in the experimental class to guide students at the same time, construct project library, and exchange students' feedback on learning effect.

The teaching mode of large class teaching and small class discussion stimulates students' innovative ability and thinking. Students are more willing to explore cooperation, collaboration division of labor, search for information, design circuit, print circuit, proofread circuit, make circuit boards, debugging and installation. In order to continue the course in primary school period of 18-19-2, an extended topic was specially designed for this course, the basic functions of the project and the self-designed functions were given, and the students' innovation consciousness was fully explored. More than 80% of the students had completed the innovative function, and the effect was remarkable.

The evaluation system reform is used as a quantitative index to evaluate students' learning effect. The assessment method makes varied. The original pattern of grading of a final paper is changed to three parts, including the usual score, practice score and contribution score within the group. According to a certain weight, teachers give students' usual score. Practice results are generated by mutual evaluation between groups, and contributions are generated by mutual evaluation among members of the group. The assessment results are treated fairly.

5. CONCLUSION

"Computer-aided circuit design" course is looked as the object of the reform. A project library is constructed, and online and offline teaching methods are adopted to implement the reform of the "three-seven class" teaching mode. Three qualitative indicators through student feedback, peer feedback, and students' sense of innovation are improved. The effect of students is measured quantitatively by the diversified assessments. The conclusion is that the student and the peer teachers are satisfied with this reform. The students' innovative ability has been greatly improved through the reform.

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REFERENCES

[1]Xie Yunxi, Huang Shun and Liu Hongbo. Research on the application of project-based teaching reform in PCB design and manufacture, Technology and Economic Guide, 2017(25): 134-135.
[2]Qing Ying. Research on the theory and path of the course construction of the online and offline hybrid "golden course" in macroeconomics, Course Education Research, 2019 (50):26-27.
[3]Jiang Xueqin. Research on teaching innovation mode of PCB design and manufacture. Science and Technology Information, 2016(08): 99-100.
[4]Zhuang Fang. Network course construction and project teaching implementation of Protel PCB design. Vocational Education Research, 2008(07): 82-83.

A Study on Early Warning and Crisis Intervention of Adolescent Mass Incidents

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Abstract: With China's social and economic development, social transformation, diversification of social relations and educational reform, various types of mass incidents of young people frequently occur, bring serious impact on the school teaching environment, and even affect the social harmony and stability. Therefore, effective countermeasures should be taken. Based on the analysis of the new characteristics of youth mass incidents, this paper explores the long-term mechanism of crisis management of student mass incidents, network public opinion and campus culture, so as to deal with the youth mass incidents under the new situation.

Keywords: Youth mass incident, Long-term mechanism, Network public opinion.

1. INTRODUCTION

At present, with the rapid development of China's social economy, the trend of social transformation and diversification has become increasingly obvious, and social relations have become complicated and diversified. Similarly, in the education front, with the continuous deepening of the education reform, the educational environment, educational philosophy and students' values, behavior patterns, psychological characteristics, etc. have also undergone great changes, and various intricate contradictions will arise, accumulate and break out in the campus. Therefore, various kinds of mass incidents of teenagers occur frequently, which seriously affect the school education and teaching environment and even affect the social harmony and stability [1]. It is of great significance for us to maintain the stability of the school, guarantee the normal teaching and scientific research order of the school and build a harmonious campus to accurately grasp and analyze the causes of the formation of mass incidents among teenagers and actively carry out the "five early" work (early prevention, early detection, early diagnosis, early treatment and early solution) [2].

2. NEW CHARACTERISTICS OF MASS INCIDENTS OF TEENAGERS

School mass incidents will show different characteristics in different periods. Now, under the influence of new environment and many new factors, school mass incidents show new characteristics.

2.1 Concealment

With the maturity of Internet technology, teenagers, as youths in the era of new media, are gradually becoming networked and emptied. The Internet has become a communication mode for teenagers to survive. Because the Internet has considerable freedom, anonymity, and concealment, the use of the Internet to vent grievances against the state, society, and schools, or to rectify collective sexual behaviors has become the most prominent feature of the school's collective contradictions [3-4]. In the era of information explosion and electronicization, Internet public opinion is spreading as "thunderstorms can't cover your ears". The existence of a hot event coupled with an emotional opinion may become the trigger for action events in school groups.

2.2 Sensitivity

The subject of the youth group incident is knowledgeable, thoughtful and enthusiastic college students, who are more concerned and sensitive to the movement and development of the country and society. Because the students themselves are not mature enough, and they are at the stage of life, they are prone to take extreme lines for some socially sensitive issues, and may even be used intentionally by some criminals [5]. With the high-informatization wave of "moving the whole body", once a group incident of students occurs in a school, it will spread rapidly and cause wide public concern.

2.3 Bidirectionality

Adolescent group events are two-way. On the one hand, the occurrence of group incidents will inevitably objectively disrupt the normal teaching and management order of the school, bring unnecessary losses to the school, and cause a certain negative impact on social stability, making it develop in the direction of "crisis". . On the other hand, if school workers can take corrective measures before and after the incident to solve and respond, and actively eliminate the negative impact brought by the incident, then the "crisis" can evolve towards "turning opportunities" and "opportunities", increasing The school's experience in dealing with similar incidents will further promote the future construction and development of the school.

2.4 Partiality

Because individuals have differences in social status, knowledge level, and way of thinking, they have different ideas about certain phenomena or actual problems and then take different behaviors. Adolescents have not yet completed the socialization of their bodies and minds, and their analysis and understanding of social phenomena and problems are not objective and comprehensive. If they do not timely guide and coordinate some of their extreme ideas and behaviors, they will gradually strengthen and condense into contradictions, which is difficult to resolve then confrontation occurred, triggering various types of mass incidents.

2.5 Predictability

Adolescents, as a special group of society, have universal characteristics and traits. Based on similar major events that have occurred in the past, they can preliminarily predict the general psychological state and behavioral tendencies of students. As youth workers, they must continue to recognize and grasp the characteristics and causes of school mass emergencies, constantly understand and grasp the characteristics and rules of maintaining school stability and building a harmonious campus under the new situation, and comprehensively improve their ability to foresee youth mass events. To fulfill the requirements of eliminating instability factors and maintaining the normal work and life order of the school [6].

3. EARLY WARNING OF ADOLESCENT GROUP INCIDENTS AND WAYS TO ACHIEVE CRISIS INTERVENTION

3.1 Establishing a Long-term Mechanism for Crisis Management of Group Incidents among Students

The establishment of a long-term mechanism for crisis management of adolescent group incidents facilitates timely prediction and discovery of the causes and signs or possible development directions of group incidents, thereby providing a reasonable basis for timely and effective interventions.

3.1.1 Formulate and practice early warning and emergency plans based on school conditions

Adolescent group events also have their own context and rules. If these laws can be grasped scientifically, proactive and scientific prevention and early warning can be carried out. For this reason, school workers improve their ability to see and understand knowledge, usually pay attention to accumulation, and are good at discovering tendencies and emergent factors. For issues and reforms involving students 'immediate interests, timely and open public hearings should be observed; students' emotional fluctuations should be observed to prevent the generation and development of grievances; and key observations should be made for students who are easily biased.

The formulation of emergency plans should follow the scientific, systematic and operable, and pay attention to improving the details. Effectively ensure that there are rules to follow when a mass incident occurs, and that there is no danger of disorder, so as to prevent misconduct and improper command. In order to verify the feasibility of the emergency plan, it is necessary to regularly organize relevant departments, institutions, and personnel training and drills to make them clear of their positions and responsibilities, enhance their ability to collaborate with each other, and improve their overall emergency response capabilities to check whether the plan is operational. And whether it can achieve the desired effect, and further summarize and improve, and must not be in the form.

3.1.2 Implementation of personnel management and information management

The first is to set up a special crisis management institution to form a scientific and systematic hierarchical responsibility and management; set up a working team composed of professionals and student workers; regularly conduct business training for members of the crisis management team to improve their Control management and crisis resolution. Secondly, professionals provide direct and systematic counseling services to students with psychological problems and shoulder the mental health knowledge training for student workers and students. Finally, we must give full play to the personality characteristics, learning, Interpersonal relationships and other situations are more familiar with the advantages of encouraging them to provide effective information for the psychological counseling center to grasp the overall mental health of students in a timely manner, and persuade students with psychological problems to accept the help of professionals in the counseling center as soon as possible.

Pay close attention to student dynamics and keep information informed and unblocked. A system of student information and psychological liaison can be established. In particular, the role of student cadres should be brought into play. The first time to grasp the information dynamics and strive for initiative; public research on the recent issues and issues of concern to students. Proactively strengthen the collection, analysis and processing of information; attach great importance to students' opinions on the school and provide timely answers; be keenly foreseeable of possible crises, hidden dangers, contradictions and problems in student work; focus on humanized management of students School life should be "student-oriented", and education and teaching must be "student- and teacher-oriented" to ensure the basic rights of students.

3.1.3 Linkage mechanism focusing on prevention and investigation

Strengthen the coordination and cooperation of school security departments, logistics groups, school hospitals and other functional departments; set up a high-quality preventive investigation team that is good at communication, rigorous and meticulous, and is not afraid of trouble, including school psychological assistance personnel, front-line counselors, Student cadres, etc. Find and pay close attention to the speech, trends or events that may affect the safety and stability of the campus in a timely manner; regularly check the student's doubts and dissatisfaction, and solve and adjust it in a timely manner; regularly check and solve the actual difficulties and problems of the students, and effectively protect the students' Legitimate rights and interests; Pay attention to timely mediation and resolution of contradictions among students; Students with mental health problems should pay attention to follow-up management. Form a co-ordinated and multi-pronged linkage mechanism for departments and personnel, weave a campus safety and stability protection net, and ensure a stable and harmonious campus teaching and living order [7-8].

3.2 Internet Public Opinions-New Frontiers for Youth Group Incidents

In today's era of network informationization, with the wave of globalization, network media has been recognized as the "fourth media" after newspapers, radio, and television. The network has become one of the main carriers of public opinion. The influence of Internet public opinion on the occurrence and development of adolescent group incidents is growing. Therefore, it is necessary to attach great importance to the new frontiers of mass incidents among young people (Internet public opinion).

3.2.1 Monitoring, analysis and management of school public opinion

Monitoring and analysis of school public opinion can accurately grasp the content, orientation and development trend of school public opinion. Hire experts, full-time and part-time teachers and students to carry out daily monitoring and key monitoring in sensitive periods of the school's Internet public opinion, grasp the latest information, conduct a comprehensive and systematic analysis, and accurately predict its development direction, so as to appropriately and timely intervene and adjust it .

3.2.2 Correctly guide the school's online public opinion

School administrators give appropriate guidance and guidance on the basis of respecting the principle of freedom and equality of online information exchange, strengthen and control the positive role of public opinion, reduce the negative impact of online public opinion on school mass incidents, and provide benefits for the handling of mass incidents Network public opinion environment. Learn to make full use of the school's network resources to guide the school's online public opinion, such as excavating and opening up the school's main campus public opinion front, strictly guarding the "entry gate" of the forum, preventing extracurricular staff from interfering with school public opinion, and focusing on the active role of "public opinion leaders" Guide role, and strive to train a group of outstanding faculty, front-line counselors, and student netizens as the school's BBS “public opinion leaders” [9], and use these leaders to guide online public opinion to strengthen mainstream speech and isolate non-mainstream speech.

3.2.3 Use the Internet public opinion to reduce the negative impact of the youth group incident

If there is a group incident of students in the school, it is necessary to make full use of the characteristics of the rapid spread of network information and the wide range of audiences, timely communication with the outside world, and use the network to release real information and report the situation. Ensure that objective, truthful, comprehensive and authoritative information is disseminated, eliminate all external suspicions about the incident, and maintain a good image of the school [10-11]. At the same time, it is necessary to prevent the wanton propaganda, malicious speculation, and provocation of a group of incidents by a group of social criminals to prevent recurrence. Within the school, timely feedback and release of relevant processing information, encourage teachers and students to start discussions, form a general consensus on group events, and ensure the rapid restoration and operation of the school's normal order.

3.3 A Sound Campus Culture is an Important Guarantee for School Stability and Harmony

Campus culture, as an environmental education force, has a huge impact on the healthy growth of students. The ultimate goal of the construction of campus culture is to create an atmosphere in the subtle way to cultivate students 'sentiments, build students' healthy personalities, and comprehensively improve the quality of students in order to ensure the establishment of a stable and harmonious school [12].

3.3.1 Moral education function of campus culture promotes college students to consciously maintain school stability

First, create a beautiful campus environment and develop a colorful, healthy and elegant campus culture. Utilizing the beautiful campus environment can infect and nurture students, inspire students' noble moral sentiment; students studying in a comfortable campus environment can inspire students to love the school and the society; the positive campus culture is vulgar and irrational Culture and various negative corrupt ideas can also play a very good role in inhibiting. Secondly, the establishment of sound rules and regulations and healthy collective public opinion are conducive to regulating the behavior of students and making them more in line with the requirements of collective public opinion and institutional norms. Thirdly, it advocates collective consciousness and collaborative spirit, cultivates students 'healthy personality, and promotes students' mental health. From the root of thought, the possibility of group incidents for young people has been suppressed, and young people can maintain the harmonious and stable situation on campus from the heart.

3.3.2 The aesthetic function of campus culture inspires young people to pursue the beauty of campus harmony

School workers should give full play to the aesthetic function of campus culture to help students feel the profound connotation of the beauty of soul, language, behavior, and environment; truly understand and experience such things as "harmony", "elegance", "generosity", and "demeanor" ", Which is internalized into their conscious behavior. Consciously resist behaviors that depart from beauty. Effectively prevent the occurrence and development of all events that disrupt campus harmony [13-14].

3.3.3 Utilize the practical function of campus culture to ensure that students form good interpersonal relationships

School administrators should take the initiative in the construction of campus culture and ensure that a healthy and harmonious campus culture is continuously formed and improved. By creating activities, organizing various types of activities that students love and actively participate in, fostering students' sense of competition and solidarity and cooperation, in the process of competition and cooperation, appropriate psychological adjustment and counseling are provided to allow students to form a healthy mentality and reduce and curb the occurrence of various extreme events on campus.

4. CONCLUSIONS

In summary, we must be vigilant and unswerving, attach great importance to the causes of adolescent group incidents, adopt multi-dimensional analysis, and take multi-pronged and practical measures to effectively warn and timely intervene in adolescent group incidents. Implement the people-oriented spirit, keep the campus safe and stable, and create a safe and stable harmonious campus.

REFERENCES

[1](US) Norman Augustin. Crisis Management. Beijing: Renmin University of China Press, 2001.

[2]Xue Yi, Zhang Qiang, Zhong Kaibin. Crisis Management. Beijing: Tsinghua University Press, 2003.

[3]Liu Jianming. Public opinion communication. Beijing: Tsinghua University Press, 2001.

[4]Wang Laihua. Public Opinion Research Concepts——Theories, Methods and Reality Hotspots. Tianjin: Tianjin Social Science Press, 2003.

[5]Wang Lirong, Chen Shunxiang. Network moral public opinion and the shaping of university students' values. Ideological and Theoretical Education, 2006 (23): 22-25.

[6]Wu Qin. On Prevention of School Group Emergency. Journal of Theory, 2004 (8): 109-110.

[7]Chen Daifen. Causes and Countermeasures of School Mass Emergency. China Educational Research and Innovation, 2005 (9): 24-25.

[8]Yu Haida. Causes and countermeasures of school mass emergencies. Journal of Hangzhou Teachers College (Natural Science Edition), 2003 (3): 81-82.

[9]Xie Huaijian. Analysis and Analysis of Proper Disposal of Public Emergencies: Taking Schools as Examples. Social Science Research, 2008 (1): 99-102.

[10]Ye Jinfu. Establishing and Improving School Emergency Response Mechanisms. Marxism and Reality, 2004 (1): 78-81.

[11]Tao Yingyong. Analysis on the Causes of Group Incidents in Adolescents and Coping Strategies. Journal of Henan Normal University (Philosophy and Social Sciences Edition), 2008 (4): 216-217.

[12]Ou Yongmei, Li Jinshun. Study on the mechanism of juvenile group emergencies. Journal of Guangdong University of Technology (Social Science Edition), 2007 (3): 78-81.

[13]Cai Yaqin, Feng Xiaoning. Study on the Intervention Mechanism of Adolescent Group Events. Journal of South China University of Technology (Social Science Edition), 2008 (3): 67-70.

[14]Zeng Runxi. Research on the Working Mechanism of Internet Public Opinion Control. Library and Information Service, 2009 (18): 79-82.

Research on Cooperative Education in Application-oriented University: Example of the Mechanical Design, Manufacturing and Automation

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Abstract: With the deepening of teaching reform, the education of Local Application-oriented Universities has been breaking through the existing teaching mode, opening up and innovating, and cultivating comprehensive professional talents to meet the needs of regional enterprises. Taking Shaoyang University and Shaodong Institute of intelligent manufacturing technology as an example, the cooperative education of Local Application-oriented Universities is studied. The purpose of this paper is to describe the experience and lessons learned from implementing the cooperative education option in college of mechanical and energy engineering, Shaoyang university. The objectives are to analyze the impact of the cooperative training on the performance of the students and study the role of the cooperative education in enhancing the achievement of student learning outcomes. The results shown the students who choose the cooperative education have higher cumulative grade point average and show better achievement of program outcomes.
Keywords: Cooperative education; Enterprises classroom; School-enterprise Collaborative

1. INTRODUCTION

Cooperative education combines classroom instructions with engineering practice experience in corporations [1]. Its main objective is to provide an environment for applied problem solving to allow students apply their engineering theoretical knowledge [2]. It seems that the first cooperative education program was founded in 1906 by Herman Schneider [3]. Cooperative education became part of applied higher education in recent years. The aims of cooperative education is described as providing students with the opportunity to integrate the knowledge and skills [4]. This educational model could touted the benefits it provides the students, such as work experience, practical skills, employability skills, communication was proposed, it specialty which cultivate talents faces new opportunity and challenge [5]. Through the school enterprise joint classroom teaching, students' engineering practice ability can make great progress and development, and can effectively promote the development of students' potential [6].

In cooperative education, the students are placed in engineering practice application background and required to analyze, optimize and make decisions, negotiate their different roles as students and workers, develop relationships with coworkers and business leaders, take on responsibilities and work as members of teams [7]. School enterprise cooperation teaching provides them with engineering practice opportunities, expands the application ability of students' theoretical knowledge in engineering practice, and enables students to smoothly transition from university to work [8].

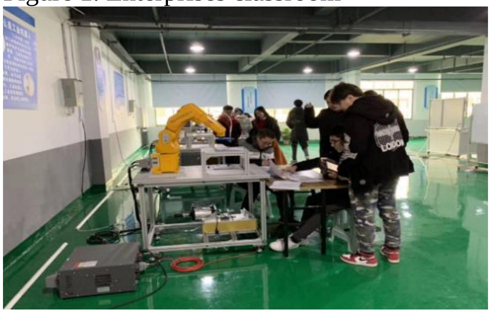
The research object of this study is the cooperation between the school of mechanical and energy engineering of Shaoyang University and Shaodong Institute of intelligent manufacturing technology, analyzed the influence of school enterprise cooperation on students' engineering practice ability, and studies the influence of cooperative teaching on improving students' comprehensive ability.

2. RESEARCH BACKGROUND

The school of mechanical and energy engineering of Shaoyang University, guided by the needs of regional manufacturing enterprises, pays attention to the students' professional knowledge, engineering practice and comprehensive competitiveness, integrates the engineering practice teaching system of Shaodong Intelligent Manufacturing Technology Research Institute, adopts the cooperative teaching form of the organic combination of classroom teaching and engineering practice, and trains the application-oriented professional talents in line with the needs of local economic development, as shown in Figure 1.

Shaoyang University and manufacturing enterprises jointly established the Intelligent Manufacturing Technology Research Institute of Shaoyang University, and set up a special class focusing on the improvement of engineering practice ability. School enterprise cooperative education realizes the resource exchange, information sharing and talent sharing between school and enterprise. As shown in Figure 2, students can have more opportunities to participate in engineering practice, and get the guidance of enterprise mentors, forming a diversified application-oriented talent training mode, and promoting the development of students' innovation ability.

Figure 1. Enterprises classroom



(a) Robot engineering practice training

(b) PLC engineering practice training

Figure 2. Engineering practice training

3. METHODOLOGY

This paper studies the related subjects of local applied university, such as school enterprise cooperation and students' learning achievements. A sample survey was conducted among 100 students in the sixth semester of the third year of Shaoyang University. In order to be qualified respondents, they need to complete a year of school enterprise cooperation education. 44 students responded to the sample email, including four women and 40 men.

4. COOPERATIVE EDUCATION

The cooperative education is the combination of theoretical knowledge learning, vocational skills training and practical work experience [9]. The combination of university and enterprise, move the teaching link to the factory workshop. The cooperative education of enterprises classroom not only broaden the students' vision, understand the requirements of the enterprise for theoretical knowledge and practical experience, but also benefit the university, enterprise and students. It is an integrated mode of university enterprise cooperation.

Cooperative education of enterprise classroom is the embodiment of the combination of university and enterprise from form to substance. Based on the actual operation of the project, the actual operation of the project as the core, the curriculum standard system is set according to the requirements, and the teaching is carried out according to the project implementation, so as to realize the resource complementarity of school enterprise cooperation. As we all know, it is very difficult to cultivate a skilled person who can meet the requirements of the enterprise only by relying on the theoretical classroom of the school, which is divorced from the actual needs of the enterprise. Therefore, Joint teaching of university teachers and enterprise engineers is the development trend of the future teaching methods.

4.1 The Course Objectives

The objectives of co-op training course in cooperative education are stated as:

1) Introduce students to the engineering application background and give them a glimpse on what their expecting career looks like.

2) Develop the student ability to formulate and solve real life complex engineering problems.

3) Enhance student skills as teamwork, organization skills, ethics, and critical analysis.

4) Build up the relation between the department and the various industrial fields as well as knowing the needs and expectations of these fields for graduating students.

5) Improve job opportunities for students after graduation.

4.2 The Ability Development Objectives

The co-op training course represents a great method for students to achieve the program outcomes due to its many objectives and course outcomes. The objectives of ability training course in cooperative education are stated as:

1) Ability to apply learned theoretical knowledge and professional skills in the work environment.

2) Ability to identify and formulate mechanical engineering problems.

3) Ability to function on a multi-disciplinary team.

4) Ability to communicate orally and in writing.

5) Ability to gain and develop employability skills.

6) Ability to embrace new learning opportunities and challenges.

7) Ability to use critical/creative thinking in decision making and problem solving.

8) Ability to analyze engineering problems and suggest solutions.

9) Ability to develop criteria to evaluate suggested solutions, and optimization analysis

4.3 Engineering Capability Objectives

Upon successful completion of the cooperative education program, graduates will have:

1) An ability to apply knowledge of mathematics, science, and engineering.
2) An ability to design and conduct experiments, as well as to analyze and interpret data.
3) An ability to design and improve integrated systems of people, materials, information, facilities, and technology.
4) An ability to function as a member of a multi-disciplinary team.
5) An ability to identify, formulate, and solve mechanical engineering & management problems.
6) An understanding to professional and ethical responsibility of engineering needs.
7) An ability to communicate effectively.
8) An understanding of the impact of engineering solutions in a global and societal context.
9) An ability to engage in life-long learning.
10) An ability to use the techniques, skills and modern tools.

5. RESULTS AND DISCUSSION

The collected data about the senior and graduated students from the Shaoyang university are analyzed and presented in this section. Until May 2019, there were 45 students who finished the cooperative education which completed by Shaoyang university and Shaodong intelligent manufacturing technology research institute.

To show the academic achievements of students who choose either the cumulative academic record average are analyzed. The co-op option students' cumulative grade point average out of 85. The results show that the average for the co-op students is higher than the rest of the students. This is due to the extra benefits of interacting with the real industrial practice for full semester.

From the start of the cooperative education, it was planned to enhance the experience for the students by giving them the option to take part in the co-op in engineering practice application. The engineering students take part in the co-op in engineering practice option to enhance their communication and team work skills to easily relate the theoretical knowledge with practical applications.

Cooperative education gives the students the opportunity to explore their future career and helps them in establishing an important connection between theory and application, academic environment and real-world practice. The students improve their communication, ability to work on teams, critical thinking, and decision making skills. Moreover, they learn about the ethics and disciplines at the work place.

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REFERENCES

[1]Yang M. Evaluating collaborative innovation ability of school-enterprise cooperation. Open Journal of Business and Management, 2015, 3(01): 75.

[2]Zhao Z, Luo Z, Gu D. Innovative Models of More Interactive Cooperation of VET Schools and Enterprise in China//The Architecture of Innovative Apprenticeship. Springer, Dordrecht, 2013, (3): 193-205.

[3]Lin Chao, Santiago F. Elena. Nonlinear trade-offs allow the cooperation game to evolve from Prisoner's Dilemma to Snowdrift. Proceedings of the Royal Society B: Biological Sciences, 2017, 284(1854): 228-232.

[4]Matthew Embrey, Guillaume, Sevgi Yuksel. Cooperation in the Finitely Repeated Prisoner's Dilemma. Quarterly Journal of Economics, 2018, 133(1): 509-551.

[5]Lenka Fiala, Sigrid Suetens. Transparency and cooperation in repeated dilemma games: a meta study, 2017, 20(4): 755-771.

[6]LiHong Li, Gang Liu. Research on the Cooperative Training Mechanism of Full-time Professional Degree Graduate with Double Tutors. Academic Degrees Graduate Education, 2018, (34): 38–41.

[7]W. Zhu and D. Bai, "Analysis on the Current Situation of Patent Cooperation Between School and Enterprise," 2019 International Conference on Economic Management and Model Engineering (ICEMME), Malacca, Malaysia, 2019, (1): 8-11.

[8]Bing, Luo, et al. Discussion on Construction of Training Practice Base of School Enterprise Cooperation. China Modern Educational Equipment 2018, (15): 1-7.

[9]Pan R. Research on Depth Cooperative Educational Mechanism and Appraisal System for Industry-University-Research of Outstanding Engineer Cultivation in Characteristic Application-Oriented Undergraduate Universities. Advanced Materials Research, 2014, (256): 3032-3036.

School-enterprise Collaborative Construction of IoT Engineering Major from the Perspective of New Engineering Disciplines

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Abstract: It is well-known that the Internet of Things (IoT) engineering is a major of the construction of new engineering disciplines. The new engineering disciplines in China has put forward new requirements for specialty construction of universities. Because of contradiction of interests, the profession participation enthusiasm is not high. In this paper, we propose a scheme of school-enterprise collaborative for the construction of IoT engineering major. The article analyzes the causes, and presents relevant views for school-enterprise cooperation, which is the effective way of developing new engineering disciplines and training applied-type skilled talents. Finally, the paper makes a study of the practice of cultivating IoT talent in university by cooperating with enterprises, points out exiting problems and puts forward the countermeasure and advice. After analyzing the current situation of IoT major teaching in the school, the proposed scheme is effective and feasible.
Keywords: IoT engineering; New engineering disciplines; School-enterprise Collaborative

1. INTRODUCTION

On February 18, 2017, the Ministry of Education held a seminar on the strategy for the development of engineering education at Fudan University. This is a milestone in the construction of new engineering disciplines [1]. Through more than three year of construction, remarkable results have been achieved. The ministry of education not only approved new engineering disciplines major such as big data, artificial intelligence, cyberspace security, etc., but also provided a new way for the construction of traditional engineering disciplines through the program of industry-university cooperation and collaborative.

The specialty of IoT is one of the emerging specialties in the new engineering discipline. At present, technologies such as big data and artificial intelligence are developing rapidly. In order to meet the urgent needs of emerging industries and new economies in the future, it is necessary to cultivate a group of high-quality talents of new engineering disciplines with strong practical ability, innovative ability and international competitiveness. In 2011, 30 universities, including Central South University and Beijing University of Posts and Telecommunications, opened the IoT engineering major firstly. The IoT engineering specialty is an interdisciplinary subject that involves computer, communication technology, electronic technology and other aspects. It is no doubt the era of the IoT has arrived. New requirements have been set for the construction of new engineering disciplines for the IoT engineering specialty due to the development of 5G and other technologies [2].

This paper mainly focuses on the construction of IoT engineering specialty under the background of new engineering disciplines. We explore the existing problems and difficulties in the training of talents of IoT engineering specialty firstly. Through the collaborative construction of schools and enterprises, a feasible education mode for the construction and talent training of new engineering disciplines is constructed. It has practical significance for the construction and development of new engineering disciplines.

2. RELATED WORK

School-enterprise cooperation is a cooperation model established between schools and enterprises. It aims at cultivating talents for enterprises. It is a talent training model that focuses on school learning, enterprise practice, and information resources sharing. Finally, a win-win-win situation between schools, enterprises and students would be achieved.

Abroad, the United States, Britain, Germany and other countries have accumulated good experience in the school-enterprise cooperation talent training model, for example, the German dual production-education integration talent training model, the British sandwich production-education integration talent training model, and the US CBE production-education integration talent training model. These research and practical results provide a good reference for the cultivation of new engineering discipline in China [3].

In china, the Ministry of Education has explicitly proposed a talent training model for the integration of production and education on the basis of school-enterprise cooperation. It has pointed out the direction for local universities to transition to application-oriented [4]. In 2012, the IoT engineering specialty was approved in Shaoyang university, and the first freshman was recruited in September 2013. In the past three years the number of graduates is over 180, many students have become backbones and achieved good results. Since the training of new engineering disciplines talents was proposed in 2017, IoT specialty which cultivate talents faces new opportunity and challenge.

In the school-enterprise cooperation, the reconstruction of talent training goals, curriculum systems, and practical teaching staff was discussed [5]. Ref. [6] investigated the mechanism for training talents for school-enterprise cooperation in the field of IoT engineering. Through the implementation of the mechanism, it achieved multi-level resource and benefit sharing. A training model of applied talents for IoT engineering based on multiple collaborations was proposed [7]. The related laboratory was established and the quality of talent training was improved. Ref. [8] proposed some measures such as integrating internal and external resources of the school and establishing a professional teaching platform, and explored a collaborative education mechanism from the aspects of organizational guarantee, interest guarantee, management guarantee, system guarantee, and experience guarantee. Besides, the training mode for the integration of production and education in application-oriented universities was studied [9]. These research results also provided a good reference for the research and reform of the collaborative construction of school-enterprise of IoT engineering specialty.

Given the above, the research on the school-enterprise collaborative construction for the IoT engineering specialty was not enough, especially under the current new engineering disciplines background. Related works mainly focused on the following aspects:

(1) The interdisciplinary problems of the IoT engineering specialty.

(2) The professional curriculum system does not have the characteristics of school-enterprise collaboration.

(3) The innovative practical ability training model for new engineering disciplines has not yet been formed, and there is a shortage of applied IoT talents that meet the development needs of regional characteristic industries.

3. PROPOSED SCHEME

In this section, we discuss the construction of IoT engineering specialty under the background of new engineering discipline. We also explore in-depth discussions on the school-enterprise collaborative.

3.1 Specialty Building on the Basis of Industry Demand

Since the concept of IoT was proposed, the academics and industry paid more attention to it. Especially, from the IBM smarter planet and the experience China, various countries have formulated the development plan of the IoT. IoT has been listed as one of the five strategic emerging industries in China since the experience China was proposed in August 2009. IoT has become a major strategy for the country to seize a new round of the commanding heights of the economy. Therefore, the technology of IoT has brought about a new industrial revolution and promoted the development of cloud computing, big data and artificial intelligence. China has trained more than 50,000 senior talents who have good technological and industrial foundation. The talents have greatly relaxed the pressing needs of the country and played an important role in the industrial development.

3.2 The Reform of Teaching Contents

With the development of IoT, some new technology and innovation should be applied to the profession teaching. Through the teaching content, a curriculum system and teaching materials that meet the needs industry development and integrate industrial technology is created. The construction method of the knowledge system and teaching content of the IoT engineering specialty is a typical example of the new engineering discipline.

Firstly, research on the strategic development of IoT engineering specialty is carried out in depth around the technologies such as perception, identification, positioning, control, transmission, processing, and decision making according to the development needs of the IoT industry. It defines professional connotation and extension from four dimensions of time, space, technology and application, and condenses professional theory and technology from four levels of perception, transmission, processing and application.

Secondly, based on the profession characteristics such as industry orientation and disciplinary intersection, the knowledge of system can be designed. In the aspect of knowledge capability, multi-interdisciplinary can also widen the vision of students, and make them master more rules and methods. Moreover, a practice teaching scheme including curriculum experiment, comprehensive design, graduation design and subject competitions is established. For each experiments of core course, we design a series of methods including basic cognition, application cognition, basic theories, application technologies, and comprehensive practice according the rules to master knowledge.

Thirdly, the construction of teaching materials is an important foundation. Based on the integration and innovation of computer, communications, control and other multi-disciplinary knowledge, professional courses including basic courses and core courses have been designed. Combined with the latest achievements of industrial technology development, the core curriculum content of the IoT engineering specialty has been constructed. According to the different needs, it is very important to summarize the characteristics and publish materials. According to the actual condition of the current institution of higher learning, the specific suggestions for courses are as follows.

(1) Set up the course of IoT principle and technology. It is composed of the following four courses: Introduction to the IoT, IoT Communication Technology, RFID Principle and Application, and Sensor Principle and Applications.

(2) Set up the course of IoT Intelligent Control. It is composed of the following courses: Artificial Intelligent and Intelligent Computing.

(3) Set up the course of Clouding Computing and Big Data. It is composed of the following courses: IoT Data Storage and IoT Data Management.

3.3 Set Up Steady Practice Base

Through cooperation with enterprises, we have established the stable practice bases outside the school to facilitate the practical teaching. For the construction of IoT engineering specialty, school-enterprise cooperation is a joint personnel training model of college and corporate. From 2013, our school has cooperated with enterprises, such as Guangzhou Yueqian and Tarena. More than 10 long-term off-campus bases have provided with students with opportunities to have direct access to work experience and comprehensive abilities. Under the framework of school-enterprise cooperation, a sustainable development of teaching mechanism is established.

On the other hand, the students are also actively involved in competitions organized by the government and industry. The competitions can further the learning process. At the same time, the schools and students put in more effort into meaning learning. IoT competition, as an important part of teaching practice, is a good way to develop the ability of practicing, innovating and engineering. Consequently, IoT contest has become the carrier of teaching reform to a certain extent, promoting effectively universities education teaching reform from various aspects.

4. THE IMPLEMENTATION PROCESS

4.1 Research on Project Investigation and Detailed Implementation Programs

The members of our team hold an investigation on the construction of IoT engineering major based on school-enterprise collaborative. The second step is literature review, which classify and filter the methods of the construction of new engineering discipline. Starting from understanding the internal employees' demands, the current status of IoT engineering talent training are found. That is, it is more important to learn about the requirements for IoT engineering graduates. Also, it is necessary to study the mismatch between the supply side of the IoT talent training and the demand of the IoT industry. It becomes important to integrate industry concepts, technologies, and resources into the training system of university. Finally, we deeply integrate the improvement of school curriculum quality with the occupation ability of enterprises, and finally explore a win-win construction plan for school-industry collaboration.

4.2 Plan Demonstration

Through the preliminary investigation and the study of the school-enterprise collaborative scheme, a new model of talent training which is suitable for the application-oriented university is proposed. Relevant experts are required to analyze and demonstrate the scheme, and strive to solve the problem of low enthusiasm for enterprise-school cooperation. Because the students are difficult to involved in the field of application development of enterprises. The school-enterprise collaborative construction plan is presented for further improvement and optimization from the two dimensions of cooperation depth and breadth. Through practice, a mechanism for platform co-construction, talent sharing, mutual resource assistance, collaborative innovation, and benefit sharing was formed.

4.3 The Implementation Paths

The school and enterprise can jointly build a professional curriculum system and construct the practical base of IoT. On one hand, enterprises recruiting such graduates will receive employment policy support from the government. On the other hand, good teaching and research achievements are of great significance to the conversion of scientific achievements to productive forces. By sharing and optimizing the allocation of industry-academia resources, we can completely solve the low enthusiasm of the enterprise and effectively solve the relevant talent needs of the enterprise.

(1) The two sides are working together to build a specialized course system. Through face to face communication and questionnaire, the first-hand information such as business needs can be obtained. The IoT courses teaching should be adjusted and innovated from course content, course setup, teaching methods and practice teaching. In order to keep pace with times and meet the challenge of the emerging techniques, the IoT engineering major in Shaoyang University has carried out a series reforms in these years. Some useful experiences are obtained during the procedures of school-enterprise collaborative construction.

(2) The dual functional teachers' construction. It is no doubt that the professional ability of teachers has a profound effect on the talent development scheme. Meanwhile, development of college is surely attached to talents. For local colleges and enterprises, the construction of dual functional can provide services for teaching and creating. On one hand, the school recruits excellent teaching professionals who come from IoT enterprises. It can embrace rich contents, impart wide knowledge and skills. On the other hand, some teaching staff who has a stronger specialized quality are arranged to exercise the capacity of theory with practice.

(3) Construction of practice bases. In practice teaching, it is very important that more practical bases of IoT outside of the engineering colleges should be strengthened. That is, combining the practice basis inside the school and outside is the best way for a majority of universities. In fact, it is the requirement of the new engineering discipline.

5. CONCLUSION

This paper mainly evaluates and analyzes the collaborative innovation ability of school-enterprise cooperation through the construction of IoT engineering major form the perspective of new engineering discipline. First, we describe the research background and relevant literature review. After analyzing the current situation, we also describe the necessity of the task. And then, we study the necessity of the construction of new engineering discipline and construct the scheme of school-enterprise collaborative of IoT engineering. Finally, the concrete implementation process is discussed. Some suggestions and concrete measures about teaching reform of IoT engineering major, which included the content of course, teaching method and experiment teaching are proposed in this paper. Through the development of new technologies and the reform of training qualified persons in IoT engineering major, the proposed scheme can provide the basis for better development and industrial application of IoT. The paper makes a study of the practice of cultivating IoT talent in university by cooperating with enterprise, points out its exiting problems. Therefore, School-enterprise cooperation under the background of new engineering disciplines is to train personnel in a more effective model and the decisive factor for the characteristics of IoT major in undergraduate institutions.

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REFERENCES

[1]Fudan consensus of the construction of new engineering disciplines. [EB/OL] http://www.jwc.fudan.edu.cn/b8/66/c9395a112742/page.htm

[2]Ke-rui Yang. Integration of production and education: problems, Polices and strategic paths. Heilongjiang Research on Higher Education, 2018, 5: 35-38.

[3]Shuchao Ma, Wenfu Guo. Experiences, problems and countermeasures in deepening industry-university of technical and vocational higher education. China Higher Education Research, 2018, 4: 58-62

[4]Li L, Qi J. The feasibility and prospect of university education reform based on the integration of education and industry. International Conference on Computer Science & Education, China, 2017:123-126.

[5]Xiaolin Gui, Dong Wang, Chuanhe Wang and Yuxi Fu. The construction of IoT engineering major based on the new engineering disciplines. China University Teaching, 2018, 7: 25-31.

[6]Xu Huang, Yunliang Jiang, Yonggen Gu. Practice and exploration of multi-disciplinary integration in the construction of Internet of Things engineering. Research in Higher Education of Engineering, 2016, 2: 86-90.

[7]Xiaoyan Gu. Exploration on cultivation of talents of IoT merged with innovation by college-enterprise collaboration. Vocational and Technical Education, 2016, 29: 20-23.

[8]Ying-wen Chen, Ping Zhong, De-ming Pang. Capability-oriented education for the Internet of Things engineering majors. Computer Engineering & Science, 2018, 40(S1): 128-131.

[9]Hao Long, Yuan, Li. Construction of the practical teaching system for Internet of Things in application-oriented university. Research and exploration in laboratory, 2014, 33(5): 160-162.

The Application of Sports Games in PE Teaching of Private Colleges and Universities

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Abstract: This paper analyzes the classification of sports games, the specific characteristics of sports games, and the role of sports games in sports teaching activities, and concludes that sports games have very important entertainment, fitness and education functions in sports teaching. In the process of teaching, PE teachers should scientifically adopt targeted game content and activity form according to each link of teaching activities to stimulate students' interest in participating in sports activities, so that students can grow healthily and healthily in rich and colorful sports games.
Keywords: Sports game; private college; sports teaching

1. INTRODUCTION

With the development of society, the concepts of "lifelong learning" and "health first" have been widely recognized. In particular, the proposal that "without universal health, there will be no comprehensive well-off" [1]. People's health is put in the strategic position of priority development, "healthy China" has become a national strategy. In recent years, with the proliferation of mobile games and computer games, many college students are far away from the playground and indulge in the virtual world, resulting in the general decline of the health level of private college students. This situation is highly valued by the education sector. How to attract students to take part in physical exercises in private colleges and universities? If students are far away from computers and mobile phones, they can take part in physical education classes and master one or two sports skills during their time in Colleges and universities, which has become a constant problem for the physical education workers in Private Colleges and universities. In this case, the use of sports games in the process of PE Teaching in private colleges and universities has attracted more and more attention of PE educators in private colleges and universities. Sports game is a kind of physical exercise, which has the characteristics of entertainment and science. It plays an increasingly important role in stimulating students' interest in sports, activating the teaching atmosphere of sports class, and improving students' enthusiasm in sports.

2. OVERVIEW OF SPORTS GAME TEACHING

Sports game teaching is a kind of teaching method that integrates the popular games into the process of sports teaching practice and realizes the purpose of sports teaching. Sports game itself is interesting, targeted and scientific. Sports game teaching makes students easy to accept, and makes sports teaching objectives easier to achieve. By actively participating in well-designed and organized sports games, students can master the skills and methods of physical exercise, enhance their physical quality, cultivate the ability of unity and cooperation, and improve their comprehensive practical ability.

3. CLASSIFICATION OF SPORTS GAMES

As an effective auxiliary means of physical education, there are many kinds of sports games in specific content and organizational form. According to the function of developing physical quality, sports games can be divided into strength class, bounce class, speed class, endurance class, etc. According to the classification of activities, sports games can be divided into football, basketball, volleyball, track and field, etc. Through the classification of sports games, teachers can use them flexibly according to the characteristics of sports games combined with the actual teaching content [2].

4. CHARACTERISTICS OF SPORTS GAMES

4.1 Sports Games are Interesting

Facing the huge pressure of study and employment, the private college students actively participate in the sports games, which can effectively alleviate their tiredness in the high tension of study. In sports games, students can not only enhance their physical fitness, but also entertain their body and mind and cultivate their temperament.

4.2 Sports Games are Targeted

The sports game is set by the teacher for the teaching content of the physical education class, and its activity content is rich and colorful. Teachers can adjust the content of sports games according to different students' physical conditions and learning ability. Sports games are mainly aimed at stimulating students' interest in sports and activating the classroom atmosphere. Such as in volleyball class to consolidate the position of the practice. If the students are allowed to play the fixed ball all the time, they will get tired of it. However, in the process of teaching, sports games such as "catching pigs" can be carried out aiming at the practice of consolidating the cushion part, which can improve the enthusiasm of students to participate in the practice of consolidating the cushion part.

4.3 Sports Games are Scientific

The purpose of sports games is to exercise students' body. The design of sports games by teachers should follow the principle of step by step. When designing the content of sports games, teachers should take the individual differences of students into full consideration, which can better reflect the scientific nature of sports games, and at the same time improve students' interest in participating in games.

5. THE ROLE OF SPORTS GAMES

Sports game is a kind of physical activity which can stimulate the participants' interest by means of physical exercise, so it has the characteristics of sports having a positive effect on the body. The key functions of sports games on teaching activities are as follows:

5.1 Entertainment Function

Because sports games are usually carried out in a collective way, students can complete the game tasks in a relaxed and pleasant environment, which is conducive to the establishment of harmonious relations. Meanwhile, the practice of games is novel, thrilling and intense. Students can get a sense of fulfillment and achievement, which can make students put off the pressure and worries in their study and life.

5.2 Fitness Function

Sports games have certain sports intensity and activity times, which is helpful for students to learn and master sports skills, and to strengthen students' physique, so it has the fitness function of other sports activities.

5.3 Educational Function

Sports games are carried out under specific rules of the game. Through sports games, participants can be trained to consciously abide by the rules of the game. At the same time, sports games are usually carried out in a collective form. Only when participants cooperate with each other and help each other, can they successfully complete the game. In the process of playing games, students can not only exercise, but also cultivate the spirit of collectivism. For example, in the game of "trawling", it is required to catch every "fish" under the rule that "fish net" cannot be broken. This requires students to unite to complete the task of "fishing".

6. THE APPLICATION OF SPORTS GAMES IN PE TEACHING OF PRIVATE COLLEGES AND UNIVERSITIES

6.1 The Application of Sports Games in the Preparation of PE Teaching in Private Colleges and Universities

In the preparation part of physical education teaching, teachers usually use the mode of letting students jog around the playground for several times and then do the preparatory exercises. This method can achieve the effect of preparatory activities, but long-term use of this method will lead to students' boredom. The introduction of targeted sports games in the preparatory activities of physical education can quickly improve the participation of students and achieve the goal of getting hotter. At the beginning of the preparatory activities, the games that can quickly concentrate the students' attention and have low intensity of exercise, such as the game of step before and after counter command, should be selected. The middle part of the preparation activity is suitable for the games with higher excitability and sports intensity. At the end of the preparatory activities, special games are selected, such as volleyball mat games. This will help students to enter the basic part of learning in a happy atmosphere.

6.2 The Application of Sports Games in the Teaching of Basic Skills in Private Colleges and Universities

In the process of teaching basic skills in physical education, there will be some actions that are more painstaking. These actions need to be repeated many times, rather than once or twice. The process of the formation of this movement skill is easy to make the students feel boring and uninteresting, which makes it difficult for them to concentrate, and the autonomy of many students' learning is reduced, the effect of classroom learning is obviously reduced, and it is difficult to achieve the pre-set goal at last. At this time, if some sports game activities are inserted, it is very beneficial for students to master movement skills. At the same time, it reduces students' fear or aversion to difficult movements to some extent, and increases more students' autonomy and participation in learning. They always want to try new movements. Under the careful guidance of teachers, most students can move in faster State, so that the skills learned are easy to accept. For example, when learning the skill of one hand over shoulder shooting, some students will be tired of this skill. At this time, we can practice the skill of one hand over shoulder shooting through "Bunker blasting game", and guide the students to experience more joy of learning the skill of one hand over shoulder shooting.

When learning basketball passing technology, if students have been boring to practice passing by two people, some students will also get bored. At this time, we can carry out the game of "two passes and one snatch": add the catcher between the two passing players, and let them quickly move to catch the outgoing ball, so that students can not only master the hidden passing technology, but also improve the speed of passing and receiving the ball.

6.3 The application of Sports Games in the End of PE Teaching in Private Colleges and Universities

The end of the game usually uses soothing content. In this way, the students' body and mind can be relaxed, so as to eliminate sports fatigue and complete the learning of a class.

7. CONCLUSIONS AND SUGGESTIONS

7.1 Conclusion

The combination of sports games and the original sports teaching methods can help students master the technical actions and use the technology better, and the significant improvement of physical quality is more prominent.

7.2 Proposal

7.2.1 Sports games should be consistent with classroom learning content

When teachers design sports games, the designed games must be consistent with the teaching content, so that students can be introduced into the learning content, and students can experience the fun of sports in the process of learning.

7.2.2 Teachers should constantly update sports games

Students in private colleges are more likely to be interested in new things. If a game is repeatedly used in the teaching of physical education, students will feel monotonous and boring, and students' interest will decline significantly. Therefore, teachers should continue to break through in the design of sports games.

6.2.3 Love every student

Teachers should pay attention to the reaction of the students with weak physique, actively encourage them to participate in physical exercises, and create a harmonious classroom atmosphere.

REFERENCES

[1]Portrayed the beautiful blueprint for healthy China - a speech by general secretary Xi Jinping at the national health and health conference. http://www.xinhuanet.com/politics/2016-08/21/c_129244493.htm

[2]Liu Fulin. Sports games. Beijing: Beijing Sport University Press, 2009

The application of movement skill transfer in Aerobics Teaching

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Abstract: as we all know, all things have the phenomenon of migration and the law of migration, which is also applicable in the field of education. Of course, physical education is also an important subject, which also involves the transfer of sports skills. Generally speaking, the transfer of sports skills is easy to be ignored by teachers and students. In most sports teaching and training processes, the transfer of sports skills is closely related to the effectiveness of teaching and training. Therefore, taking aerobics as an example, this paper introduces the basic definition of sports skills transfer and the basic characteristics of aerobics, and analyzes the role of sports skills transfer in improving the effectiveness of Aerobics physical education. This is conducive to the correct use of sports skills transfer rules, so as to further improve the quality of physical education.
Keywords: sports skills; migration; aerobics; Physical Education

1. BASIC DEFINITION OF MOTOR SKILL TRANSFER

In general aerobics teaching, there may be some mutual influence phenomenon between new sports and old sports. Specifically, some students have mastered some sports skills before, but they are influenced to a certain extent by the old sports in the past when they study new sports. Of course, in the study of these new Aerobics movements, it is also natural to consolidate and improve the original movements. In the practice of aerobics, there may be a variety of movements that interact with each other. We call this problem movement skill transfer.

Generally speaking, the transfer of motor skills has two aspects of influence, that is, it has a positive impact, but also has a negative impact. According to this point, it can be divided into positive transfer and negative transfer. In fact, the positive transfer is that the movement of Aerobics mastered by the students before is conducive to the follow-up new aerobics movement learning, that is, to play the beneficial role of the previous movement, while the new movement also further consolidates the original movement. In fact, the negative transfer is a restrictive effect, that is to say, some of the previous Aerobics movements hinder the learning of new movements and have a negative impact on the mastery of new movements, while some of the new Aerobics movements also affect the actions that have been learned before, so that the movements before and after form interference with each other. Therefore, in the process of aerobics teaching, physical education teachers must actively play the role of positive movement, try to limit the emergence of negative movement, so as to help students accurately master the new movement of aerobics.

2. AN ANALYSIS OF THE REASONS FOR THE MOVEMENT TRANSFER OF AEROBICS

Generally speaking, there are many reasons for the movement transfer of aerobics, which can be divided into two types: the first one is related to people's physical function, especially with the nervous system, which has a very close relationship, and the structure of the nervous system can directly affect the movement transfer effect of aerobics. For human physiological function, the structure of cerebral cortex and nerve fiber greatly promotes the movement of aerobics. In general, some action stimulation of aerobics can stimulate people's cerebral cortex to produce excitation or inhibition phenomenon. At the same time, this stimulation will spread to other locations around besides the initial location, and then promote other locations to produce certain excitation or inhibition. Therefore, the previous Aerobics movements have a certain impact on the production of new Aerobics movements.

On the other hand, the structure of aerobics movement also has a certain impact on the movement. We all know that many Aerobics movements have some similar or similar movement structures, there are some similar common factors, and aerobics practitioners also have similar movement position requirements, only in some movement details are different. Although aerobics students have learned the previous Aerobics movements, they have some reserves in Aerobics movements, but when they carry out new movement exercises, because of the similar stimulation of the two movements, at the same time, they cause very similar movement responses, which has a certain positive impact on learning some new movements. [1]

3. THE SIGNIFICANCE OF CALISTHENICS TEACHING AND THE PROBLEMS IN CURRENT TEACHING

With the continuous development of the current society, science and technology has also changed people's lives. Most people are in a fast-paced and efficient daily life with high pressure. Many people have physical and mental fatigue, and even some people are in a sub-health state of near collapse. Therefore, how to ensure their physical and mental health has become the life goal of more and more people. Under the influence of this reality, different types of fitness sports quickly enter people's daily life, among which aerobics is one of the choices of modern people. The existence of aerobics can actively play its fitness function. For aerobics, its system composition is relatively numerous, which involves the movement and there are typical diversity, the form of sports has the characteristics of fast and slow combination and dynamic and static combination, so it is suitable for people of different ages and different physical conditions. Anyone can find out the suitable Aerobics from aerobics, so that people can achieve the effect of physical and mental health with the help of Aerobics practice.

3.1 The teaching atmosphere of aerobics is poor

Teaching atmosphere refers to a dominant emotion expressed by students in teaching, including mood, emotion, interpersonal relationship, reaction to environment, etc. Students' interest in learning, enthusiasm, emotional experience and learning attention will fluctuate greatly in the teaching atmosphere. In some areas, the level of physical education teachers is low. Originally, this boring aerobics is difficult to arouse students' interest, which makes students lack of enthusiasm for Aerobics learning. In addition, teachers' improper teaching methods make students dislike aerobics courses more, which will not only not stimulate students' enthusiasm for learning aerobics, but also increase students' inertia and appear weariness of learning. In addition, many aerobics teachers ignore the specific characteristics of students and do not design Aerobics from a diversified perspective. Some aerobics teachers may have some mechanized aerobics teaching actions, which will directly lead to lower teaching efficiency. In view of these phenomena, aerobics teachers should seek a good teaching atmosphere, which can arouse students' interest in aerobics. Through some practical teaching experience, it has been proved that full action interpretation in the teaching process of Aerobics plays a very important role for students, which can stimulate their enthusiasm for learning aerobics and enhance their desire for aerobics.[4]

3.2 Students lack interest in aerobics teaching content

With the rapid development of society, aerobics is one of the most important courses for students' health, which is of great significance for the future work and life health. Therefore, the main problem of aerobics teaching is to improve the students' interest and enthusiasm for Aerobics learning and cultivate their physical quality. In the traditional Aerobics Teaching in the past, aerobics teachers often take a serious attitude of teaching, so that students only blindly imitate the teaching action of teachers, less interaction with teachers, so it is easy to get tired of Aerobics learning. If this situation can not be solved in time, teachers can not stimulate students' interest in aerobics, students' interest in learning can not be stimulated. Therefore, only by strengthening the interest teaching of aerobics, can we provide a happy learning atmosphere for students and stimulate their learning autonomy, which is of great significance to enhance the learning of aerobics.[3]

4. MEASURES TO PROMOTE THE EFFECT OF SPORTS TRANSFER IN AEROBICS TEACHING

Active use of the law of movement transfer in learning some new movements of aerobics, we should pay attention to be good at using the current knowledge system we have mastered, but also need to understand their own body functions. In fact, when learning the movements of new aerobics, as a teacher, we should first guide students to master the contents of the movements before analysis. Then learn to analyze the new action content to be learned, combine with their own characteristics to carry out selective learning, and finally confirm whether they need to master this new action skill. Therefore, when students choose the learning action of aerobics, their cerebral cortex can carefully analyze and grasp their previous sports content and the aerobics action they want to learn at present. If after certain analysis, it is confirmed that the new aerobics movement is basically similar to the previous movements, that is, the movement mode of the two is basically the same, then the cerebral cortex can automatically extract the learned movements, so as to help students better master the new aerobics movement method. In the teaching process of aerobics, this kind of good habit can help students and teachers to speed up the teaching progress, but also can improve students' learning efficiency.[2]

5. CONCLUSION

In the pre social situation, it is an inevitable trend to use sports transfer to carry out aerobics teaching, which is the product of the development of the times. Therefore, we need to learn from the advanced movement to carry out aerobics teaching, aerobics is a more interactive sports activities, through exercise can effectively develop people's Sports Aerobics action, increase interest in sports aerobics. As long as we carefully study and refine various laws, and then use sports transfer to carry out aerobics teaching, we can easily increase the transfer of students' knowledge in aerobics teaching.

REFERENCES

[1]Liu Yimin. Sports behavior. Beijing: People's Sports Publishing House, 1993.
[2]Wang Ruiyuan. Sports physiology. Beijing: People's Sports Publishing House, 2002.
[3]Che Wenbo. Sports psychology. Changchun: Jilin Education Publishing House, 1990.
[4]Tang Yuexiang. On the teaching method of sports movement transfer. Journal of Longyan Teachers College, 2002,20 (3): 61-64.

Study on the Legal Problems of Rural Soil Pollution

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Abstract: Rural soil pollution has become the focus of sustainable development in China. For the negative impact of rural soil pollution on agricultural production and development, on the basis of data analysis, taking the maximization of social benefits as the foothold, affirming the legal status of the public and environmental non-governmental organizations, thus forming a multi-directional supervision mechanism, clear and strict liability principle, so as to better determine the responsibility in the judicial decision, from a sound legal perspective, to rural soil pollution prevention and control of new solutions.
Keywords: rural areas; soil pollution; responsibility; supervision mechanism

1. INTRODUCTION

Meditating on the global village of the 21st century, pollution seems to be the topic that people talk about after meals. In view of this, this paper only analyzes the problems of rural soil pollution in China from a small perspective of rural soil pollution and puts forward corresponding countermeasures.

2. General Analysis of Soil Pollution in Rural Areas

China is a country with a population of more than 2/3 of the country undefineds population. Contamination of soil is bound to affect the quantity and zhi'z of agricultural products. The report of a team of Chinese agricultural scientists, Zhang Weili the "The soil in China has occupied 1/5 of the cultivated area, pollutants such as chemical fertilizers, pesticides, domestic waste and livestock and poultry manure will not only cause soil pollution, but also cause agricultural non-point source pollution".

The further reflection on the soil pollution in our country, the pollution to the rural soil in our country is mainly from the four kinds of actions of human beings. First: agricultural pollution. The main "The perpetrator" of soil pollution in rural areas is the non-local use of pesticides, such as herbicides, chemical fertilizers and agricultural films [1]. In 99% of the "rational economic thinking" of agricultural farming, the low-cost pesticides, fertilizers and plastic films they choose are likely to produce high yields, high incomes, and economic returns based on their own maximization of benefits. But if it is to think of this problem from the angle of social integrity and social interest, it seems to be a pessimistic phenomenon of high-cost input and low-efficiency gains, so it is not the least possible resource cost to reach the rational choice of the expected target [2].

Second, pollution from small factories and workshops in rural areas. According to the investigation by relevant departments such as the Ministry of the Environment of China and the General Administration of Agricultural Chemicals, the emission of the total pollution of the township enterprises in 2010 increased by 18.27 times compared with that in 1995. The emission of harmful chemical components such as sulfur dioxide and polycyclic aromatic hydrocarbons in the processing and production of small and medium-sized factories in rural areas will destroy the structure and composition of the soil, even cause salt-type reactions of soil pollution, and affect the balance of agricultural ecosystems [3].

Third, to explore the factors of soil pollution in the rural areas, and the living garbage produced in the rural areas is also the "important criminal" of the soil being polluted. A large number of rural areas have a natural and formed garbage disposal pit. At present, the disposal of rural domestic waste in our country lacks the strict control of legal superstructure, and the consciousness of recycling of grass-roots people is weak, which causes domestic waste to be discarded everywhere and pollute the soil to a certain extent.

And fourthly, the pollution of the breeding industry. The rural population, on the basis of the planting industry, has increasingly developed the breeding industry as the sub-industry for increasing the income, and some rural areas or farmers have made the breeding industry as the main industry. According to the relevant literature, the sodium and potassium salts produced by the annual discharge of the manure in the national industry tend to be higher than that produced by industrial waste, and these excess sodium and potassium are physically and chemically reacted by anti-poly and the like, which can affect the soil gap and clutch, thus destroying the soil structure.

3. ANALYSIS OF THE PROBLEMS EXISTING IN RURAL SOIL POLLUTION

3.1 The Monitoring Mechanism is not Sound

China undefineds new "soil pollution prevention and control law" for the supervision of soil pollution prevention and control of more than a dozen legislative regulations, although these legislative regulations highlight the importance and necessity of supervision, but it seems that too much highlight the status and role of administrative subjects. If we consider this situation from the theoretical logic of law and economics, in the supervision of rural soil pollution prevention and control, it will undoubtedly create a more efficient supervision mechanism by placing the legislative supervision of the masses, NGOs and other non-governmental organizations in the supervision system of rural soil pollution prevention and control. In addition to the power of the public, some non-governmental environmental organizations, in the rural soil pollution prevention and control system should also be inadequate design, the government seems to ignore the important role of non-governmental public organizations in building a bridge for public participation in environmental law enforcement.

3.2 The Content Design is Floating

The Law on the Prevention and Control of Soil Pollution, promulgated and implemented in 2019, has a strong general and strong specification on prevention and protection of soil pollution in rural areas, and lacks the specific measures of operability. In article 25, it was not specifically specified what means and means the Government should take to guarantee the operation of the facility; article 26 did not show how the safety evaluation was programmed. In addition, in the special fund system of the prevention and control of the soil pollution in the rural areas, the legislation also has the problems of large dispersibility, insufficient operability and so on, which will cause the deficiency of the protection mechanism of the legal system of the rural soil pollution control in China to a certain extent. In the design of the law enforcement system of the rural soil pollution, the enforcement and punishment of the law enforcement are weak, which will make the illegal cost of the enterprise lower than the law-abiding cost, thus leading to the final selection of these enterprises to seek greater economic benefits on the basis of the pollution of the rural soil.

3.3 The System of Legal Responsibility Investigation is Not Designed Enough

In the legal system of investigating the responsibility of soil pollution in rural areas, the legal regulation of those responsible for pollution seems to be somewhat light. Because of the potential and slow nature of pollution, the specific responsibility for pollution should be "spent in the end". If there is no clear basis for the identification of the duty bearers of soil pollution, it will lead to the confusion of no one to bear or the degree of responsibility to be prevaricated. In addition, the local finance is seriously dependent on the tax payment of high pollution enterprises, the government has turned a blind eye to the illegal sewage discharge behavior of high pollution enterprises, and the administrative and criminal penalties are not in place. In addition, the grass-roots offices, which have the most close control over the prevention and control of rural soil pollution, often do not set up a regular and specialized organization responsible for the prevention and control of rural soil pollution, which is also a gap in the accountability system of rural soil pollution in China. Therefore, the imperfection of the responsibility investigation organization, the imprecision of the main body of the responsibility burden, and the low illegal cost are the important reasons why the legal responsibility is not in place, which is also a resistance that can not be ignored in the prevention and control of rural land pollution.

4. A NEW SOLUTION TO THE COUNTER MEASURES OF RURAL SOIL POLLUTION

4.1 Perfecting the Supervision Mechanism of Diversification of Soil Pollution Prevention and Control in Rural Areas

Based on the game of "cost-benefit", in order to maximize the efficiency of rural soil pollution prevention and control legislation, the supervision of rural soil pollution should be based on the strength of rural areas, and the supervision of soil can also be carried out from two aspects of prevention and control.

First of all, the legislative setting in the supervision organization of "prevention" and "control" can give certain responsibilities to the rural soil pollution supervision prevention and control group in legislation. Prevention and control groups may be entrusted by the corresponding higher authorities to village autonomous organizations or other village groups, or they may be directly authorized by legislation to organize village collective economic organizations or villages spontaneously. Such as: village environmental protection collective group. Of course, in order to improve the efficiency of soil pollution prevention and control, prevention and control groups should be organized by different groups within the village.

Secondly, it is the design of the supervision mode of "prevention" and "governance". For the supervision of prevention, regular or irregular spot checks can be made on the state mandatory equipment of enterprises stationed in villages and large farms, and convenient reporting offices can be set up within the collective of the village so that the villagers can reflect the problems truthfully and the problems can be solved efficiently by the relevant groups. In the aspect of control, we can learn from the legislative experience of soil pollution remediation and remediation in Japan, such as the direct supervision of village members, the supervision of appraisal and inspection institutions, and so on.

4.2 The Content of the Ledislation Should be Enhanced to be practical

The law of the prevention and control of soil pollution is a legal document for the prevention and control of soil pollution in the whole country. The design of the prevention and control system of soil pollution in the rural areas is not only given to the idea but also to the practical and innovative rural resource environment management mode. Taking the pollution source of the rural soil as the lead, the source control and the specific region analysis of the use of the pesticide and the chemical fertilizer are carried out, and the production standard of the chemical fertilizer pesticide is strictly controlled. In the aspect of the legislative construction of the rural soil pollution prevention and control fund, the "the burden of the beneficiaries" principle can be implemented in depth, and the financing and innovation of the socialized financing channel can be made through the distribution of government bonds and social fund-raising. In addition, in the area of law enforcement, the environmental awareness and professional quality of the grass-roots law enforcement personnel can be enhanced, and the corresponding law enforcement incentive mechanism should be established.

4.3 Clarity of Accountability Mechanism

In order to perfect the accountability system of soil pollution prevention and control in rural areas of our country, we should undoubtedly consider the subject and imputation principle and study the legislation of subject difference in the United States. According to the above general analysis of rural soil pollution, the establishment of responsibility should also form corresponding legal regulation, that is, the agricultural pollution that causes rural soil pollution, the "three wastes" pollution of enterprises, the negative behavior of government personnel undefineds omission or slow action, and the corresponding negative behavior of village collective economic organization or agricultural producer, township enterprise and relevant government. In the aspect of arrangement and regulation of imputation principle, in order to maximize the benefit of society, the principle of no-fault imputation should be clearly adopted in legislation. Based on the requirements of the concept of fairness and justice, the exemption of rural soil pollution can be clearly stipulated.

5. CONCLUSION

Rural soil is not only the source of human grain, but also an essential link in ecological environment combination factor. In the face of the problem of soil pollution in rural areas, it is necessary to put the solution of legalization on the agenda and strengthen the scientific and operational content in legislation: in the process of law enforcement, we should innovate the supervision mechanism and give full play to the strength of non-governmental organizations; in the determination of judicial responsibility, we should take the maximization of public interest as a self-sufficient point and adopt strict accountability procedures. Through orderly means to ease the contradiction of rural soil pollution, in order to improve the development of rural soil pollution system.

REFERENCES

[1]G.P. Keane. Agronomic factors affecting the yield and quality of forage maize in Ireland: effect of sowing date and plastic film treatment. Grassand Forage Science, 57. 3.

[2]Posner. R.A. Economic Anaylsis of law, Little Brown, 2nd ed, 1977.

[3]Caili Zhang, Kai Lu: Analysis on Soil Contamination Status in Rural Area in China. Agricultural Science & Technology, 2015(4): 845-849.

Innovating English Teaching in Higher Vocational Education and Improving Students' Professional Quality

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Abstract: The cultivation of vocational ability is the main goal of higher vocational education activities. In the traditional English Teaching of higher vocational education, we pay more attention to knowledge teaching, but in fact, no matter in teaching objectives, teaching methods and teaching evaluation, we lack the attention to the cultivation of students' vocational ability and quality, which also affects the improvement of students' professional ability One of the reasons. In order to help students improve their professional competitiveness and promote their own sustainable development, this study attempts to analyze the vocational English teaching model with students' professional quality as the core, in order to exchange teaching opinions with front-line educators.
Keywords: professional ability; Higher Vocational English; teaching mode

1. INTRODUCTION

Focusing on the theme of "Vocational English teaching mode based on vocational ability training", guided by the spirit of the 18th National Congress of the CPC and the requirements of the Ministry of education for vocational education, and according to the needs of social employers for vocational talents, modern vocational English education should indeed make innovation and reform measures in the teaching mode. China's higher vocational education has been developed for many years. Most of the higher vocational colleges have participated in the reform of vocational education. They have innovated and improved the original talent training mode of the colleges and played a role in improving the quality of talent output. However, with the increasing number of foreign-funded enterprises, Sino foreign joint ventures and foreign trade enterprises in China, the ability and quality of Vocational English talents are required to be improved gradually, which makes higher vocational colleges need to participate in the teaching reform continuously to ensure the level of vocational talents training.

2. RECONSTRUCTION OF TEACHING OBJECTIVES "BASED ON VOCATIONAL ABILITY TRAINING"

Under the influence of the traditional teaching mode, the English teaching goal of higher vocational education is based on the subject knowledge, emphasizing the learning and mastering of English language knowledge itself. The vocational oriented English teaching goal needs to be adjusted and innovated on this basis, and finally transformed into the vocational ability of students. The theory of vocational ability standard (CBE for short) is the ideological orientation of vocational skill training education originated in western countries in 1967. The theory emphasizes the cultivation of practical operation ability, professional ability, method ability, social ability and other qualities of vocational needs in practice, in fact, it emphasizes the systematic improvement of Vocational skills of the educated in vocational education. At present, the establishment of English teaching objectives in higher vocational colleges should be guided by the above-mentioned professional competence standard, and a scientific teaching objective system should be established.

3. RECONSTRUCTION OF TEACHING CONTENT OF "PROFESSIONALIZATION AND MODULARIZATION"

Under the guidance of the vocational ability oriented teaching objective system, the English teaching content of higher vocational education also needs to make corresponding changes. The traditional English teaching content of higher vocational education is too uniform, and the difference between the traditional English teaching content of higher vocational education and the ordinary college English teaching content is not obvious enough, which does not highlight the characteristics of vocational education. In order to make the English teaching content of higher vocational education only focus on the goal of students' professional ability development, modern higher vocational English colleges should try to build the teaching content with the characteristics of "professionalization and modularization".

3.1 "Professionalization" Teaching Content

Based on the analysis of the requirements of English teaching content setting in higher vocational colleges, we find that professionalization is an important feature of English teaching content driven by vocational ability. In the daily teaching guidance, teachers should pay attention to the creation of professional situations and guide students to improve their post English application ability. In addition, in the vocational English teaching with professional ability as the core, the humanistic education content of strengthening professional ethics and professional ideals should also be reflected. Therefore, we can combine the requirements of English curriculum guidance with the famous sayings related to dreams, ethics and employment Famous sentences, movie songs, books and works of art are integrated into the teaching content. Students can not only learn professional knowledge, but also improve their humanistic cultivation in the process, and further highlight the charm of English discipline.

3.2 "Modular" Teaching Content

Higher vocational English courses need to be combined with vocational teaching content, At this time, we can divide the English teaching content into several subject sections in a modular way. The daily English curriculum content can be divided according to the basic content, key content, ability development and other modules. Each module can adapt to the professional characteristics and post needs of students, generate project tasks, and drive students to complete tasks. And the content of each part can match with the corresponding learning plan and learning objectives, so that the curriculum plan has a focus and purpose. In the simulation training of professional situation, students use the knowledge points they have learned in each module, and finally implement the teaching goal of professional ability development.

4. THE TEACHING METHOD REFORM OF "COOPERATION AND LEVEL"

4.1 Hierarchical Teaching Method

The application of layered teaching method aims to highlight the subjectivity of students, pay attention to the differences of students and adopt differentiated teaching methods, so as to ensure that students at all levels can make continuous progress in learning activities, find suitable learning methods, and reasonably adjust learning progress [1]. The reform of English teaching methods in higher vocational education aims to improve the quality of teaching. The layered teaching method provides a new teaching idea for English teachers in higher vocational education, and also brings better learning experience for students in higher vocational education, with outstanding emphasis and collective progress. Such a teaching method provides help for the improvement of English quality of students in higher vocational education.

4.2 Collaborative Learning

The cooperative learning mode mentioned here is not only the cooperative learning among students, but also the effective coordination of teachers, teaching resources and teaching settings. All elements in teaching activities together constitute the learning system. On this platform, students can obtain the best learning resources, improve the cooperative ability, establish the sense of cooperation and competition, which is also the student occupation Key components of capability. Under the influence of collaborative learning methods, teachers and students can use the collaborative system to complete learning tasks together, reflecting the open and free teaching environment.

5. TRANSFORMATION OF THE EVALUATION MODE OF "PROFESSIONALIZATION AND DIVERSIFICATION"

In the course of the construction of the curriculum system of vocational education, the teaching goal of vocational standard should not only guide the change of teaching methods, but also change the way of curriculum evaluation. The evaluation model of English Teaching in Higher Vocational Colleges in China is dominated by summative evaluation, which is not in line with the current concept of Vocational English education, which leads to unreasonable evaluation of students' curriculum learning achievements, and has no positive impact on students' self-awareness and teachers' acquisition of teaching feedback. Therefore, higher vocational colleges should establish a set of "diversified, professional" curriculum evaluation system that can reflect the real teaching level in combination with the basic goal of students' professional ability development [2].

5.1 Professional Evaluation Mode

The goal of English Teaching in higher vocational education is to improve the students' ability to use English in their posts in the future. Therefore, it is very important to build a professional evaluation model. In the form of post task simulation, test the students' ability to use English, and combine the students' performance score. This kind of assessment method can not only cultivate students' post consciousness, but also observe their communication ability and adaptability in simulated situations. It can meet the standard of "improving the assessment mechanism composed of formative test and summative test" in the comprehensive provisions of English Course Teaching in higher vocational colleges, and integrate the assessment of English foundation, application skills and vocational skills.

5.2 Diversified Evaluation Methods

In the process of applying the multiple evaluation mechanism supported by the theory of multiple intelligences to carry out curriculum evaluation activities, for students with different levels of intelligence and professional characteristics, the evaluation mechanism can flexibly evaluate students from the perspectives of evaluation, evaluation objects, evaluation means and evaluation strategies. In addition to basic knowledge and language skills, it also includes the course of students Emotion, enthusiasm, listening ability, self-awareness, cooperative learning ability and independent learning ability [3]. In the course of assessment of learning situation, students can choose to report their learning results in multiple ways, such as scene representation, dubbing, group cooperation, talent display, etc., which makes the traditional single assessment method supplemented, and is also conducive to stimulate students' enthusiasm to participate in teaching assessment, and to build up their confidence in English learning.

6. CONCLUDING REMARKS

To sum up, vocational English education needs to make a change in the traditional teaching mode, so as to meet the needs of vocational talents in the new era. Obviously, many higher vocational colleges in China are actively participating in the reform of English education. However, due to the lack of mastery of methods and the influence of traditional vocational education mode, there are still many problems in English teaching activities in higher vocational colleges, so the implementation of further teaching reform measures is still very important. This paper focuses on the cultivation of vocational ability in English Teaching in higher vocational colleges, analyzes effective teaching reform measures, and hopes that the above research points can provide effective reference for teaching workers.

REFERENCES

[1]Yu Jiabo, Hui Minxia. Innovation of Public English teaching mode in Higher Vocational Education Based on the goal of "three types" talent training dynamic research - Taking H vocational and Technical College as an example. Knowledge economy, 2019, 21 (02): 170-172174-175

[2]Zhang Xiumei, Wang Ying. Reflections on the reform and development of Vocational English teaching based on vocational ability. Curriculum Education research: foreign language pedagogy research, 2018, 11 (18): 119-121122-125

[3]Liu Ning, Zang Jiajin. Research on project-based teaching innovation mode of Vocational English curriculum. Overseas English (I), 2018, 12 (07): 112-113115-117.

Discussion on the Legal Regulation of Urban Homestay in Sharing Economy

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Abstract: sharing economy, as a new system economic model, is mainly for the purpose of obtaining reward, through the transfer of the right to use goods to achieve the basic requirements of "distribution on demand", so as to achieve the purpose of "taking what each needs". The city house is an important embodiment of sharing economy. Only by ensuring the rationality and legitimacy of the city house, can we provide reliable guarantee for the smooth transaction of the city house, so as to better realize the basic goal of sharing economy. Therefore, this paper analyzes and discusses the legal regulation of the sharing economy urban homestay, and puts forward the corresponding improvement strategies, hoping to provide some reference for the relevant personnel.

Key words: sharing economy; urban homestay; rule of law

1. INTRODUCTION

At present, under the promotion of the sharing economy mode, the urban homestay transaction has become a normal situation. However, as a new consumption mode, its legal regulation is not perfect. In the process of actual transactions, it is easy to have legal disputes and loopholes. It is not only easy to disrupt the housing rental market, but also poses a huge threat to social security. This requires the relevant departments to strengthen the improvement of the legal regulation of urban residential housing, combined with the main problems and contradictions of the current urban residential housing transactions to develop targeted solutions, and constantly improve the legitimacy and standardization of urban residential housing transactions, so as to create a good market environment, but also to promote the in-depth development of the "sharing economy".

2. ANALYSIS OF THE PROBLEMS EXISTING IN THE LEGAL REGULATION OF URBAN HOMESTAY

2.1 Lack of a Sound Legal System

With the concept of "sharing economy" being put forward, China's homestay trade has gained a broader development space. The focus of homestay transaction has shifted from rural areas to cities, and the transaction mode has also shifted from offline to online. Meanwhile, with the support of Internet technology, online short rent transaction in cities has become an important economic model. For this new economic model, the state has given strong support both in terms of policies and funds. Specific to each region, it still needs to be managed and regulated by the local government. However, in the process of management and regulation, some problems are gradually exposed. First of all, there are great differences in the standards and contents of the legal regulation of urban homestay in different regions, and no unified legal system has been formed. The legal system has a strong local and arbitrary nature. Secondly, each region lacks the corresponding legal constraints on the main body of the homestay facility, the access standard, the reward and punishment mechanism and other contents, which not only makes it difficult to ensure the orderly conduct of management activities, but also reduces the enforcement efforts of law enforcement departments. Finally, the legal regulations of urban homestay adopted at present are mainly made for offline leasing. There are no clear laws and regulations on the online short rent transaction, which leads to the problem of "non-compliance" frequently encountered by relevant departments in the actual management work. The lack of laws and regulations not only reduces the overall quality of management, but also affects the overall development of urban homestay [1].

2.2 Lack of Corresponding Administrative Supervision Mechanism

As a concrete embodiment of the sharing economy model, the development of urban homestay in China is still in the initial stage, and many homeowners are in the absence of operating qualifications and business licenses under the premise of housing rental transactions, which undoubtedly increases the difficulty of the work of administrative supervision departments. With the continuous development of homestay transactions in cities, many homeowners usually transfer their idle housing use rights to get extra income, and the transfer process is basically done online, which makes it difficult for the administrative departments to register and verify them. This not only increases the difficulty of administrative management, but also easily leads to tax evasion and other illegal phenomena, which is extremely detrimental to the long-term development of China's market economy [2]. in addition, due to the lack of the corresponding administrative supervision mechanism, it is difficult to clarify the supervision departments for urban homestay, and the regulatory departments in some regions shirk responsibility for each other, and the overlapping management of the regulatory departments in some regions. No matter what form of management, it is easy to cause chaos in the urban homestay trading market.

2.3 Lack of Protection for Consumers' Rights and Interests

At present, the transaction of urban homestay in China is generally completed through the network platform. The house owner publishes the house information on the network platform, and the consumers get in touch with the house owner through the network platform, and finally determine the lease conditions. In the process of transaction, the rights and interests of consumers are easy to be infringed. On the one hand, in order to obtain the lease qualification, consumers need to provide a large number of personal information, which will be open on the transaction platform, and it is easy to infringe the privacy of consumers; on the other hand, the lease conditions are determined by the homeowner, once affected by external factors, it is easy to make it happen Changes, such as tight housing supply, rising house prices and so on, will greatly increase the risk of consumers being defaulted. When the rights and interests of consumers are violated, whether the homeowner is responsible or the trading platform is responsible has not been solved until now.

3. IMPROVEMENT STRATEGIES FOR THE ABOVE PROBLEMS

3.1 Establish a Perfect Legal System and Clarify the Access Standard of Urban Accommodation

At present, there is a lack of a systematic legal system in the urban homestay market in China, which leads to the lack of rationality and scientificity in the legal regulation of urban homestay in various regions. Therefore, the legislative branch must make a scientific legal system and establish a unified access standard for urban homestay facilities. On this basis, guide the local government to formulate local rules and regulations, so as to constantly improve the legal system of urban homestay. First of all, the legislative department should formulate the targeted legal system of homestay based on China's national conditions, starting with the access standards, the main body of homestay and the transaction mode, and formulate the management methods of urban homestay in China as a whole, so as to provide reliable guarantee for the smooth development of the homestay transaction activities in various regions [3]. Secondly, the local government needs to formulate rules and regulations in line with the local situation on the basis of a unified legal system, and deal with the details of the management of urban accommodation, so as to create favorable conditions for obtaining good management effect. Finally, the legislative branch needs to formulate relevant laws and regulations for online short rent transaction, and clarify the transaction qualifications and conditions. This can provide effective reference for law enforcement departments, so as to reduce the occurrence of violations.

3.2 Define the Responsibilities of Administrative Organs and Give Full Play to the Role of Supervision and Management

First of all, the state needs to clarify the specific responsibilities of the administrative departments in the urban homestay exchange market, and conduct a comprehensive investigation and verification of the specific conditions of the local homestay transactions. For individuals or groups without business licenses or operating qualifications, it is necessary to make targeted treatment, or to apply for a full business license, or to terminate the lease transaction. After the review, the administration will also have to investigate the qualifications of all homestays. The phenomenon that violates rules and regulations undertakes punishment in time, and the home that trades good credit wants to give certain reward. Secondly, in order to fully implement the basic requirements of supervision of urban homestay, the administrative departments need to strengthen the supervision and management of online short-term rental transactions. By cooperating with online trading platforms to master online trading information and establish a sound network supervision system, online trading and offline trading are brought into the administrative management system. Through these measures, we strive to reduce the management loopholes and strengthen the supervision function of administrative departments, so as to create a good market environment for urban homestay.

3.3 Build a Formal Industrial Organization and Safeguard the Legitimate Rights and Interests of Consumers

If we want to ensure the orderly development of the urban homestay transaction, it is far from enough to rely on the restriction of laws and regulations. This requires us to learn from the advanced experience of foreign countries and actively build a formal industry organization, so as to better regulate the transaction behavior and effectively safeguard the legitimate rights and interests of consumers [4]. Taking Japan as an example, its economy of homestay is relatively mature. In the process of development, the industry association of homestay plays an important role. Therefore, China can learn from the development experience of Japan and by encouraging the people to spontaneously establish a homestay industry association to protect the legitimate rights and interests of consumers. The homestay facility industry association may effectively supervise the operation and management. The association can violate the home of consumer legal rights and interests to want to give warning and punish. Association also needs to blacklist "Incorrigible" homestays and strictly control their trading activities.

4. CONCLUSION

To sum up, as an important part of the sharing economy, urban homestay transaction has an important impact and significance on promoting the rapid development of China's social economy. However, in terms of the current legal regulation system of urban homestay transactions in China, the system construction needs to be strengthened, and the legal status of urban home stay is not clear. These not only affects the economic order of the rental trading market, but also easily leads to a series of problems such as public security, health, taxation, etc., and ultimately will be difficult to play the effective value of urban home stay. Therefore, relevant departments and staff must face up to the problems existing in the transaction process of urban homestay, and constantly improve the legal regulation of urban homestay, so as to ensure that all transaction activities have laws to follow and evidences to follow. Through the construction of laws and regulations, we hope to not only strive to regulate the leasing market, but also to implement the basic requirements of the sharing economy.

REFERENCES

[1]Shao Xinyi. Legal regulation of "sharing economy" urban homestay. Journal of Beijing Printing Institute, 2019 (09).
[2]Zhang Jiajie. Legal regulation on the subject of sharing homestay. Hainan University, 2019 (12).
[3]Zhang Hongyan. Legal dilemmas and Countermeasures of urban homestay in the context of sharing economy. Theory and practice of development and reform, 2018 (06).
[4]Tao Yu. Discussion on the legal regulation of urban short rent accommodation. Today's China Forum, 2018 (10).

Understanding English Postgraduate Students' Engagement without Campus's Reviews in Chinese Context

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Abstract: Drawing upon multiple sources of data including semi-structured interviews, first and revised drafts of master's theses, out campus reviews, this case study examines how three master's students affectively, behaviorally and cognitively engaged with out campus written feedback on drafts of their thesis at a mainland university. The findings show that the relationships between the three dimensions of student engagement were interconnected dynamically. The three students' engagement differed from each other, however, their affective engagement could influence their cognitive engagement. This study provides pedagogical implications on how out campus written feedback can enhance the quality of master's students' academic writing.
Keywords: students' engagement; out campus reviews; academic writing

1. INTRODUCTION

While research on written corrective feedback (WCF) in second language writing at university level has proliferated, graduate students' engagement with out campus reviews in Chinese context is under-explored. Students' engagement with teacher WCF has been the subject of substantial studies. Kuh [1] conceptualized the term engagement as the quality of efforts that students have invested in educational activities. Whereas Ellis [2] defined engagement as students' response to feedbacks. Furthermore, Fredricks et al [3] assessed students' engagement as an investment, for instance, investment in behavioral engagement ranged from superficially obeying the rules to fundamentally participating, cognitive engagement from simple memorization to deep understanding, and emotional engagement from liking to appreciation.

Previous studies interpret students' engagement with teacher feedbacks in two major ways. First, some studies agree on the idea that students' engagement is an effective device by virtue of which students are able to improve their learning. For instance, students' engagement has been viewed as the hardcore of learning process [4]. In addition, engagement has long-term impact on students' learning that contributes to both learning and personal development [1]. Second, some researches propose conceptual frameworks to uncover the nature of students' engagement with teacher WCF. Kahu [5] presented a conceptual framework based on four approached identified from previous studies including the behavioral perspective, the psychological perspective, the socio-cultural perspective and a holistic perspective. And the current study is underpinned by the conceptual framework proposed by Ellis [2] (2010) with the inclusion of affective engagement, behavioral engagement and cognitive engagement.

In concert with previous studies [2][6][7], students' engagement with teacher WCF in this article is regarded as his/her response to the WCFs received from out campus professors, and the engagement is interpreted from the perspectives of affection, behavior and cognition. In this regard, students' engagement with out campus reviews is a "meta construct" [3][8]. The three dimensions of students' engagement, namely, affective, behavioral and cognitive engagement, of the conceptual framework for students' engagement are dynamically interwoven.

The affective engagement refers to students' attitude towards WCFs [2]. It involves positive and negative reactions to educational activities and is considered to influence the willingness to accomplish the work [3]. Affective engagement dynamically interrelates with behavioral engagement and cognitive engagement. Particularly, Vygotsky [9] stated that "a true and full understanding of another's thought is possible only when we understand its affective-volitional basis." Mahfoodh [10] found that affective engagement towards teacher WCFs may impact students' use of WCFs. Therefore, in this article, students' affective engagement is viewed as his/her attitude towards and feelings upon receiving out campus reviews.

The behavioral engagement encompasses revision operations and the employment of strategies to produce revision operations [6][8]. It can be conceptualized from two aspects: the number of responses and the time invested in revisions [11]. As a result, the current study looks into students' behavioral engagement in light of the methods and strategies they adopted in response to out campus reviews.

The cognitive engagement includes the psychological factors and students' feelings [12] and can be interpreted in relation to noticing and understanding [6]. It also interplays with other factors. For instance, students' engagement with WCFs is influenced by perception of staff skill in the classroom and passion for the subject [4]. In addition, the quality of cognitive engagement such as noticing is of more significance to improve L2 proficiency [13]. In return, low language proficiency compromises students' understanding of feedbacks and discounts learning outcomes [14]. Accordingly, this article examines students' cognitive engagement in terms of to what extent students understand out campus reviews.

Empirical studies employing a multi-dimensional perspective to investigate students' engagement with WCF is still at an early stage [8]. Recent studies have been carried out within the conceptual framework suggested by Ellis [2] (2010). Han & Hyland [6] explored the approaches that non-English major Chinese students engage with teacher WCF emotionally, behaviorally and cognitively. The study found that teachers should take individual factors and contextual factors into consideration so as to cater to promote students' engagement. Zhang [11] looked into students' affective, behavioral and cognitive engagement with computer-generated feedbacks. It indicated that the three dimensions were dynamically interconnected. The same result was yielded in Yu et al [7] investigation into postgraduate students' engagement with peer feedback on theses. Moreover, Zheng et al [8] examined lower-proficiency Chinese students' engagement with teacher WCF. They found that low language proficiency exerted negative influence on students' cognitive and behavioral engagement with teacher WCFs.

Substantial studies have dived into the recesses of students' engagement with teacher WCF, however, very little literatures on the postgraduate students' engagement with out campus reviews. Master's thesis writing is a prototype of academic writing that is complexed by its distinct characteristics in lexical level and syntactical level, such fact makes thesis writing a challenging process for both native writers and non-native writers [15]. Passing the out campus reviews is a significant criterion for obtaining a master's degree. Accordingly, to arrive at a matched mutual understanding between students and off campus professors on WFCs is of great importance. Therefore, it is necessary to investigate students' engagement with out campus reviews so as to promote postgraduates' to come to the level of academic requirements for thesis writing.

To bridge this research gap, the current study adopts the conceptual framework proposed by Ellis [2] to understand the students' affective, behavioral and cognitive engagement with out campus feedbacks in Chinese context. This study centered on three students' experiences in revising their masters' theses and followed a multiple-case study approach [16]. The following research questions will be addressed as the discussion unfolds:

(1) How did the student engage affectively with out campus reviews on master's theses?

(2) How did the student engage behaviorally with out campus reviews on master's theses?

(3) How did the student engage cognitively with with out campus reviews on master's theses?

2. METHODS

This article employed a multiple-case study approach to examine how students' affectively, behaviorally and cognitively engage with out campus reviews in Chinese context. The conceptual framework underlying this study proposed by Ellis [2] includes three interconnected dimensions: affective engagement (investigates students' attitudes toward out campus reviews), behavior engagement (studies the way students use out campus reviews in revision their theses) and cognitive engagement (focuses on students' processing of out campus reviews).

2.1 Participants

Three English major postgraduate students from a university in mainland China who are in their last semester of postgraduate study.

2.2 Data Collection and Analysis

Data were collected from multiple sources, including first and revised drafts, written feedbacks from out campus professors, semi-structured interviews and online interviews via WeChat.

Data collection lasts three weeks and includes three stages. In stage 1, at the beginning of the first week, three original theses and three revised theses after receiving the out campus reviews written by the three participants, together with WCFs on each thesis offered by off campus professors were collected to understand students' behavioral engagement with out campus written feedbacks.

In stage 2, at the beginning of the second week, semi-structured interviews were conducted after receiving WCFs from out campus professors to investigate students' multi-dimensional engagement, namely, affective engagement, behavioral engagement and cognitive engagement, with off campus reviews. The face-to-face semi-structured interviews were carried out to each participant respectively. Each interview lasted 30-45minutes.

In stage 3, at the beginning of the third week, online interview via WeChat are conducted, in which participants were required to further explain their responses so as to gain more information and cross-validate their responses provided in previous stages. All interviews, online and offline, were launched in Chinese that is the three participants' mother tongue. The guide for semi-structured interviews for three participants followed the conceptual framework of behavioral engagement, affective engagement, and cognitive engagement [2] and are presented in Appendix A.

This study used qualitative data analysis scheme (i.e. data reduction, data display, conclusion drawing and verification) to analyze and code the multiple sources of data.

3. FINDINGS

3.1 Affective Engagement

According to the conceptual framework, affective engagement can be explored by examining students' emotion, judgement and appreciation. In the current study, there was no indication in any of the cases that students were expecting their teacher not to provide out campus reviews. Every student was willing to receive WCF, but the willingness varied in degree, that is, some students regarded out campus reviews as indispensable assistance in improving writing skills but some perceived it as optional. One student (Han) remarked in the interview:

I am expecting some kind of feedback from out campus professors, it serves as a reference for me to evaluate my thesis, based on which I can modify my thesis. Besides, I think my effort has been acknowledged whether her feedback is positive or not. It is much better than providing us nothing but a grade.

One student (Cao) responded positively upon receiving the feedback, appreciating the teacher's effort in marking their writing. However, she said that although the out campus professors had offered assessments and grades on her thesis, they failed to mark out specific errors. Such leads to the fact that she could not locate errors in her writing. The perception that she was not making any progress frustrated her, however, when asked how the out campus professors could better help her with writing, she was unable to put forward a solution. Cao stated as follows:

Generally speaking, I was satisfied with the grades that the two out campus professors offered. However, both of the two professors have not provided detailed information of my thesis and that made the out campus reviews were not as useful as I expected. Furthermore, I still need to pin down some detailed errors by myself, in other words, I have not benefited a lot from the out campus reviews.

3.2 Behavioral Engagement

A student's behavioral engagement with out campus reviews can be embodied in his/her methods of revision and strategies employed in revision. Students' methods employed in revising their theses can be inferred from changes in error rates over drafts and textual modifications. The textual examinations demonstrated that all of the three participants made modifications, mainly at the word level, but some were non-target-like.

Direct out campus reviews were generally perceived to be more beneficial than indirect out campus reviews in that they facilitate students' more effectively in making successful modifications. Just as Chandler [17]267 has claimed, "direct correction is best for producing accurate revisions, and students prefer it because it is the fastest and easiest way for them as well as the fastest way for teachers over several drafts". On the other hand, understanding indirect out campus reviews were regarded to be more demanding for the students because it may require more cognitive engagement in processing the out campus reviews and a higher level of linguistic competence to self-edit [17].

The participants used some strategies that are observable in their behaviors to enhance the accuracy of their drafts and their English language competence, which also demonstrated their behavioral engagement with out campus reviews. In the semi-structured interviews, one participant (Mu) reported that when revising her thesis, she first looked at the words or phrases that had received out campus reviews and then proceeded to read through the text. Some corrections, as the students said, were made in consistent with what seemed to be right in Chinese translation. One student (Cao) shared her experience of writing and revision in the interview:

When writing my first draft, I planned the text in my mind first in Chinese and then translated the sentences into English. They were understandable if we translated them back to Chinese. So, I only revised what I found wrong. With respect to seeking extra assistance as a revision strategy, only one participant (Han) described consulting the Internet, peers or other instructors while writing or editing.

3.3 Cognitive Engagement

The extent to which a student engages cognitively with out campus reviews can be examined in light of the extent to which she processes out campus reviews, deploys cognitive operations to process the feedback and take revisions, in conjunction with metacognitive operations that regulate her mental effort in processing out campus reviews and revising texts. Regarding the depth of processing, the semi-structured interview suggested that the participants had difficulties in understanding out campus written feedback (Cao) reported in her interview as follows:

I was stuck at where the teacher referred to as illogical argumentation and inadequate. I guessed it meant there was some errors in the argumentation or report of statistics, but I could not decide where exactly it was. So, I did not make any modifications in my second draft.

For another instance, one student (Han) who mentioned her confusion about one instance of indirect out campus reviews in the semi-structured interview chose to ignore the negative comments on argumentation that confused her without further consulting the out campus professor what was wrong. The out campus professor marked "the manner of reporting can be improved", however, when asked in the interview about why she thought the professor gave such feedback, the student could not provide any explanation. "That is why I ignored the comment in the second draft," she responded.

4. CONCLUSION

This study examined how three master's students engaged with out campus written feedback on their theses across three dimensions: affective, behavioral and cognitive. Our findings show that the relationships between the three dimensions of student engagement are interconnected in a dynamic and complex way. Overall, they valued out campus written feedback as effective tools to improve their English writing skills, but not all of the feedbacks contributed to their modification of theses. While they held positive opinions towards out campus written feedback, they neglected the feedbacks that are difficult to comprehend. Furthermore, the present study also shows that all three participants demonstrated superficial cognitive engagement with out campus written feedback that they received in the absence of meta-cognitive engagement.

5. LIMITATIONS AND IMPLICATIONS

Inevitably, this empirical study is characterized by a number of limitations. First, this research investigated students' engagement with teacher written feedback in Chinese context. Further studies are needed to explore learners' engagement with WCFs in other contexts and comparative study is desirable. Second, the sample size in this study was rather modest and all participants were from the same disciplinary, it is difficult to give generalization. Therefore, further research should aim for cross-disciplinary areas with more participants from different majors. Third, automated writing evaluation (AWE) feedback has not been paid attention to in this article, thus comparative studies could be conducted on learners affective, behavioral and cognitive engagement with WCF and AWE feedback.

REFERENCES

[1]G. D. Kuh, The national survey of student engagement: Conceptual and empirical foundations. New Directions for Institutional Research, 2009, 141: 5–20.

[2]R. Ellis, A framework for investigating oral and written corrective feedback. Studies in Second Language Acquisition, 2010, 32: 335-349.

[3]J. Fredricks, Blumenfeld, P., and Paris, A. School engagement: Potential of the concept, state of the evidence. Review of Educational Research, 2004, 74(1): 59-109.

[4]K. Krause, and H. Coates, Students' engagement in first-year university. Assessment & Evaluation in Higher Education, 2008, 33(5): 493-505.

[5]E. R. Kahu, Framing student engagement in higher education. Studies in Higher Education, 2013, 38(5): 758-773.

[6]Y. Han, and F. Hyland, Exploring learner engagement with written corrective feedback in a Chinese tertiary EFL classroom. Journal of Second Language Writing, 2015, 30: 31-44.

[7]S. Yu, Y. Zhang, K. Yuan, and L. Zhang, Understanding student engagement with peer feedback on master's theses: a Macau study. Assessment and Evaluation in Higher Education, 2019, 44:150-165.

[8]Y. Zheng, S. Yu, B. Wang, and Y. Zhang, Exploring student engagement with supervisor feedback on master's thesis: Insights from a case study. Innovations in Education and Teaching International, 2019, 57(2): 186-197.

[9]L. S. Vygotsky, Thought and Language. Beijing: Peking University Press, 2010.

[10]O. Mahfoodh, "I feel disappointed": EFL university students' emotional responses towards teacher written feedback. Assessing Writing, 2017, 31:53-72.

[11]Z. Zhang, Student engagement with computer-generated feedback: a case study. ELT Journal, 2017, 71: 317-328.

[12]V. Kumar, and E. Stracke, An analysis of written feedback on a PhD thesis. Teaching in Higher Education, 2007, 12(4): 461-470.

[13]D. S. Qi, and S. Lapkin, Exploring the role of noticing in a three-stage second language writing task. Journal of Second Language Writing, 2001, 10(4): 277–303.

[14]J. Bitchener, and H. Basturkmen, Perceptions of the difficulties of postgraduate L2 thesis students writing the discussion section. Journal of English for Academic Purposes, 2006, 5(1): 4-18.

[15]J.Bitchener, H. Basturkmen, and M. East, The focus of supervisor written feedback to thesis/dissertation students. International Journal of English Studies, (2010), 10(2): 79–97.

[16]S. B. Merriam, Qualitative Research and Case Study Applications in Education. San Francisco, CA: Jossey-Bass, 2009.

[17]J. Chandler, The efficacy of various kinds of error feedback for improvement in the accuracy and fluency of L2 student writing. Journal of Second Language Writing, 2003, 12: 267–296.

On the Employment of College Students by the Practical and Realistic Way of Thinking

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Abstract: Employment is the foundation of people's livelihood and the policy of national security. If we can't understand the current employment problem of college students correctly, it will seriously affect the smooth progress and practical effect of the employment of college graduates. Seeking truth from facts is our ideological line, fine tradition and important magic weapon. It should also be our principle and method to correctly understand and solve the employment problem of college students. There are not only social reasons, employer reasons, college reasons, but also college students' own reasons. This paper attempts to use the practical and realistic way of thinking to interpret the employment of college students one by one, and put forward ideas to solve the problem.
Keywords: seeking truth from facts; methods of thinking; employment of college students

1. INTRODUCTION

Always adhere to the ideological line of seeking truth from facts is our magic weapon and experience in solving important problems. Today, the basic principle of seeking truth from facts and starting from reality is still the basic ideological method to correctly understand and solve the employment problem of college students.

2. IT SHOULD THE INISISTED ON THE THOUGHT OF SEEKING TRUTH FROM FACTS: THE WHOLE SOCIETY SHOULD FACE UP TO THE EMPLOYMENT PROBLEM OF COLLEGE STUDENTS

2.1 Severity of Employment Situation

In 2009, the "Seven National Policies" for promoting the employment of college students was issued; the report of the 19th National Congress of 2017 stressed that "employment is the biggest livelihood, we should adhere to the employment priority strategy and active employment policy, and achieve higher quality and full employment". All kinds of signs indicate that the employment of college students has become a major concern of the current government, and it has become a problem in recent years to attach importance to and solve the employment problem of college students one of the focuses of our work. After years of efforts, the employment problem of college students has been alleviated, but it has not been solved fundamentally. The employment problem originated from the population problem is the primary one in China. At present and in the future, it will be the peak of employment growth in China, with an annual increase of about 10 million people. In addition, there are about 8 million urban registered unemployed people, nearly 6 million laid-off workers in state-owned enterprises and collective enterprises, and 150 million surplus rural labor force. The seriousness and long-term nature of China's employment problem is self-evident. In 2018, there are 8.2 million fresh graduates in China, the employment rate of college students is 50.51%, and the postgraduate entrance examination group accounts for 30.02% [1]. It is reported that in 2019, there will be more than 8.34 million college graduates nationwide, an increase of 140000 over the previous year [2]. These figures are overlapped with millions of college students who have not been employed in the past years. Such a large number is presented in front of people, and the seriousness of the employment situation of college students is imminent.

2.2 The Harm of False Employment

If schools do not insist on seeking truth from facts, false employment will inevitably become a common phenomenon in society. Since 2005, the relevant departments have appropriately linked the enrollment plan of colleges and universities with the employment situation of graduates. For their own development and the sake of the school's fame, some colleges and universities "inject water" into the employment rate, many graduates "are employed", and the employment rate indicators of all regions are also triumphant, as if the employment situation is very good. In order to pursue high employment rate, some colleges and universities require students to submit "employment certificate" before leaving school, otherwise, the files will be returned to their original places, and the graduation certificate and degree certificate will be issued later. The social consequences caused by the "false employment rate" which violates the principle of seeking truth from facts are very serious. First of all, the "false employment rate" leads to the distortion of information, and the employment rate is the core data related to the employment status of college students. The inaccurate employment rate will affect all sectors of society to make a correct judgment on the employment status of college students, and it is difficult to remedy the problem. Digital forgery will not only mislead the formulation of public policies, but also affect the macro-control of the state's employment policies for college students. Secondly, the practice of "false employment rate" actually misleads the society, which will lead to the vicious circle that the vast number of candidates have no real information and data to base on when they apply for the examination of schools and majors, resulting in the supply exceeding demand of the talent market. Finally, "false employment rate" "Rate" and the prevailing fraud in the society influence each other, which directly affects the students' Outlook on life and values, further undermines the social atmosphere, and is not responsible for the students themselves.

2.3 Lack of System to Solve the Employment Problem

Nowadays, the party and the government have regarded employment as the foundation of the people's livelihood and the policy of stabilizing the country. From the macro point of view, the employment of college students is a part of the whole social employment. The employment of graduates is not only a matter for schools and college students, but also for government departments and the whole society. It needs coordination and cooperation from all walks of life and departments. The reasons for the difficulty in employment of college students are very complex, including social reasons, employer reasons, University reasons and the reasons of college students themselves. The promotion of employment is a systematic project, which requires people's governments at all levels and relevant departments to perform their respective duties, to take their respective responsibilities and to administrate according to law to do a good job in employment.

3. INSIST ON THE STANDARD OF PRACTICE: COLLEGES AND UNIVERSITIES SHOULD CULTIVATE TALENTS WITH ADAPTABILITY TO THE NEEDS OF THE MARKET

3.1 Adaptability of College Major Setting

It is difficult for college students to get employment. The main reason lies in the contradiction between the marketization of College Students' employment and the lag of higher education reform. With the deepening of China's reform and opening up, the reform of the higher education system has been called for more than 20 years. However, some schools still follow the traditional teaching method of exam oriented education, and some students are trained with high scores and low abilities, which can't meet the needs of the employing units. Even if some majors are adjusted, they are not facing the market demand, but simply based on their own teachers' conditions. In this way, school enrollment and professional setting are out of line with market demand. At the same time, the vast majority of colleges and universities still have to go through the examination and approval of the Ministry of education when setting up new disciplines and specialties, and they are not completely independent. Therefore, the education system has not really realized the marketization, which leads to the contradiction between the marketization of employment and the lag of education reform. On the other hand, many colleges and universities often do not take a comprehensive consideration and long-term perspective when they go to some new majors. They tend to only focus on the hot majors with good short-term employment situation and ignore the cold majors, which will result in the lack of people in some cold majors but the recruitment of less than people, and the hot professional graduates are surplus, the supply is far greater than the demand, affecting the employment of students. Even some schools vigorously expand the enrollment of majors with high fees and relatively low training costs (such as art majors), so as to improve the school efficiency.

Colleges and universities should adjust and reform the professional structure and education system, and establish a "demand-oriented" education system, that is, what kind of talents are needed in the society, which is reflected by the supply and demand signals of the labor market, and then schools adjust the disciplines, majors and teaching contents according to the signals to meet the needs of the market. Colleges and universities should adjust the structure of major from the reality, combine the enrollment with the employment trend of graduates, increase the number of enrollment of major urgently needed by the society, and set up unreasonable schools and major for the teaching quality, reduce the number of enrollment, or even stop enrollment; for the major with rapid renewal, courses should be set up according to the actual needs, which are out of touch or eliminated in the society. The course should be updated in time, and everything should be based on the reality. We should promote cooperation between schools and enterprises, co-construction between enterprises and schools, and order based personnel training, so that schools have their own characteristics, advantages and competitiveness in personnel training objectives.

3.2 Teaching Methods should be Targeted For Students' Employment

Dr. Yao Jihuan, Dean of Yuncheng University, pointed out in an exclusive interview on "how to solve the employment difficulties of college students in local universities": "due to the relatively closed education system, there is a lack of necessary social investigation procedures and scientific feasibility analysis in the aspects of specialty opening and enrollment, resulting in the college graduates unable to adapt to the social needs and meet the higher requirements of employers. For example, more theoretical education, less practical education, more professional education, less ideological education and so on. In particular, most of the writing and communication levels can not meet the requirements of the employer, so the graduates will lose their employment opportunities" [3].

Colleges and universities should adjust the teaching content and professional direction according to the needs of employment, vigorously organize the practice for the purpose of promoting employment, and strive to cultivate students' practical ability. The author believes that we should be practical and realistic and take employment as the guide to speed up the education and teaching reform in Colleges and universities. The school adjusts its own teaching content and teaching methods in combination with the current situation, changes the past training mode of emphasizing theory, ignoring practice, emphasizing knowledge and ignoring ability, and combines the actual situation to open courses with professional characteristics and strong practicality, so that students have solid professional knowledge. At the same time, we should pay attention to the demand of social development for compound talents, not only to impart knowledge, but also to cultivate ability, quality, concept and consciousness.

3.3 Employment Guidance should be Professional

Colleges and universities should become the senior staff of graduates' employment, and establish or improve the Employment Guidance Center for college students. The focus of the work of this guidance center is to strengthen the ideological education of employment for college students, including the education of employment outlook, career outlook, values, integrity outlook and entrepreneurship outlook. This work is not sudden, but runs through the whole college life of students. Many students do not think of employment until they graduate. They realize that employment is closely related to themselves, which is closely related to the lack of employment guidance in schools. The overall quality of the employment guidance team plays a key role in promoting the employment of college students. This requires professional training for the full-time personnel engaged in the employment guidance of college students according to the actual needs, so as to improve the professional level and comprehensive quality. At the same time, we should actively absorb teachers with expertise in psychology, sociology, education and informatics to enrich the employment guidance team, and let a high-level and responsible expert group guide the employment of college students. Starting from the actual situation, according to the needs of the society, we should guide college students how to choose a job first when they are faced with a severe employment environment. Many schools do not have employment guidance courses, even if there is not enough system. Many times, we ask some experts to talk about the employment situation, or stop what we should pay attention to in the course of employment, which is difficult to achieve the purpose of guidance. We should standardize and systematize the course of employment guidance for graduates, and make it more professional.

In addition, the employment guidance center of college students should timely and dynamically convey the information provided by the employment service information network of college graduates and the employment networks of various colleges and universities to the graduates; in the process of students' employment, the school should also strengthen the contact with the employment market, give full play to the services of providing employment information, competitive skills training, psychological consultation, etc.; the employment guidance center of college students should mobilize the school We should make full use of all kinds of information and timely promote our students to employers. At the same time, teachers engaged in graduate employment work should visit all over the country, seize the opportunity of employment and make students find suitable jobs.

4. INSIST ON THE COMBINATION OF THEORY AND PRACTICE: COLLEGE STUDENTS SHOULD HAVE CORRECT EMPLOYMENT MENTALITY

4.1 The Best Way is not to choose a Job First, But to get a Job First

The first paragraph of Article 7 of the general provisions of the Employment Promotion Law stipulates that "the State advocates that workers should establish a correct concept of employment selection, improve their employability and entrepreneurial ability, and encourage workers to start their own businesses and seek their own jobs." [4].We should start from the reality, see clearly the form of employment, overcome the utilitarian mentality, and establish a realistic and pragmatic style of thinking. When choosing employment cities, don't always aim at big cities and coastal areas; when choosing units, don't always focus on institutions of higher learning and other units; when choosing enterprises, don't only focus on big companies, good jobs and good treatment, but determine your own according to the needs of the society, your own career planning and career positioning, professional interests, professional ability and development direction post. College students should emancipate their minds and make adjustments and efforts from the actual situation. We should change our employment concept in a practical and realistic way, strengthen the career choice strategy of "first employment, then employment, and then entrepreneurship", and choose our own career path from the reality.

4.2 Not Centered on the City, Treat the Most Conducive to Development as the Highest Standard

At present, some college students are often unable to start from the reality and emancipate their minds when they are looking for jobs, which leads them not to find jobs, but to find satisfactory jobs. When choosing a job city, "it's better to have a bed in a big city than a suite in another city". They like to go to a big city and have a special interest in coastal areas. In fact, there are more employment opportunities in the western regions, township enterprises, etc., but these are not always the choice of college students. In these places where college students can play a more important role, college students are often unable to recruit college students. Because college students think such places will bury themselves and make their Heroes useless, they prefer to stay in big cities when they choose jobs. And the competition in big cities is very fierce, which is also very critical of talents, so it is often difficult for people to find jobs.

College students should also set out from the reality, put their own position in order to establish grass-roots awareness, career awareness and struggle awareness. They should realize that the more remote the place is, the more skilful the stage is, the more grassroots the place is, the more room for their own growth, and there is no regional discrimination. We can train ourselves at the grass-roots level and tap our potential. We can also focus on the West and the areas to be rebuilt after the disaster, and train our talents in these areas.

4.3 Don't Focus on High Salary, Take Being Suitable for Yourself as the Best Choice

Today's college students often think that they are high-quality and highly educated people. As soon as they graduate, they feel that they have everything, can do anything, and employment should also be high salary. When they are employed, they always look to the high salary departments and units with high goals. They have unrealistic employment outlook and mentality, so that they are always unemployed when they are employed I don't understand that my salary is equal to the value I create. I'm not looking for a job that suits me and is competent according to my actual ability. We should objectively estimate ourselves, accurately position ourselves, set up a practical and realistic view of employment, and proceed from the reality, based on "first employment, then employment." Today, the buyer's market in the employment situation reminds college graduates that opportunities are more important than benefits, jobs are more urgent than high salaries, and employment is more pragmatic than job selection.

5. ALL TREAT REALITY AS THE START: THE EMPLOYING UNIT SHOULD HAVE A PRAGMATIC CONCEPT OF EMPLOYING PEOPLE

5.1 To Avoid High Consumption of Talents, We Should Overcome the Psychology of Comparison

The phenomenon of "high consumption" of talents is a new situation in the recruitment of talents in the talent market in recent years, which is highlighted by the increasingly high educational requirements of enterprises for job seekers. Many enterprises pursue vanity and are keen to compete. By recruiting high-level talents to show the strength of enterprises and establish a good image to the outside world, they seldom consider the specific requirements of occupation, type of work and post. We often see that doctors are competent for master's and undergraduate's work. To recruit an environmental sanitation job requires not only a bachelor's degree or above, but also height, stature and appearance. This practice will inevitably increase the employment difficulty of college students while causing high consumption of talents, resulting in a considerable number of people in order to improve the employment admission ticket and constantly improve the diploma height. The work of any unit is divided into different levels. Any talent group is also divided into different levels. The level of talent must correspond to the level of work. The dislocation of the two cannot give full play to the role of talent most effectively. Making the best use of people and things is the basic principle of resource allocation. Matching ability and position is the best state of employment, and "just in time" is the greatest respect for talent, "High talent" is the biggest waste of talents. Employers and enterprises employ people for efficiency or benefit. As long as the candidates are competent for the corresponding tasks and can fully perform the corresponding post responsibilities, education and diploma should not be the only choice standard. Today, the whole society is paying close attention to the employment of college students. The employers must change their psychology of one-sided pursuit of high education, regardless of the actual needs of enterprises, and take the social responsibility of enterprises to solve the employment problem of college students.

5.2 The Employment Shall Overcome the Psychology of Comparison, and Take Applicability and Sufficiency as the Standard

There are quite a number of employers that have the phenomenon of comparison. They think that their own units and enterprises need to be developed or have been very good. For the sake of the image and face of the units and enterprises, they often recruit some people with high education background and good appearance. This practice will cause high consumption of talents, and will inevitably delay the time of employment. Some college students will wait for work as soon as they graduate. For example, the office of a certain unit needs a printer and a person who can do the printing and copying can be recruited. However, during the recruitment, the unit requires a bachelor's degree or above, good image and good temperament, etc. for the purpose of "image and face" of the unit. Companies and enterprises need efficiency, income generation and talents suitable for the positions they want. As long as the candidates are professional and competent for the positions, they can select and record the employees according to the actual needs of the employers. No matter what is suitable for you is the best, work is also suitable, enough is the best, the most suitable, the most standard. It's not a good fit for your company.

5.3 Pay More Attention to Ability than Education Background and Create a Fair Environment for Talent Competition

At present, many large companies, institutions and even state organs pay more and more attention to the "famous brand effect". Some employers, especially the better ones, will give priority to those graduates from good schools when they recruit employees. Some organizations even indicate in the recruitment brochure that only "211" or "985" university students are needed. No matter the state organs, public institutions or large companies should adhere to the principle of practical and realistic employment. Starting from the reality, recruitment should be based on the actual needs, not only on the "hat" of the employees. In fact, both famous universities and ordinary colleges and universities will cultivate students with different qualities. Employers should not only focus on those famous universities, but ignore the talents of ordinary colleges and universities. The institutional discrimination of employers makes the students of key colleges and universities "favorite", while the students of ordinary colleges and universities are ignored, just because their "hats" are not beautiful and high enough.

The requirement of working experience for college students is another threshold for enterprises to recruit talents. Most employers at the job fair require working experience. Although many positions don't rely on experience, many enterprises still display the brand of "require working experience", but they don't recognize the internship experience. In fact, they refuse the college students who are eager to get employment, which makes the already severe employment situation of college students worse. This truly reflects the enterprise's quick success and instant benefit in the employment issue, and is eager to recruit employees who can "fight and win" in the war. Imagine, if every enterprise makes such a request, where does the work experience come from? A discerning enterprise is able to establish its own talent team through the enterprise training mechanism, so that the trained talent team is more stable and loyal. To solve the problem of College Students' employment, the employer can do something as follows: when selecting talents, it should provide a fair and just platform for all applicants to compete for employment, and set reasonable interview or written examination items according to the needs of the employers, rather than identifying their abilities by looking at their education background, and should not use whether they have experience as the basis for evaluating a person's level. The employer should combine the actual needs of the employer, abandon the discrimination of education background and experience, select people by virtue and ability. What you get is the future pillar of the enterprise!

In short, it is believed that as long as the whole society follows the principle of seeking truth from facts and the whole society makes joint efforts, the problem of difficult employment of college students will be solved properly. As an active productivity in China's huge population and labor force, college graduates will make due contributions to the cause of socialist modernization.

REFERENCES

[1]2018 employment report of college graduates. 2018 (8): 1. https://www.sohu.com/a/247134977_804679

[2]Li Qiyao. In 2019, the number of college graduates in China will increase by 140000 and reach a new high. Beijing Evening News, 2018 (11): 1. https://baijiahao.baidu.com/s?id=1618545635646950359&wfr=spider&for=pc

[3]Yao Jihuan. How to solve the employment difficulty of college students in local universities. Shanxi news network, 2007 (3): 1. http://news.sina.com.cn/c/2007-03-08/062711363875s.shtml

[4]Employment Promotion Law of the people's Republic of China (revised in 2015). Kunming human resources and Social Security Bureau, 2019 (5): 1-3. http://rsj.km.gov.cn/c/2019-05-17/3012323.shtml

A Brief Analysis of the Design of Ecological Parking Lot in Tourist Area

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Abstract: With the continuous development of national economy and the continuous improvement of people's living standards, tourism has become an enduring industry. With the development of tourism, self-driving tour has become a popular choice. The rise of self-driving tour brings the problem of parking difficulty to the scenic spot, exposes some imperfect places in the scenic spot day by day, and at the same time, the whole scenic spot presents a mess. This paper puts forward the relevant problems and solutions for the development of domestic ecological parking lots from several aspects. At the same time, through the comparison and analysis of the existing ecological parking lots in the scenic spot, the parking lot in the scenic spot not only bears the function of parking, but also bears the corresponding ecological function.
Keywords: Scenic spot, Ecological parking lot, Landscape design.

1. RELEVANT CONCEPTS OF PARKING LOT IN SCENIC AREA

First of all, we should have a clear definition of the concept of tourist attractions. Generally speaking, tourist attractions start from three aspects: the types of local scenic resources, the characteristics of regional landscape and the tourists' demand for tourism, so as to divide the scenic area into certain areas to meet the tourists' travel purpose. For scenic spots, there are not only scenic resources, but also some historical backgrounds based on certain natural resources and some local unique regional cultures. Tourist attractions provide tourists for services such as sightseeing, exploration, leisure, scientific research and so on. They can relax and get close to nature in their leisure time. At the same time, the scenic spot is also a profitable organization[1-2].

The ecological parking lot is to integrate the ecological concept into the construction of the parking lot under the premise of the ecological concept, and at the same time to meet the use of people in the area. Compared with the traditional parking lot, the ecological parking lot should be safe, hygienic and beautiful modern parking lot.

2. ECOLOGICAL DESIGN OF PARKING LOT LANDSCAPE IN TOURIST ATTRACTIONS

Adhere to the concept of respecting natural utilization and sustainable development

In September 7, 2013, delivered a speech at Kazakh, Nazarbayev University and answered questions raised by students. When it comes to environmental protection, he pointed out that clear waters and green mountains are as good as mountains of gold and silver. Xi's speech fully explained that at present, not only our country should adhere to the sustainable development route of ecological development, but also all countries in the world should take ecological construction as the top priority of development. The location selection of parking lot is related to many problems. First of all, we should consider the convenience of passengers, and start with the demand for parking space in the scenic area. From the overall layout to the later design, we should start from the perspective of humanization, so that there is a more reasonable route for tourists to enter the scenic area and park until they drive out of the scenic area after sightseeing[3-5].

3. CHARACTERISTICS OF ECOLOGICAL PARKING LOT IN THE SCENIC SPOT

3.1 Sustainability and Efficiency of Parking Lot in Scenic Area

The ecological parking lot of the scenic spot does not exist in the scenic spot independently or suddenly. The ecological parking lot of the scenic spot is based on the renewal and continuous development of the original old parking lot of the scenic spot. The design concept of the ecological parking lot in the scenic spot is to respect and utilize the nature, and to promote the ecological and sustainable development of the scenic spot. The rise of new environmental protection materials and some renewable energy also provides a relatively large development opportunity for the development of the ecological parking lot in the scenic spot. The continuous development and rise of new energy and renewable energy can provide the necessary construction conditions for the construction of the ecological parking lot in the scenic spot.

3.2 Economic Rationality of Parking Lot in Scenic Area

In the construction of the parking lot, we should consider that the economic development level of the parking lot and the region should be consistent, that is to say, the economic rationality is to plan and construct according to the actual situation of the scenic spot, such as the data of passenger flow, vehicle flow and parking volume at the peak of people flow can be used to reasonably plan the corresponding parking spaces. The expansion of the parking lot can not lead to the waste of land resources, nor can the parking lot constructed in order to save land resources not meet the demand of the scenic spot.

In the construction and design of general parking lot, the parking lot will be divided into inclined, parallel and vertical parking spaces. Inclined parking: when parking, the vehicle and the driving channel will form an angle, and the large angle is generally less than 90 degrees. This kind of inclined parking can make the parking of vehicles very flexible. When the driver stops, the parking of vehicles can be more flexible and free, which is convenient for the driver's access. At the same time, when the site is limited, this kind of parking mode can quickly Park and evacuate the vehicles in any emergency. However, this kind of parking mode also has disadvantages, that is, the construction area of the parking lot is relatively large, resulting in a waste of space. Parallel parking: when parking, keep the vehicle and the driving passage parallel and enter the parking space through the way of side parking. This way of parking can improve the efficiency of vehicle access, but there are some disadvantages in this way of parking. For example, when parking, form a long and narrow parking space, which covers a large area, and the same parking area. In this case, the number of parking is less and the utilization rate is not high. Vertical parking: when parking, it is perpendicular to the driving passage. This kind of parking mode is also the common parking mode in the domestic parking lot at present. The characteristics of this parking mode are that it can park more vehicles in unit length, and the land is relatively compact, which can make better use of the land of the parking lot. However, compared with the other two parking modes, the vertical parking mode occupies too wide an area.

In the current layout and construction of the ecological parking lot in the scenic spot, we must design and allocate the parking mode reasonably according to the land occupation of different vehicles and the demand of different vehicles for the parking space area.

For a scenic spot, the parking lot is not only to solve the problem of passengers' parking, but also to ensure the long-term development of a scenic spot with a reasonable planning. At the same time, it is also the need for a scenic spot to constantly improve its self-development. As a service industry, the tourism industry should provide passengers with a safe and comfortable travel environment, at the same time to ensure that passengers have a relatively high-quality travel, self-driving travel is increasingly popular today, to solve the problem of parking can make passengers have a relaxed mood to visit the scenic spot, so the establishment of the scenic spot ecological parking lot will not only make passengers enjoy themselves, but also improve the tourists' good feeling for the whole scenic spot.

4. DESIGN AND ANALYSIS OF ECOLOGICAL PARKING LOT

For a scenic spot, the parking lot is not only to solve the problem of passengers' parking, but also to ensure the long-term development of a scenic spot with a reasonable planning. At the same time, it is also the need for a scenic spot to constantly improve its self-development. As a service industry, the tourism industry should provide passengers with a safe and comfortable travel environment and ensure that passengers have a relatively high-quality travel, self driving travel is becoming increasingly popular today, to solve the problem of parking can make passengers have a relaxed mood to visit the scenic spot, so the establishment of the scenic spot ecological parking lot will not only make passengers enjoy themselves, but also improve the tourists' good feeling for the whole scenic spot.

4.1 Design of Parking Lot in Scenic Spot

Compared with the development of ecological parking in the world. The development of our country is at the beginning of a relatively backward development in the late stage. In recent years, with our national government's attention to the ecological environment, and the concept of "sponge city" and "rainwater garden" put forward, people pay attention to the construction of ecological parking lot. But on the basis of the original design and transformation, most scenic spots only pay attention to the improvement of parking lot traffic and parking volume. With the rise of going on a road trip, the landscape also realized that the original parking space has not been able to meet the needs of the current passengers, so it continues to expand the area and parking space of the parking lot. In this blind promotion, it completely ignores the landscape design of the parking lot and the ecological benefits the parking lot demands to carry. As a result, the contradictions in these aspects are becoming increasingly acute, and the problems brought to the parking lot in the scenic spot are also increasing.

4.2 Problems in the Construction of Ecological Parking Lot

4.2.1 Ground pavement of parking lot

According to the field observation of the parking lots in some scenic spots that have been put into use at present, most of the parking lots are still paved with cement concrete, hard bricks and asphalt. These hard pavements account for 80-90% of the parking lot area, and the coverage area of the rest lawn only accounts for a small part. At the same time, it is found that some newly built so-called scenic area ecological parking lots are only symbolic of the use of some ground permeable materials, which only accounts for a small part of the total ecological benefits of the scenic area parking lot, especially in the face of the extreme weather of rain and snow, basically the ground water can not be quickly drained, resulting in many parking lots water accumulation is serious. We should pay attention to the use of permeable materials, replace the original hard landscape pavement with new environmental permeable materials, increase the green area of the parking lot, and promote the balance of ecological water cycle in the parking lot.

4.2.2 Plant allocation

Through the field inspection of some parking lots, it is also found that most of the parking lots have less plant planting and less plant coverage area. Only in the boundary part of the parking lot, trees are planted to divide the space, and trees in other places are planted. From the perspective of landscape design, the planting of these trees is only to meet the greening requirements of the parking lot, and has not achieved the effect of landscape viewing. In the greening of parking spaces, there are only grass planting bricks, small-scale greening within the local area, no consideration of vehicle shading and other issues, some parking spaces are not even green, all of which are constructed with cement concrete, and then simply divide the parking spaces on the basis of cement.

4.2.3 Heat island effect of scenic spots

In the scenic spot, due to the large area of asphalt cement and other hard landscape pavement in the parking lot, the planting of plants is ignored. Especially in summer, when the sun is strong, the hard pavement of these floors does not have the ability of heat dissipation, so a more serious problem is that the temperature of the parking lot in the scenic spot is higher than that in other areas of the scenic spot, forming a heat island effect, which also affects the temperature in the car. In summer, under the sun, the temperature in the car is larger In the same area, the temperature outside the car, and the car park heat island effect, make the temperature inside the car on the basis of the original will have a greater rise, the tourist quality will be greatly reduced.

At the same time, for the scenic spot, as the place with the largest emission, the parking lot must do a good job in the prevention and control of automobile exhaust. Because the large amount of exhaust emissions in the parking lot seriously affects the ecological environment and air quality of the scenic spot, so do a good job in the prevention and control of automobile exhaust in the parking lot to reduce automobile exhaust and bringing environmental problems to the scenic spot, it is also conducive to the physical and mental health of passengers.

4.2.4 Later maintenance and management issues

Most of the scenic spots have been in use since the completion of the parking lot. In addition to the daily work of some park staff, there is no good maintenance and maintenance of the parking lot. For example, some plants planted in the parking lot are withered, and the ground of the parking lot is cracked due to the long-term car rolling plus the sun exposure and rain washing, and the cement ground in some places is even damaged seriously. Some parking signs in the parking lot are seriously worn, and even the lines dividing the parking lot are worn out in some places. These will directly affect the safe parking of passengers.

5. RESEARCH ON THE DESIGN OF ECOLOGICAL PARKING LOT

5.1 Inevitability of the Construction of Ecological Parking Lot in the Scenic Spot

To solve the problem of ecological environment in tourist attractions has reached a point that must be solved. The construction of ecological environment in tourist attractions can not only promote the development of tourist attractions, but also provide a better model for the construction of ecological environment in a region. As the parking lot may become the biggest obstacle to the ecological construction of a scenic spot, the construction of the ecological parking lot in the scenic spot will become an important part of the ecological construction of the scenic spot. The achievements of the construction of the ecological parking lot in the scenic spot not only affect the parking standards of the parking lot, but also advocate the ecological construction of the scenic spot, an important part of the ecological tourism, and the demand of the ecological construction of the scenic spot.

Domestic scenic spots are generally composed of cultural scenic spots and some natural scenic spots. On the one hand, these scenic spots are precious heritages left to people by the heritage of history and culture, and on the other hand, gifts from nature to human beings. The original ground of these scenic spots is not composed of hard pavement such as water mud asphalt, but in the later development of scenic spots, in order to meet the tourism needs of tourists, a large number of hard pavements such as cement and asphalt are used. Although these pavements meet the tourism needs of people, the original landform of the scenic spot is transformed, and the original geological landform of the scenic spot is destroyed. It brings about serious ecological problems.

5.2 Design Principles of Ecological Parking Lot

With the continuous rise of tourism, the tourist reception of the scenic spot is also increasing, and the scenic spot is also constantly improving and developing, which requires us to build a space environment that can meet the needs of people's parking and rest when they travel in a certain space and scope, with the minimum occupation of green area. Parking lot is an important part of a scenic spot. Before, people ignored the ecological problems. In order to meet the impact of parking on the scenic spot, people did not fully consider. With the increasing environmental and ecological problems, at present, the protection of ecological environment has become a problem that people must consider in the development, which also requires that we must consider the ecological problems in the construction of parking lot in the scenic area to develop and construct in the direction of ecological.

5.2.1 Classification principle

In the later use of the traditional parking lot, it only marks the parking spaces of passengers. All cars can be parked as long as they are in the parking spaces, without distinguishing the types of cars. For example, the floor area of buses and minibuses is different, but the classification of parking spaces is the same, which to a certain extent causes a waste of space in the scenic spot parking lot in the construction of a new type of ecological parking lot in the scenic spot, different types of vehicles can be distinguished, such as bus parking area, minibus parking area, battery car parking area, bicycle parking area, etc. According to the floor area of different types of vehicles, parking spaces can be divided, so that the limited land in the parking lot can be used reasonably and efficiently. At the same time, in the face of seasonal tourists, temporary parking can be added in the peak period of tourism, so that in the peak season of tourism, the demand of tourists can be met, and the parking can be cancelled in the off-season of tourism.

5.2.2 Diversity and seasonality of parking lot landscape

In the daily landscape design, we will consider the seasonal factors of the landscape, that is, showing different landscape effects in different seasons, and also in the construction of the parking lot in the scenic area, and we should also consider the seasonality of the landscape. The seasonality of landscape is the different feeling that the landscape brings to people in different seasons of the year. In different seasons, some landscape effects that the landscape elements of plants make to people will be different, so we should consider the use of evergreen plants in the selection of plants, and the flowering plants in winter should also be used appropriately.

5.3 Landscape Elements of Ecological Parking Lot in Scenic Area

5.3.1 Ground pavement of parking lot

The ecological parking lot in the scenic spot should first choose the pavement materials with strong water permeability. First of all, the base course pavement of the surface must ensure the water permeability of the pavement to meet some requirements of the permeable ground pavement, such as the use of gravel layer in the base course pavement, and the mixing of soil and sand, so the water permeability effect will be better. Pervious pavement is generally paved with pervious bricks and grass planting bricks. Permeable brick, a new material, can not only make the surface water permeable effect of the scenic spot better, and the rainwater infiltrate will be better, so as to reduce the surface runoff smaller than that in rainy days, but also have the effect of water conservation, at the same time, it can also alleviate the heat island effect of the scenic spot and maintain the ecological balance of the soil in the scenic spot.

5.3.2 Greening form of ecological parking lot in the scenic area

The greening of the ecological parking lot in the scenic spot is not only to meet the landscape design needs of the ecological parking lot in the scenic spot, at the same time, the ecological parking lot in the scenic spot plays an important role in improving the ecological environment of the scenic spot, and can play a role in protecting the environment of the scenic spot. In the rate of parking lot, we must adhere to the principle of adjusting measures to local conditions. In the process of planting and transplanting trees, we must consider the local environment and climate. When planting local landscape plants, we can introduce some plants suitable for the local climate. In this way, we can not only create a parking lot that conforms to the local local landscape and reflects the local environment. And can design a more novel landscape model and landscape effect.

5.3.2.1. Greening of a parking space

The design of the parking lot in the scenic spot should start from the perspective of vehicle access, passenger safety, no impact on night driving safety, lighting and take into account the overall ecological environment of the parking lot and the scenic spot as a whole. At the same time, it can provide a shady place for the vehicle, as well as the occlusion of the crown of trees to the driver. The greening of parking lot can start from two aspects. The first is to plant around the parking lot. You can plant some tall trees and match them with shrubs and lawns.

5.3.2.2 Greening of parking lot

Evergreen trees and broad-leaved trees, such as cedar and ginkgo, should be used in the surrounding greening of the ecological parking lot of the scenic spot. In this way, the parking lot is made into a relatively closed space, which can reduce the threat of wind to the parking lot. At the same time, some plants that can absorb harmful gases can also be planted, which not only plays an important role in the health of passengers, but also purifies the air environment of the parking lot. In the Bush, you can plant some shrubs and flowers, which enriches the diversity of green plants in the parking lot and improves the recognition of the scenic spot at the first moment when the passengers get off the bus. In addition, plants are also used to make some landscape ornaments, which not only improves the greening of the parking lot, but also enhances the beauty of the parking lot landscape design.

5.4 Energy Saving and Environmental Protection of Parking Lot

In the construction of ecological parking lot in the scenic spot, we must pay attention to the energy conservation and environmental protection of the parking lot itself. The original parking lot basically ignores the environmental protection of the construction of the parking lot itself. We can increase the use of wind and solar energy in the construction of the new ecological parking lot in the scenic spot. These renewable energy can not only alleviate our own energy problems, but also the use of clean energy will not cause pollution to the environment. It can be said that the application of new energy in the ecological parking lot not only makes the parking lot itself an important part of energy conservation and environmental protection, but also play an role for the ecological construction of the whole tourist attraction.

5.4.1 Application of wind and solar energy

When the domestic technology of wind and solar energy was not mature before, due to the high cost of development, there were many areas that did not use wind and solar energy generally for construction. With the maturity of domestic technology, the use methods of wind and solar energy are simpler and cheaper, so they are more and more put into people's daily life. This kind of clean and renewable energy has gradually become common and favorite energy.

5.4.2 Rainwater collection and utilization

Due to the large flow of people and vehicles in the parking lot of the scenic spot, the surface runoff water will be mixed with a lot of pollutants. The water discharged into the river will pollute the water body of the river due to the inclusion of many pollutants on the ground, which will affect the quality of groundwater and surface water, while the evaporation of water resources will cause serious waste of water resources, especially in areas with less drought and areas with uneven seasonal distribution of water, such waste of water resources will seriously affect the local economic development. The collection and utilization of rainwater can not only conserve the water source, but also make rational use of water resources, so as to reduce the stop of scenic spots The destruction of the parking lot to the environment of the scenic spot not only plays an important role in environmental protection, but also plays an important role in the scenic spot.

6. CONCLUSION:

This paper studies the design of some parking lots at home and abroad, mainly aiming at the parking lot of tourist attractions. Through the investigation, it is found that as the most vulnerable part of the ecological environment in the tourist attraction, the parking lot has not been paid attention to and protected accordingly, so the construction of the ecological parking lot in the tourist attraction must be paid attention to and gradually promoted. In the construction of ecological parking lot in tourist attractions, we should abandon the original concept of parking lot construction, and build a more modern ecological parking lot from the perspective of material landscape design and the functions of parking lot, instead of building the parking lot in order to meet the demand of parking as pure as before. The landscape planning of parking lot should be an essential part of parking lot. According to the different problems existing in different areas, a set of landscape design scheme is put forward, which is in line with the construction of parking lot in this area.

REFERENCES

[1]Hu Su hang. 2013. Ecological construction of parking lot. [D]. Changsha. Central South Forestry University of science and technology:

[2]]Bai Ya bin. Study on the ecological planning mode of parking lot in 2014 scenic spot -- Taking the ecological parking lot of Tai bai Mountain International Tourism Resort as an example. [D].Xi'an. Xi'an University of architecture and technology

[3]Chen Ming. 2011. Study on ecological parking lot and its comprehensive evaluation index system in Beijing area. [D]. Beijing. Beijing Forestry University

[4]Qu Zhi. 2010. Research on the planning and management of parking lots in tourist attractions. [D]. Xi'an. Chang'an University

[5]I. L. mchag. 1992. Design combined with nature. [J]. Beijing. China Building Industry Press. 1992:59

Analysis of Export Problems and Countermeasures of Gannan Tungsten Ore

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Abstract: Tungsten ore has an extremely important strategic position in industrial modernization. China's tungsten ore occupies an important position in the world, and Gannan tungsten ore reserves also play an important role in the world's tungsten ore industry. However, the current status of tungsten ore exports is not optimistic. The decline in export resource reserves and low added value of export products have become obstacles to the development of tungsten ore export trade. Some rare metals also have similar problems. This article analyzes the export of tungsten ore in the south of Jiangxi, and puts forward corresponding countermeasures based on related issues, as well as provides theoretical support for the improvement of the export of tungsten ore in the south of Jiangxi. It also provides a reference and model for other rare metals with similar export problems.

Keywords: Gannan tungsten mine; Resource reserve; Export countermeasures

1. IEXPORT PROBLEMS OF GANNAN TUNGSTEN ORE

According to the export situation of Gannan tungsten ore in recent years, we can understand that it has many problems in terms of resource reserves, product structure, and product price. Specifically, it has the following problems.

1.1 Decline in Export Resource Reserves

Driven by the interests of the production enterprises in Gannan Tungsten Mine, large-scale blind mining, the phenomenon of mining rich and abandoning poverty are repeatedly banned, and the resource recovery rate is very low, resulting in serious waste of resources. This makes Gannan tungsten mines face serious shortage of export resources,It seriously threatens the export trade of tungsten ore in the south of Jiangxi. At the same time, the production of tungsten ore is a highly polluting activity. If the discharged ammonia nitrogen and dust are not effectively controlled, the pollution will be very serious. Some tungsten smelting enterprises also arbitrarily discharge tailings, waste rock, waste water, and have serious environmental pollution[1].

With the loss of tungsten ore, the position of southern Jiangxi will be seriously threatened According to the current mining rate, the southern ion-type tungsten ore will be depleted in ten years. At that time, the United States will become the largest tungsten ore country, the price of tungsten ore will increase hundreds of times, and Gannan will be completely controlled by others. And the environmental pollution in southern Jiangxi will become more and more serious, which will seriously damage the ecological environment in this area.The normal life of the people in the area will also be adversely affected, which will also severely restrict the economic development of the people in the area[2].

1.2 Low Technical Content of Export Products

1.2.1 Lack of independent innovation

Because of the long-term lack of planning for the tungsten ore industry in Gannan, and the scientific research and industrialization are very disconnected, the applied technology of tungsten ore has a large gap compared with developed countries such as Europe, the United States, and Japan, and it lacks independent innovation,especially new tungsten ore mines. Material devices and end-use technology are particularly obvious. At the same time, new technical results of tungsten ore with independent intellectual property rights in the area are relatively scarce. The transformation and industrialization of new technical results of tungsten ore are relatively lagging. It leads to poor competitiveness and sustainable development of the industry. As this situation is difficult to change in the short term，developed countries such as Europe, America, and Japan will continue to take advantage of their advantages in high-tech fields,They will use intellectual property rights, technical barriers to trade, and other means to curb the development of the application industry in the south of Jiangxi. Competition will become increasingly cruel and fierce. Gannan tungsten mine industry is facing increasingly severe challenges。For a long time, the investment in basic research and application development of the Gannan tungsten mine has been insufficient，this has resulted in a lower applied technology content in Gannan tungsten ore,there are more imitation products and fewer innovative products,development and application are relatively lagging. Today, the overall scientific research and application promotion level of the Gannan Tungsten Mine lags behind other provinces and regions in China.

1.2.2 Low added value of export products

Tungsten ore products are divided into primary low-end products and tungsten ore functional high-end material products.However,Gannan tungsten ore is still in the initial stage of production in the tungsten ore industry chain, and it can only isolate specific tungsten ore elements from ore with more complex components；even if there is a processing industry,it still stays in the simple primary purification, sintering, and crushing[3].

So far, although the technology of extraction and separation of tungsten ore in Gannan has been at the leading level, it is very lacking and lagging behind in the production technology of tungsten ore functional materials Some developed countries, such as Japan, Europe, and the United States, have mastered the core technology of tungsten ore functional materials, which severely restricts the shift of the southern Jiangxi tungsten ore industry to the high end of the industrial chain. Gannan's tungsten ore industry chain is incomplete, there are too many primary products, and the technology content is not high. This has given the international tungsten ore industry an opportunity to allow the other party to drastically lower the price of tungsten ore primary products exported from Gannan.

2. MEASURES TO PROMOTE EXPORTS OF GANNAN TUNGSTEN

To manage the export trade of tungsten ore, it is not enough to rely on trade policies to restrict exports. The most important thing is to comprehensively regulate the industrial chain of production, deep processing and export from the source. Specifically, it can be implemented by the following measures.

2.1 Management of export resources

2.1.1 Improve policies and regulations, regulate corporate behavior

The Gannan government should formulate and improve corresponding tungsten resource management policies and regulations. And each tungsten ore enterprise should implement relevant regulations such as "Access Conditions for Tungsten Ore Industry" and "Emission Standards for Tungsten Ore Industry Pollutants" as soon as possible. Letting the price of tungsten ore reflect the scarcity of resources and environmental costs will increase the cost of enterprises, accelerate the survival of the fittest, and effectively regulate the production behavior of enterprises.

2.1.2 Establishing a strategic reserve system for tungsten ore resources

At present, Japan plans to provide economic assistance to poor countries with rich tungsten mines to ensure a stable supply of tungsten mine resources. The EU and the U.S. are also accelerating the deployment of tungsten reservesIn 2013,the European Union formulated the relevant reserve strategy principles in advance, while the United States has adopted a two-pronged approach to legislation and local resource development, restricting or stopping the development of domestic tungsten mining, and instead importing from Gannan, laying a foundation for the reserves of tungsten mineral resources. We should also learn from these countries and make good strategic reserves of tungsten ore products, which can win us bargaining chips for purchasing more high-tech and high-tech products. This helps Gannan to gain more initiative and voice in the conventional war of international trade. For example, open source and reduce expenditure,and then look for new tungsten mines around existing mines. Then strive to improve the direct collection and selection rate, expand the resource recovery and utilization rate, establish a resource-saving industry,and achieve sustainable development.

2.1.3 Strengthen foreign investment management and strictly control project approval

At present, in order to reduce the dependence on Gannan tungsten ore, in addition to political and trade pressure on Gannan, it has also greatly strengthened the research and development and exploration of tungsten ore.The Japanese government is working hard to promote the research and development of tungsten substitute materials and tungsten recovery technology,such as strengthening cooperation between tungsten producers in Asia and Africa to seek tungsten ore resources.In addition,Japanese companies produced and used tungsten ore products in Gannan, eliminating the need for export links and also losing tariff revenue in Gannan. The French company Rhodia invested in Gannan to produce tungsten ore deep-processed products and export them, occupying the tungsten ore export quota in Gannan.

Therefore,the Gannan government needs to strengthen foreign investment management and prohibit foreign investors from setting up tungsten mining enterprises in Jiangnan. Wholly foreign-owned enterprises are not allowed to hold tungsten smelting and separation projects. It can only be limited to joint ventures and cooperation; foreign investors can be encouraged to invest in tungsten ore deep processing, new materials for tungsten ore,and tungsten ore application products. Deepen the reform of the use of foreign capital in the tungsten ore industry, promote the sustainable, rapid, and healthy development of the tungsten ore industry in southern Jiangxi, and realize the strategic goal of turning the advantages of tungsten ore resources into economic advantages.

2.2 In terms of Export Product Structure

Encourage and strengthen independent innovation of enterprises to increase the added value of tungsten products.

The government can formulate corresponding regulations，encourage enterprises to innovate in new and high-tech fields such as new materials and devices for tungsten ore and end-use technology,and increase financial investment to cultivate enterprise research and development capabilities. Strengthening independent innovation capabilities requires funding to support.In order for a country to have high innovation capabilities, it must invest a lot of money in scientific research. Our government should actively create a good policy environment. Enterprises should not only reduce their deductions for scientific research funding,but also encourage their independent innovation in product technology and improve their financial support capabilities. High-tech companies approved government procurement and other policies. We will accelerate the development of a multi-tiered capital market, give full play to the functions of the newly established gem board, and support diversified venture financing for emerging enterprises. Focusing on the implementation of the Thousand Talents Plan, we will work hard to strengthen the introduction and training of high-level innovative talents, and encourage scientific and technological personnel to go deep into the enterprise to provide corresponding services. Enterprises should actively carry out independent innovation on primary products,master the core technology of producing tungsten ore functional materials,product and export of high-tech content and high value-added products，in order to promote the shift of the Gannan tungsten ore industry to the high-end of the industry chain[4].

2.3 In terms of Export Product Prices

Develop futures market and establish international pricing center.

In the modern market system, the futures market has three major functions: price discovery, risk transfer and increasing market liquidity. It provides a public bargaining platform and forms a transparent pricing mechanism recognized by the international market. By introducing a large number of transaction entities, a public bargaining situation is formed. So far, most of the international markets have been formed through the world's major futures exchanges. In recent years,with the improvement of the international capital market situation, Jiangnan has opened up futures varieties such as zinc and gold，It has played an important role in price discovery, risk transfer and improving market liquidity, and has also laid a foundation for enterprises to further master pricing power.

The launch of tungsten ore futures can attract most companies as trading members, and each transaction is publicly quoted and centralized, which makes it easy to form a price alliance. At the same time, it provides enterprises with warehousing, quality inspection, logistics distribution, and fund settlement functions. There are opportunities for many private investors to participate and increase private reserves without the state reserve system for tungsten mines.

3. SUMMARY

For resource-based enterprises such as tungsten ore production, the scarcity and non-renewability of tungsten ore resources make the possession of tungsten ore resources the most critical bottleneck that restricts the development of tungsten ore enterprises.At the moment when the state's regulations on tungsten ore are becoming stricter, the supply of tungsten ore in the province will become less and less, which will not be enough to supply Gannan's own needs, and use foreign resources to promote the development of the country.Instead, import large quantities abroad. In the field of primary tungsten ore production, Gannan tungsten ore enterprises have original technology, and at the same time, the technology is also at the leading level. With the increasing proportion of tungsten ore resources export in the southern part of Jiangxi, more prominent problems and more and more problems encountered in the international market, how to better promote the export of tungsten ore resources in the southern part of Jiangxi is currently not allowed. Important issues not resolved.This article analyzes the existing problems in the production and export of tungsten ore in southern Jiangxi, and then puts forward suggestions for improving the export of tungsten ore in southern Jiangxi.

REFERENCES

[1]He Weiwei. Spatiotemporal distribution and new progress of ore prospecting in the southern Jiangxi tungsten deposit. China Mining. 2018-08-26.

[2]Zhao Kang, Zhou Keping, Tu Xubao, Zhao Kui, Zeng Qiang. Analysis and countermeasures of ground pressure problems in tungsten mines in southern Jiangxi. Mine Engineering. 2018-06-15

[3]Liang Gumei, Ma Ming. Investigation and analysis of the current situation of competitive price reduction in the tungsten ore industry. Tungsten Ore Information 2015-06.

[4]Zhang Lubo. Research on China Tungsten Ore Export Pricing Rights. China University of Geosciences. No. 8 2015.

On the Significance of Home Visits to the Aiding Project in Universities

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Abstract: Through home visits, the gap between the impoverished college students' families and universities is bridged, an educational joint force is forged, and thereby necessary help can be offered to the impoverished college students. To ensure the effectiveness of home visits the following three principles should be observed: objectivity, depth and authenticity. The aiding work should aim to help the impoverished college students develop their comprehensive competence to support themselves and it should be personalized and multilateral. Home visiting can play an especially important role in the aiding work.

Keywords: Home visits; impoverished College students; Qualitative research; Educational narrative

1. INTRODUCTION

Helping the impoverished college students is an important project in universities. Visiting their families and investigating the growing environment and family status of the impoverished college students is of extreme importance in helping them. It is time-consuming to visit the families of the impoverished students because it might cover large number of regions, however, it is the best and the most direct way to find out why the students are in poverty and what specific difficulties they are confronted with. Therefore, home visits are of great significance to help the impoverished students in universities. Then, how can educators help the impoverished college students and thus achieve better education effect on the impoverished college students through home visits?

2. ANALYSIS ON THE ROLES OF THE EDUCATORS WHO VISIT THE IMPOVERISHED COLLEGE STUDENTS

Whether home visits can have a positive education effect on the impoverished college students is, to a certain extent, determined by the educators who visit their families. As an important bridge between the universities and the impoverished students' families, the home visiting educators can play four roles, which directly affect the quality of the home visits and thus the quality of the aiding work.

Firstly, through home visits, the visiting educators can learn about the growing environment and the present situations of the impoverished students, so that they can provide better advice for their universities on how to help the students in need. The visiting educator shave become "thermometers" for their universities to "measure" the growing environment and current situations of the impoverished students.

Secondly, through home visits, the visiting educators can communicate with the impoverished college students' parents about the school performance of their children, playing the role of "Monitors" for the poor families and keep them well-informed about their children's school life.

Thirdly, through home visits, the visiting educators can spread the relevant national policies and their school systems to the poor families. The home visiting educators are like the "mouthpiece" of their universities and make the policies and decisions of their universities known by the impoverished families.

Fourthly, through home visits, the visiting educators can deeply understand the different backgrounds of different impoverished students, become better aware of how important each individual student is to their family. Therefore, the home visiting educators are also a "promoter" who can promote the understanding between the universities and the visited students.

3. PRINCIPLES OF HOME VISITS TO THE IMPOVERISHED COLLEGE STUDENTS

The educators who visit the families of the impoverished college students must follow certain principles in the process of home visits in order to gain more insights into the students' actual situation and make a more accurate and scientific investigation, so as to help the students solve their problems in their growth.

First, the principle of objectivity. In the process of home visits, the visiting educators should eliminate their subjective perspectives, analyze the process of communication objectively, and make objective records of the home visits, so that they can make a more objective description about the interviewed families, more exactly feedback to their schools and offer more feasible advice to help the impoverished college students.

Second, the principle of depth. Before conducting the home visiting work, educators should make sufficient preparation to have all-round information of the poverty-stricken students and their families. In the process of home visiting, when the educators are in the growing environment of the impoverished college students, they can directly understand the problems that the visited students are faced with.

Therefore, in addition to performing the routine home visiting procedures, educators can adopt the *Three Ones* approach, i.e. walking together once -- walking around the residence with the visited student; chatting once – chatting deeply with their neighbors; doing together once -- doing farm work with the students and their families, so as to sense the situation and life pace of the interviewed students. The *Three Ones* approach can help the home visitors deeply analyze the growing problems of the impoverished students.

Certainly, in order to achieve the depth principle, educators must also make specific preparation for each case. As mentioned in the related research: "Teachers should find appropriate entry points to start the conversations with varied parents. Only in this way, can the communication resonate with the parents in educating their children and then we can truly enter the children's world" [1].

Third, the principle of authenticity. Apart from material shortage caused by the poverty of their families, the growth problems of the impoverished students are multifaceted. Although the majority of the impoverished college students are adults, whose growth problems might be caused by many other factors, their original family still has the largest effect on them.

This authenticity principle is achieved on the basis of the above two principles: objectivity and depth. On one hand, educators must dissect the superficial phenomena in the communication, further analyze them and find out the root of the growth problems of the visited students. On the other hand, the visiting educators should objectively describe the growing environment and family situation of the visited students, make exact growth profiles of the visited students and lay a solid foundation for the aiding work of the university.

Through home visits, an objective, in-depth, and authentic investigation on the family situation of the impoverished college students will be made, which, to a certain extent, can provide an important reference for the university to help the students solve their growing problems.

To achieve the three principles during the home visits, strict preliminary preparations are required, for example, a scientific visiting procedure should be made in advance, the visiting educators should be trained to be more professional and so on. Only when the visiting educators are well-prepared can they accomplish the visiting task and thus achieve the goal of effectively helping the impoverished students.

4. SIGNIFICANCE OF HOME VISITS TO THE AIDING PROJECT IN UNIVERSITIES

4.1 Shift of Emphasis on How to Help the Impoverished College Students

The impoverished college students, as a group of students of great concern in universities, are accustomed to regarding the school aid as financial. In the past, the home visits were focused on material assistance, but the financial aid shouldn’t be the core way to solve the growth problems of the students in poverty.

Related studies have statistically analyzed the relationship between college students’ family background and the level of the scholarships they obtained. A conclusion was drawn from the studies that "students with family financial difficulties got more grants instead of scholarships or some of them just got more lower - level Scholarships" [2]. It is indicated that financial aids will lead to inertia of students in the long run. Therefore, financial aiding can only be a supplement aryway instead of a dominant one to help the impoverished college students.

In visiting the families of the impoverished college students, educators found different reasons for the poverty of their families, which have correspondingly done great psychological harm to the students, who may be too sensitive, self-abased, relatively closed and so on.

Meanwhile, through the home visits, it is found that the impoverished students have greater independence and ability to bear hardships and stand hard work compared with their peers.

Therefore, universities should put emphasis on the guidance of the growth and academy of the impoverished students, that is to say, they are supposed to give priority to the students’ academic growth and the development of their overall ability at the same time, which should be the core of the aiding work in universities. This is beneficial for the impoverished students to maintain psychologically and physically healthy, win more scholarships, cultivate the comprehensive ability and the competitiveness in their future employment and entrepreneurship, and thus the transformation from the Indemnificatory funding to developmental funding can be realized [3]. In doing so, the impoverished students will be regarded as an important group who may become successful talents, which will greatly motivated them.

3.2 Significance of Home Visits to the Aiding Project in University

As instructors and guides of the impoverished college students, the visiting educators should recognize the specific needs of the students in their growing process as well as their characteristics and advantages. Educators can make full use of the home visits to help the impoverished college students in the following two aspects.

Firstly, according to the information from the professional home visits the universities can offer personalized help.

On the one hand, according to the different causes of poverty, the universities are able to divide the impoverished students into different types and guide them in different ways. They can establish and improve the personal growth files of the impoverished students, make personalized training programs on the principle of "scientific guidance", conduct personalized psychological guiding, academic tutoring and material aiding according to their specific situation, so as to help the students achieve both mental health and academic progress.

On the other hand, the labels of "rural" and "poor" on the impoverished college students will be transformed into symbols for their special advantages in talent training. The impoverished students can be organized into associations according to their majors. Educators can establish a psychological guiding system in the association, offer regular mental health education, and help the students acquire a correct understanding about poverty and themselves, so that they can be encouraged and concentrate on learning; Educators can also make use of the familiarity with rural areas of the rural impoverished students, exploit their professional knowledge to teach in their hometown and educate the villagers; What’s more, universities can offer the impoverished students opportunities of participating in the projects involving agricultural innovation. In doing so, the impoverished students can help each other, improve their skills together and eventually, as a result, their comprehensive competence is improved, too.

Secondly, according to the information from the professional home visits, the universities can try to offer the impoverished students multilateral help.

On the one hand, Educators will try to understand the situation of the impoverished students in question, fully consider their difficulties, guide them whole heartedly.

On the other hand, multi-party contacts should be made to solve the problems on the basis of the information obtained from the home visits.

Above all, the universities can establish a long-term relationship with the impoverished students' families, and pay attention to the situation of their families as well as the growth of the students. Then, the universities can establish a long-term relationship with the class to see that the impoverished students keep their dignity in the class, avoiding the sense of inferiority. The universities can also establish a long-term relationship with the society in order to provide academic guidance and tuition support for the impoverished students by offering them chances of social practice and regular internships, which may also help them lay a foundation for their future career development after graduation. What’s more, the universities can establish a long-term contact with the local governments in the impoverished students’ hometown and communicate with them about the situation of the impoverished students and their families. Only when the above several parties cooperate well can the problems be solved effectively.

4. CONCLUSION

Home visiting is an effective way to make an objective, deep and authentic investigation on the situations of the impoverished college students, which can play a significant role in aiding the college students in poverty. Meanwhile, further studies on how to solve the growth problems of the impoverished college students can be conducted, which may provide some valuable experience and improve the efficiency of the aiding work in universities. Educators should insist on the developmental aiding and help the impoverished students improve their comprehensive competence, exploit the positive effect of home visits on the aiding work and make it a core way to help the impoverished college students.

REFERENCES

[1]Min Liang, Jia Chen. Correcting the deviation in the process of teachers' home visit. Teaching and management. 2019 (7).

[2]Liu Hong. Research on the influence of graduate student's charging policy and award system on graduate student's study. Journal of education. 2019 (2).

[3]Ying Xu, Tianyue Li. Development funding: a new dimension of the development of university student funding in the new era [J]. Education review. 2018 (2).

Research on Color Application in Graphic Advertisement Design

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Abstract: In the fierce competition environment, advertising has always been an effective way for enterprises, organizations, societies and other organizations to improve their popularity and sell products. Graphic advertising design is often used by many businesses and social organizations. Print ads mainly rely on text, pattern, number and other elements to convey the main idea to the outside world. For a graphic advertising design, color is its life. From ancient times to modern times, the role of advertising is not to be ignored, and the role of color in advertising is also worth thinking and studying. A vigorous advertisement can not only directly touch people's hearts, but also convey the central idea of advertisement. If the new products come out and the advertisements are in place, then the first sales show must be a good one. If consumers don't know about them, how can they understand and "rob like crazy"?! Therefore, in order to achieve business objectives, many enterprises and organizations will work hard in advertising design and strive to win the attention of the public for products. In this paper, the author will analyze the important role of graphic advertising design in enterprises and campus communities and the importance of color in this kind of advertising, and discuss how to effectively apply color in graphic advertising.

Keywords: print advertising; color design; color effect

1. INTRODUCTION

The Advertising, in fact, is to let people know something widely. People will be interested in familiar products or things, and then they will have the desire to know or even buy. Only promoting the products in place can enterprises sell them smoothly and handily. Through advertising, people can understand the advantages, characteristics and uses of the products, better match the products with the requirements. Consumers can buy the right products in the shortest time, and enterprises can effectively sell the products[1].

2. AN ANALYSIS OF THE IMPORTANT ROLE OF ADVERTISEMENT

2.1. The role of print advertising in the sales process of enterprises

The enterprise is a collective with the purpose of making profits, and its business is to maximize its interests. Advertising is an important marketing means for enterprises to create classic brands and launch new products. Under the condition of fierce competition in the industrial environment, it can stand out from a wide range of similar products. In addition to the quality of the product itself and other factors, advertising is also crucial. Paper advertising, electronic advertising, text advertising, verbal advertising, video advertising and other types are selected by enterprises, among which graphic design advertising is one of the traditional and typical forms of advertising.

As early as in ancient times, there were products printed on paper for advertising in our country. Therefore, the importance of print advertising in the sales process of enterprises can be seen. For example, taking the sales of new houses in the real estate industry as an example, from developers buying the land to builders providing the use and design of the real estate, the advertisements about a certain real estate will be widely publicized. The advertisement, which contains multiple information, such as the distribution of the house area and the hall, the sales price, the preferential policies during the period of sale, the location and the surrounding supporting facilities, can let the house purchasers come to purchase actively during the opening sale, which provides a harbor for the house purchasers and achieves the business purpose of the enterprise on the other hand.

2.2. The outstanding performance of print advertising in campus community activities

Generally speaking, when it comes to advertising, we all think of enterprises, sales, etc. the author thinks that print advertising also plays an important role in campus community activities. For example, when a club starts to recruit members, how can new students be interested in it? Advertisement is the best choice. Through the paper-based advertising, we can convey the basic information of the community to the future members, and make them resonate with the community from the perspective of values and identity, which can not only expand the scale of the community staff, but also create a new organization and new family for the new students[2].

Another example is that a certain club will hold lectures by experts or famous teachers. Through the print advertisement, we can simply introduce the basic information such as the guest speaker, the theme and topic of the lecture, the time and place of the lecture, which is helpful for other people to judge whether the lecture is the activity they need or want to participate in, and also enable the students who like the theme or worship the guest speaker to participate in and have close contact with the idol, which not only solve the awkward situation of the cold field of the lecture, but also give full play to the main role of the lecture. There are many kinds of activities on campus, which can give full play to the role of advertising and lay a favorable foundation for the better development of campus activities[3].

Therefore, no matter in which industry or field, print advertising is an effective means of publicity and an effective choice to achieve the desired effect[4].

3. COLOR DESIGN IS THE SOUL OF PRINT ADVERTISING

It is often said that the world in people's eyes is colorful. In fact, the reason why life is beautiful is that the filling of color makes the things that have no life full of vitality. With the color of embellishment, life is rich and diverse everywhere. Color can attract the viewer's attention intuitively, and it can also make the viewer resonate emotionally[5].

3.1. Sensory function of color

If the print advertising is a piece of paper, then it is like a page in the textbook, which will not be noticed by many people. But if it's an advertisement with words and pictures filled with colors, then many people are attracted by the colors first, then read the text immediately, and have a preliminary understanding of the things to be publicized. Therefore, the first "eyeball" is caused by the direct effect of color on human senses.

The direct effect of color on human senses is incomparable with that of words. For a print advertising of selling real estate, it will attract people's attention more than a black-and-white advertisement, and make people want to know more about it. For another example, for a newly opened hotel, the basic style of the dishes can not be intuitively realized by the colorless recipe publicity map, and the filled recipe advertisement shows the true color of the dishes to the consumers, which is of great help to the customers' yearning for dining. Therefore, it is the key to play the role of advertising to do a good job of color matching in print advertising.

3.2. Emotional function of color

As the saying goes, the eye is the window of the heart. Where the eye reaches, the heart will follow the association and feelings, and express the inner feelings. When people see red, they think of the sun and fire, so what they show is also a dynamic emotion. When you see blue, you will think of the color of the sea or the sky, and your heart is broad and comfortable. Because of the different colors and the different characters of viewers, the application of colors in advertising design will bring different effects.

For children's product advertisements, they usually focus on bright and lively colors, which can make children interested; however, if they focus on product marketing for college students, they will choose stable and mature color matching to arouse the interest of college students. For men's product marketing advertisements, they will focus on medium or light colors to match men's calm personality and broad mind, while for women's consumer products, they are mainly pink and yellow, showing warm and amiable characteristics. Different age, gender and personality are all aspects that are needed attention in graphic advertising design.

4. COLOR EFFECT IN GRAPHIC ADVERTISEMENT DESIGN

Print advertising is an important medium for enterprises or organizations to publicize their products and services. The success or failure of advertising is directly related to the sales results of products and services. A product and service with a cold degree of publicity can not be recognized and accepted by the majority of consumers. The collocation and application of color is an important factor affecting the advertising effect. People's appreciation of beautiful things is the basis for advertising. The perfect combination of color and content will enable viewers to enjoy a good visual effect and at the same time, they can't help but understand the key content of the promotional products, laying a solid foundation for later sales and purchase. The followings should be paid attention to when using color matching in graphic advertising design:

4.1. The reasonable color matching.

Color matching is a wonderful and complex subject. The designer's mastery of color matching expertise directly affects the overall effect of advertising. There are various kinds of colors, different methods of distinguishing warm color, cold color and neutral color, and different matching principles. The conflicting color matching will make the advertisement lose the color harmony. In an advertisement, the problem of too many colors should be avoided. Too many colors will dazzle consumers, lose their sense of beauty, and even make them fidgety and reduce the overall sense of the advertisement.

4.2. Choose the main color according to the characteristics of consumer groups.

For enterprises, the marketing target group of certain products is not all groups. Some are for the young, and some are for the old. Besides the age difference, there are also differences in gender and personality. Only on the basis of fully mastering the color matching knowledge of different personnel categories and timely understanding the characteristics of the target group, can the advertisement designer design a perfect print advertising. If it does not meet the requirements of the target group for color, the advertising will face the situation that no one will pay attention to the product.

4.3. The main content of advertising and color matching.

Advertising is an important medium for enterprises or organizations to promote products and services to consumers. If the content of advertising is inconsistent with the matching color, it will cause consumers' misunderstanding, and then affect the marketing results of products and services. If we design the advertisement about milk food, the indispensable color should be milk white, green of grassland, color of cattle and sheep, etc. The selection and utilization of color should be consistent with the characteristics of the advertised products.

The application of color in advertising design can make plain print advertising appear in a new form in front of consumers. The color effect in advertising is the enjoyment of beauty by viewers and consumers.

5. CONCLUSION

Advertising design is an inevitable choice for enterprises and organizations to publicize their products. Print advertising is an indispensable part of it. In the era of pursuing beauty, it is a skill that the advertisement designer must master to let the color fill the print advertising. The matching of colors, the matching of colors with the target groups of advertising and the combination of colors with the main contents of advertising itself are important indicators that directly affect the advertising effect. It is a new requirement of graphic advertising design for designers and design industry to have deep professional skills of color matching and skillful use. Under the condition of increasingly fierce market competition, it is an important guarantee for the survival of enterprises to lay a solid sales foundation for the original products and create a smooth marketing channel for the new products. Product publicity and powerful advertising media are the marketing tactics that enterprises and organizations must attach importance to. Learning and mastering the color matching skills, researching and understanding the characteristics of the target groups and ensuring the consistency of the content and design concept are the basis for designers to make good advertisements, which is worth further learning.

REFERENCES

[1]Huang Yifan, “Application of color in graphic advertising design,”Journal of Hunan Mass Media Vocational and technical college, 2009 (9).

[2]Huang Yamei, “On the use of color in modern graphic advertising design,” Journal of Jilin radio and Television University, 2012 (2).

[3]Wang Xiaosheng, “Color application and economic efficiency in graphic advertising design,” Journal of Tongji University (SOCIAL SCIENCE EDITION), 2000 (1).

[4]Sun Zuofan, “On the use of color in graphic advertising design,” Popular literature and art,2011 (2).

[5]Zhao Qiaohong, “Color application in graphic advertising design,” New western Xunyuan, 2011 (4).

The Blended Teaching in University: Status and Application Exploration

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Abstract: In the era of educational information, blended teaching with its unique advantages has gradually transformed into a hotspot for teaching reform. There is not much literature that points to practice of blended teaching. Based on analysis of current situation of the organizational form, the course attributes, and the construction of blended teaching in universities, it finds the shortcomings that it faces in promoting and applying based on the comprehensive perspectives of universities, teachers and students. And it further proposes that a collaborative promotion mechanism that integrates the trinity of colleges, teachers and students should be established to better achieve the application effect of blended teaching.
Keywords: Blended teaching; Status analysis; Collaborative promotion mechanism; Application effect

0. INTRODUCTION

Blended teaching is neither a new-concept nor a new-comer in the higher education system. Since the application of information technology to traditional teaching and integration with the curriculum, the term of "blended teaching" has been repeatedly mentioned. The combination of information technology makes possible for online teaching also provides a solid foundation for the increasing popularity of blended teaching. However, there is not much literature on how to specific apply and evaluate in colleges and universities. In addition, it remains much concerns, challenges, and different opinions on the blended teaching. So this study builds on previous literature into understanding the definition and connotation of blended teaching, and exploring the specific implementation and application based on the current situation analysis.

1. CONNOTATION ANALYSIS OF BLENDED TEACHING

Blended teaching refers to the combination of various learning methods in a broad sense. In the narrow sense, it tends to combine the face-to-face learning with networked learning to obtain the best learning results. With the concept of learning-centered proposed, the connotation of blended teaching has been further enriched. There are multiple levels of understanding. Some even equate blended teaching with blended learning. In fact, there are some differences between the blended learning and teaching. The former highlights the students' principal role based on constructionist in educational thought. While in blended teaching, it needs to start from the guiding and facilitator role of teachers to ponder how to help student achieve the optimal learning effect, which reflects multiple and deep hybrid of the curriculum platform functions, the online resource construction, the student learning methods and the teaching process. In addition, the blended teaching also places higher requirements on teachers because in addition to integrating various effective teaching methods and information technology, they still need to implant emotions and insist on student-centeredness to maintain or even enhance the communication with students. So comparatively speaking, the blended teaching may be strategy terminology much more suitable for teaching.

2. CURRENT SITUATION ANALYSIS OF BLENDED TEACHING

With the advancement of the "Internet + " education era, the blended teaching enters the field of higher education rapidly. Just as the December in 2017, the curriculum resources of domestic MOOC platforms have reached more than 3,200 courses. Research on blended teaching has also gradually expanded from theoretical foundations, frame analysis, teaching design, and model development to the integration with various intelligent teaching tools such as the ketangpai, the rain classroom, the online forum, etc. Research perspective is also multi-dimensional including policy support, college investment, teacher's attitude and competence, the autonomy learning and engagement of students and so on. There is some status about blended teaching in present as follows.

In terms of organization. Although there are differences in the nature of the course, student group, class size, and technical conditions, the teaching phases can be divided into the pre-class design, in-class teaching, and after-school evaluation in general. Through the effective connection of these three stages, the best elements of online and ground teaching can be perfectly integrated to provide students with more valuable knowledge and pleasant learning experience [1].

Analysis from the attributes of the course. Perhaps it is related to the technicality of science and engineering teachers. On the whole, the online open courses of science and engineering are slightly higher than those of literature and history. Taking the first National College Blended Teaching Design

Innovation Competition in 2019 as an example, more than 250 universities, 663 courses participated in the preliminary competition, and 204 courses entered the rematch. There are 30 courses in the finals, including 11 in Chinese history and 19 in science and engineering. It is also found that the curriculum system of the same subject has not yet been constructed.

In terms of construction of the course. The effective development of blended teaching needs to be fully integrated with various curriculum resources, and teachers also need to invest a large amount of time, energy and effort. Studies have pointed out that the core of blended teaching lies in instructional design. Good instructional design and organization can significantly promote effective connection of every blended teaching component, and thereby improve its effect. From the perspective of the first National College Blended Teaching Design and Innovation Competition in 2019, the 30 finalists came from 26 colleges and universities, mainly provincial universities and public colleges. Perhaps due to the lack of funding and technical support, the design and application of blended online teaching lags slightly in some local private colleges and universities.

3. APPLICATION ANALYSIS OF BLENDED TEACHING

From the perspective of university. Although the competitiveness evaluation of colleges and universities is divided into the teaching quality and the subject evaluation, which are both mainly measured by some objective and easily quantifiable indicators, such as articles, enrollments and research projects. Under the guidance of this system, colleges and universities tend to focus more on scientific research, while neglecting something in the teaching method innovation, student feedback, training quality and other factors. There is a paucity of clarity evidence to accurately reflect or calculate the workload related to the blended teaching in some university [2]. A comprehensive teaching quality evaluation and monitoring system has not yet been fully formed. In addition, a phenomenon has emerged that teaching facilities fail to meet the normal needs of blended teaching. In a real sense, the university plays a vital role in profession development and technical support and for the blended teaching [3]. If the responsibility and duty are ignored, the university may eventually restrict the further development of blended teaching.

From the perspective of teacher. Blended teaching is neither a simply transfer of offline classroom to online teaching, nor a direct mix of face-to-face teaching with watching videos and completing homework after class. It requires teachers to actively explore and learn for better participate in the online classroom guidance and management, and deliver skills and knowledge to students at the right time, then realize a balanced utilization between the online and face-to-face teaching. In a way, this has triggered teachers' negative attitudes which are harmful for their perception of blended teaching. What’s worse, these affect the approach to design and deliver the course, which impact the quality of blended teaching ultimately. For example, if the teacher views blended teaching as applying technological media to realize the intended learning performance of course design, he/she is inclined to help students to produce or develop new ideas in the course design [4].Otherwise, if teacher regard the technology as just a substitution of himself/ herself, which may reduce the quality in blended teaching.

From the perspective of students. Blended teaching creates a truly high participatory and personalized learning experience for students. It strengthens the student's subjective role and the teacher's guiding role invisibly. Students also should develop different learning methods for every aspect in blended teaching. Because neither learning skills nor learning platforms in single can offer the needed conditions to achieve a valid blended learning scenario. However, long-term exam-oriented education has led to students' lack of critical thinking and autonomous learning ability, which results their incompatibility with this method. These further exacerbate the dissatisfaction of some students.

4. COUNTERMEASURES ANALYSIS OF BLENDED TEACHING

Needless to say, the reform of blended teaching in colleges and universities is a general trend, and its effect also be affected by many factors. In order to achieve full and effective integration of online and offline courses, it needs to build a collaborative mechanism between the colleges and teachers, also pay attention to the role of students.

Specifically speaking, colleges and universities should establish perfect support and incentive mechanisms, actively promote teachers to carry out blended teaching attempts and reforms, and provide teachers with the necessary training or resources. Simultaneously, strengthening the construction of study style and student work to improve students’ initiative in autonomous learning is also significant. In addition, it is necessary to actively explore the blended teaching model with school-enterprise cooperation. For the teachers, they should uphold the concept of lifelong learning to actively improve their own outside of blended learning design and application capabilities, a course team should also be established to select the appropriate platform for online teaching. In this way, the ground teaching can be used more as a guide for students' personalized learning. Finally, for the students, it is urgent to improve their learning ability, and transfer the passive reception of information into active exploration, proactively increase the class engagement. Taking the problem-oriented learning dialectically to look at the differences and integration of the knowledge taught by teachers and the resources of various teaching platforms is also required.

5. CONCLUSION

There are indeed some shortcomings in the current state of blended teaching in universities ，and quality remains to be an important issue from beginning to end. As suggested by "Horizon Report" in 2017 New Media Alliance that there will be more blended learning design, various kinds flipped classroom, mobile learning, maker culture space, massive open online courses in the short-term. And there also will be a great development. However the implementation and promotion of this teaching mode need to be carried out step by step, as well as the coordination and participation of multiple parties. For those direct stakeholders of education, it is their obligation to actively integrate blended teaching strategies to better achieve effective blending of online and offline. So this research concentrates on the multi-angle analysis of university, the teachers and the students together to put forward some suggestions for advancing and participating in this new teaching paradigm in an orderly manner.

REFERENCES

[1]Gilbert, J. A., & Flores-Zambada, R. (2011). Development and implementation of a “blended” teaching course environment. MERLOT Journal of Online Learning and Teaching, 7(2), 244-260.

[2]Tynan, B., Ryan, Y., & Lamontmills, A. (2015). Examining workload models in online and blended teaching. British Journal of Educational Technology, 46(1), 5-15.

[3]Ocak, M. A. (2011). Blend or not to blend: a study investigating faculty members perceptions of blended teaching. World Journal on Educational Technology, 2(3), 196-205.

[4]Ellis, R. A., Steed, A., & Applebee, A. (2006). Teacher conceptions of blended learning, blended teaching and associations with approaches to design. Australasian Journal of Educational Technology, 22(3), 312-335.

Research on the Green Education Path of Local Higher Vocational Education under the Concept of Green Education

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Abstract: Green education is a brand-new modern education concept in the new period, and it is a new requirement of society for talent training goals in higher vocational colleges. This article aims at the demand for professional green talents in the Guangdong-Hong Kong-Macao Greater Bay Area, elaborates the current status of green education development, analyzes the problems existing in the training of green talents in local colleges and universities, clarifies the goals and content of green talent cultivation, and formulates green talents for professional staff The training path provides a certain reference for the cultivation of green talents in local senior staff.
Keywords: Green education; Guangdong-Hong Kong-Macau-Greater Bay Area; higher vocational engineering specialty

1. INTRODUCTION

In order to cope with the urgent needs of high-quality economic development, the Guangdong-Hong Kong-Macao Greater Bay Area promotes the green development of the Greater Bay Area. The Bay Area should innovate various ways to support green development[1].The green development of the Guangdong-Hong Kong-Macao Greater Bay Area urgently requires higher vocational education to cultivate green professional talents that meet the requirements of the new era. In order to promote and deepen the reform of the higher vocational education system in the Guangdong-Hong Kong-Macao Greater Bay Area, and to promote the practice and development of green education for the staff and professional majors in the Guangdong-Hong Kong-Macao Greater Bay Area, this article takes green education for the staff and professional subjects in the Guangdong-Hong Kong-Macao Greater Bay Area as the research object. Studying the path of cultivating green talents for higher vocational education majors in the Guangdong-Hong Kong-Macao Greater Bay Area will help enrich vocational education theories, help expand new fields of higher vocational education research, promote the discipline construction of higher vocational education, and help promote And deepening the reform of the higher vocational education system in the Guangdong-Hong Kong-Macao Greater Bay Area will help promote the practice and development of green education for higher vocational students in the Guangdong-Hong Kong-Macao Greater Bay Area. It can be seen that researching the path and model of training green talents for engineering majors has theoretical value and practical significance.

2. DEVELOPMENT OF GREEN EDUCATION

In 2015, the heads of State of the United Nations adopted the 2030 Development Agenda, which proposes multiple development goals with sustainable development as the main line. At present, universities in several typical countries (UK, US, Japan, etc.) are actively developing green education and innovative practices. Developing green economy and industry, conducting green education, and training green talents have become the consensus of all countries in the world[2][3].

In 2015, the Central Committee of the Chinese Communist Party of China reviewed and approved the "Opinions on Accelerating the Construction of Ecological Civilization" and proposed "Synergistically Promoting New Industrialization, Urbanization, Informationization, Agricultural Modernization and Greening". The "Made in China 2025" in 2015 took "green development" as a basic strategic guideline for the future development of China's manufacturing industry, put forward "persistence of sustainable development as an important focus of building a manufacturing power, and strengthen the promotion of energy-saving and environmental protection technologies, processes, and equipment[4].Application and comprehensive implementation of clean production[5].The Guangdong-Hong Kong-Macao Greater Bay Area needs a large number of high-level staff professionals who are engaged in "green intelligent manufacturing", and put forward new requirements for the training goals and quality of high-level staff professionals.

3. PROBLEMS EXISTING IN GREENEDUCATION FOR SENIOR STAFF

At present, there are still some problems in the exploration and development of green education for higher vocational majors, such as the incomplete green education system, the lack of green pigment for teachers, the unreasonable curriculum, single teaching methods, weak students' green consciousness, and backward construction of green campuses. There is no ready-made experience and model for green education in the senior professional subjects of Guangdong, Hong Kong, Macao Greater Bay Area[6].Therefore, the construction of a green talent training path for engineering majors in Guangdong, Hong Kong, Macao Greater Bay area, and the green development of Guangdong, Hong Kong, Macao Greater Bay Area, and even the national green education of senior professional staff Development is of great significance.

4. ANALYSIS ON THE PATH OF GREEN EDUCATION FOR SENIOR STAFFMAJORS

4.1. Training objectives and content of green talents

Green talent training goals include green knowledge goals, green value goals, and green practice goals. The goal of green knowledge is to gradually integrate green knowledge into the students' knowledge structure.The content that is closely related to engineering majors includes the concept of sustainable development,ecosystems[7][8],resource conservation, environmental laws and regulations, ecological protection, and coordinated development of people and the environment. Green values include green consciousness and green morality, which enable students to gradually realize that green consciousness for sustainable development should reasonably utilize and protect natural resources so that people and nature live in harmony. The goal of green practice is to integrate green education into professional education, implement green behavior and improve green skills on the basis of mastering green knowledge and establishing green values. The three goals of green talent training goals are different, interconnected, and mutually promoted. Knowledge goals are the foundation, values goals are the soul, and practice goals are the outcome[9].

The construction of ecological civilization in the Guangdong-Hong Kong-Macao Greater Bay Area is inseparable from the practice of green construction of engineering disciplines in higher vocational colleges, especially the training of skilled talents. The training content of green talents in higher vocational education includes green knowledge, standardized green behavior, and cultivated green skills. three aspects. Green knowledge is included in the professional curriculum system, and a series of green courses are set up to enable students to master relevant knowledge such as energy conservation, environmental protection, life health, and sustainable development. With the advancement of science and technology, the green knowledge structure can be continuously updated in the course. Standardizing green behavior includes building a green education environment on the basis of mastering green knowledge, forming a green consciousness and green ethics with the characteristics of the times, allowing students to better understand the nature and the living environment from the needs of the times and national requirements. To green self-discipline, and promote the harmonious development of people, people and society. Cultivating green skills includes clarifying the green development trend of occupations, strengthening the green attributes of vocational education, helping workers to master green skills, and achieving green employment.

4.2. Training of green teachers

Having a green faculty team is the necessary foundation to ensure the quality of green education for college students of science and technology. Various types of green education and training classes are organized in an organized and planned manner, so that teachers can continuously update their knowledge, learn green education theories, and pass on the advanced knowledge of green education to students. Professional teachers in higher vocational schools are more diligent in studying, willing to learn new knowledge, and put forward teaching requirements for green education through training, and establish corresponding incentive mechanisms, so that teachers have a deep understanding of green knowledge, green awareness, green morality, green skills, etc. . Teachers can infiltrate green knowledge and skills into the teaching process of related disciplines through various teaching methods and apply them to specific teaching practices. It can be seen that the cultivation of green teachers is the key to strengthening green education.

4.3. Establishment of green teaching system

Guangdong, Hong Kong and Macao Greater Bay Area higher professional staff majors should actively revise the talent training plan based on GF research and form a green curriculum system of "green learning + green practice + green innovation" to cultivate sustainable development ideas and awareness for the Bay Area And ability of high-quality skilled innovative talents. Green elements such as energy conservation, environmental protection, and sustainable development are incorporated into the curriculum system, and students' green awareness and environmental protection awareness are gradually cultivated. Docking internship companies, developing green practice bases, in the practice of student internships, emphasizing greening in various work links, so that students can see how the company implements the green concept. Taking the practice teaching base as a green base, it advocates the implementation of the concept of green education in various practices and innovative designs. From classroom teaching and research projects, science and technology competition projects, graduation thesis topic setting, to competition project research, program design, implementation, experimental testing, report writing, and other links, we consider green issues and guide students to analyze and analyze sustainable development concepts. solve the real problem.

5. SUMMARY

On the basis of explaining the existing problems in the cultivation of green talents for senior professional staff, this paper focuses on the analysis of the green talent training path in the context of the Guangdong-Hong Kong-Macao Greater Bay Area, and finally forms the path and ideas for the cultivation of green talents for senior professional staff in the Bay Area. The demand for green talents in the transformation and upgrading of the manufacturing industry is oriented, the goal is to cultivate green innovative applied talents, the focus is on the construction of green teachers, and the core of the green teaching system, to improve students' sustainable development and innovation capabilities, and help Bay District to green manufacturing transformation and upgrading.

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REFERENCES

[1]Xie Liangcai, Zhang Yanyan. Obstacles and strategies of implementing green vocational education in China. Contemporary Vocational Education, 2019 (01): 9-15.

[2]Xu Yongxin. Exploration and practice of the establishment of green university under the background of transformation and development. Green Technology, 2019 (09): 277-279.

[3]Yi Wenjing, Liang Qi, Fu Guanyun, Bai Quan. Status and potential of green, low-carbon development in the Guangdong, Hong Kong and Macau Greater Bay Area. China Energy, 2018, 40 (06): 21-24.

[4]Peng Junlin. Research and Practice of Green Education in Higher Vocational Colleges. Southern Journal, 2017 (06): 99-101.

[5]Peng Fangmei. Analysis on the Green Development Path of Guangdong-Hong Kong-Macao Greater Bay Area. Journal of the Party School of CPC Nanjing Municipal Committee, 2019 (02): 85-91.

[6]Chen Yueqin, Chang Guoliang. Effective ways to improve school effectiveness from the perspective of green education. Basic Education Research, 2018 (11): 28-30.

[7]Xue Juan. The concept and practice of green education in colleges and universities——Taking Chongqing Three Gorges University as an example. Journal of Chongqing Three Gorges University, 2018, 34 (01): 114-121.

[8]Fan Dayue. Several basic concepts that need to be clarified for the green development of the curriculum system in higher vocational colleges. Chinese Vocational Education, 2017 (23): 18-21.

[9]Ma Jianhua, Zhao Xianghong, Wu Pingping, Chen Qiong, Lin Minjie, Li Xionghu. Exploration and Practice of Green Education in Engineering Colleges——Taking Xiamen University of Technology as an Example. Education Modernization, 2017, 4 (42): 51-53.

Research on the Green Education and Promotion of Higher Vocational Education under the Background of Guangdong, Hong Kong and Macao Greater Bay Area

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Abstract: The construction and development of the Guangdong-Hong Kong-Macao Greater Bay Area requires not only talents with professional technical knowledge, but also these talents with high professional quality and comprehensive quality. This article analyzes the shortcomings of green education in cultivating middle and college students, explores the importance of green education in higher vocational colleges to the construction of the Greater Bay Area, and proposes corresponding suggestions to strengthen the quality of high-quality talents The export will lay a solid foundation for enhancing the international competitiveness of the Guangdong-Hong Kong-Macao Greater Bay Area.
Keywords: Green Education; Promotion of Higher Vocational Education ; Guangdong, Hong Kong and Macao Greater Bay Area

1. INTRODUCTION

In an important speech of the National Higher Vocational College Ideological and Political Education Working Conference, General Secretary Xi emphasized: "Education is strong, country is strong, and the great rejuvenation of the Chinese nation is realized. The status and role of education cannot be ignored. The important task of higher vocational colleges is It is necessary to train high-quality talents with both morals and talents for the country. "The construction of the Guangdong-Hong Kong-Macao Greater Bay Area is one of the important strategies for the nation's rejuvenation. High-quality professionals are the foundation of the construction of the Greater Bay Area. The professional knowledge and skills that match the occupation should also have good professional quality, which requires that the ideological and political education in higher vocational colleges play its huge quality training role.

2. THE IMPORTANCE OF GREEN EDUCATION FOR THE CONSTRUCTION OF THE GUANGDONG-HONG KONG-MACAO GREATER BAY AREA

The main goal of green education is to fundamentally improve the comprehensive quality and professional ethics of college students, which is a manifestation of the comprehensive ability of college students. The main performance of college students with good professional literacy is: in the work, have rich professional knowledge and skills, high professional ethics, mature working mentality, correct value orientation and good professional behavior habits. The construction of the Greater Bay Area urgently needs a large number of highly qualified personnel.

In 2019, the State Council issued the Outline of the Development Plan for the Guangdong-Hong Kong-Macao Greater Bay Area, which made important arrangements for the construction of the Guangdong-Hong Kong-Macao Greater Bay Area, mentioning the need to build technology-intensive and knowledge-intensive industrial belts in the Greater Bay Area. Develop modern service industries, develop new industries and new fields, and a large number of new industries have emerged within the Greater Bay Area, especially new energy development, advanced manufacturing, big data services, ecological and environmental protection industries, and marine resource development industries. Both need a large number of talents who possess innovative technology, and these talents must have good professional ethics, which is crucial for the construction of the Bay Area [1].The Guangdong-Hong Kong-Macao Greater Bay Area is an important space carrier to enhance China's global competitiveness. Talents in the Bay Area should understand its important strategic position. Talents with good professional qualities and comprehensive qualities are an important guarantee for the strategic security of the Bay Area. First, professional knowledge and skills ensure the orderly development of construction work. A large number of high-tech industries have emerged in the construction of the Bay Area, and relevant professional knowledge must be available in various positions in the industry. Otherwise, the work will be difficult and the development of the Bay Area will be delayed. Second, good professional ethics Ethics has safeguarded the stability and safety of the construction of the Greater Bay Area. All staff members must have a high level of ideological and political awareness and good professional ethics. Only in this way can they stand firm and choose the correct value orientation. Core technologies and industrial knowledge for the construction of the Greater Bay Area Will not be threatened in the international ideological confrontation; Finally, a stable working mentality is an important condition for continuous exploration. Although the Guangdong-Hong Kong-Macao Greater Bay Area is the fourth bay area in the world, it is the first to be built in China. World-class urban agglomerations have limited experience for reference. A large number of areas still need to be explored independently. In the process, there must be various difficulties and obstacles. We need to maintain a stable mentality, be positive and optimistic, and never give up in the construction of the Bay Area.

3. DEFECTS IN GREEN BAY EDUCATION IN VOCATIONAL COLLEGES OF THE GREATER BAY AREA

(1) Underestimate the influence of ideological and political education on professional literacy

In the past, higher vocational colleges paid special attention to practical majors in education and teaching, and despised the impact of humanities majors on careers. Personal morality, psychological quality, value orientation and behavior habits all seriously affect a person's career development. Without good character, it is difficult to establish a foothold in the social industry [2]. There are five subjects in the ideological and political courses in higher vocational colleges, including ideological and legal foundations, party theoretical knowledge, basic principles of Marxism, modern history and situations and policies.The main content is focused on education in politics, ideology, and morality. The purpose is mainly to guide students to establish correct concepts of life and values, to understand the role and significance of moral value standards, and to form a good moral character. Responsibilities, and seek to achieve self-worth in his career.

(2) One-sided problems in employment guidance for college students are serious

At present, most higher vocational colleges across the country have set up special employment and entrepreneurship guidance courses, mainly to solve the problem of blind spots in graduate employment, such as career channels, career choices, interview skills, and labor contract signing. The cultivation of professional quality ignores the important role of ideological quality in employment, and further lacks the psychological construction of employment for students, the lack of professional moral education, and the instability of psychological state is not conducive to students' long-term planning of their careers. Moreover, this course is often set on the eve of graduation, and the amount of lessons is small, but the content of the course is complex and numerous, and students cannot fully digest the course content in a short time. Career guidance and ideological and political education are not closely linked, and low integration is the key to causing students to lack some professional qualities in their employment.

(3) Inadequate connection between education theory and employment practice

Education reform has greatly promoted the development of higher vocational college education. Most higher vocational colleges at this stage have launched a combination of theoretical education and practical education, especially for application-oriented colleges, but the connection between educational theory and practical activities is still insufficient. full. Take the automation major as an example. Most of the vocational colleges in the Greater Bay Area's education in automation major are based on theoretical indoctrination, and the education of students' practical skills is relatively weak. Some colleges and universities have implemented practical courses. However, in such practical courses, there are a large number of students, a small number of class hours, limited instructors, and valuable teaching equipment. Students who fail to perform the entire process or the actual operation of the staff are still based on sight and supplemented by hands [2]. In addition, the cooperation between higher vocational colleges and professional counterparts is inadequate and unable to provide students with sufficient internship resources, which has also become the main reason hindering the cultivation of professional literacy.

4. MEASURES TO IMPROVE GREEN EDUCATION IN HIGHER VOCATIONAL COLLEGES IN THE GREATER BAY AREA

The improvement of college students' professional literacy and comprehensive quality requires the concerted efforts of all parties in society. Higher vocational colleges are important positions for cultivating college students. For the ideological and political education of students as the main means of quality education, we must constantly update the education content and change teaching Methods to enhance the relevance of education itself and social reality, strengthen the teaching quality of teachers, and promote the overall professional quality and comprehensive quality of college students.

(1) teaching curriculum to integrate employment guidance and practical skills

The improvement of college students' professional literacy and comprehensive quality is inseparable from the guidance of theoretical education in higher vocational colleges. High-quality vocational education cannot be separated from the guidance of practical skills. Whether it is the employment guidance theory or the cultivation of practical skills, it is important to the career of college students. Career has an important impact. In order to make the most of the two types of education, we should actively integrate the two, build a practical and practical employment guidance platform, and reflect good professional literacy in actual work words and deeds. Strengthen guidance in selection, career planning, etc., especially in the face of the development of the Guangdong-Hong Kong-Macao Greater Bay Area, it is even more important to guide college students to establish a correct career choice view. No matter what kind of occupation, no matter how many cities, there are huge opportunities for development and Space, for different types of cities and occupations in cities, the practical hands-on platform should have specific data analysis to help students better plan their careers, year on year changes in talent demand of 9 cities in Bay Area in 2019 is shown in figure 1,eliminate psychological gaps, and promote professional literacy [3]. Nearly 80% of the talents in the Greater Bay Area are concentrated in the two cities of Guangzhou and Shenzhen, and there is fierce competition for talents. At the same time, Guangzhou's demand for talents has maintained rapid growth, with specialties such as integrated circuits, automobile manufacturing, and automation outstanding.

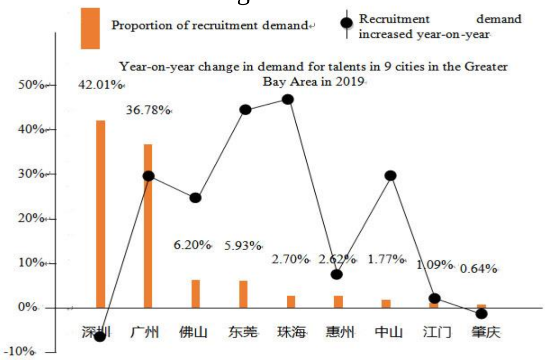

Figure 1 :Year on year changes in talent demand of 9 cities in Bay Area in 2019

(2) Strengthen the construction of teachers in higher vocational colleges

Green education requires higher vocational colleges to strengthen the construction of teachers. First of all, teachers' own quality needs to pass. Teachers in higher vocational colleges should have the theoretical knowledge and practical experience of employment guidance, and communicate with the employment guidance teachers in a timely manner, so that the theory can be integrated in order to lay a solid employment ideological foundation for students. Second, Teachers should have good professional quality. Teachers' responsibility is to preach and dispel doubts. Therefore, teachers must teach by example and lead by example. They do not have good professional quality. Without good morals and correct values, students cannot be made. Convincingly, cultivating high-quality talents is a piece of paper; finally, higher vocational colleges should strictly formulate a teacher assessment system. The management of the teaching staff must rely on a strict assessment system. Without the system, there is a lack of standards. Without the standards, the overall quality cannot be improved. In addition to scientific research inspections, vocational colleges should pay more attention to teaching inspections and teachers' moral inspections, timely understand the teaching and style of teachers, and create a high-quality teaching environment for students.

(3) Strengthen and innovate the school-enterprise cooperation model in the Greater Bay Area

The improvement of college students' professional literacy must also be achieved in the practice of practice. At this stage, some higher vocational colleges in China have opened a school-enterprise cooperation and joint cultivation model, which provides college students with more internship opportunities and enables them to work in real work. Gradually develop his professionalism. Under the school-enterprise cooperation model, schools should strengthen the inspection of cooperative enterprises, especially the inspection of corporate culture. Corporate culture represents the concept of corporate development. Many corporate development concepts run counter to ideological education in higher vocational colleges, such as unfair competition and extreme sales. There are a lot of unhealthy thoughts such as brainwashing mode [3]. We should strictly control these enterprises and examine whether their thinking is in line with the mainstream of the society and allow students to cultivate and improve their professional qualities in enterprises that are consistent with the ideological and political education concepts.

5. CONCLUDING REMARKS

In summary, in the context of the construction of the Guangdong-Hong Kong-Macao Greater Bay Area, strengthening the guiding role of green education in higher vocational colleges in employment guidance, so that each college student establishes a correct employment concept, cultivates his own professional quality,and a positive attitude is devoted to the construction of the Bay Area to realize the ideal of life in social practice.

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REFERENCES

[1]Zhang Ying. Practice and Exploration of Promoting Party Construction and Ideological and Political Work in Colleges and Universities with New Media as an Innovation Carrier . Science Teaching Journal, 2016 (9): 82-83.

[2]Yan Jing. Research on Educational Function in College Educational Administration Management. Thinking on the Path to Realize Educational Function in College Educational Administration Management, 2013 (3): 118-120.

[3]Luo Yonggui. Exploration on the work path of ideological and political education in colleges and universities in the new situation. Education of the Times, 2017 (11): 75-76

A Review of Domestic Research on Family Investment and Financing

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Abstract: since the reform and opening up, China's economy has developed rapidly, and has become the second largest economy in the world. With the convening of the 19th National Congress of the Communist Party of China, China has officially entered a new era of socialism. With the continuous improvement of residents' income and the accumulation of family wealth, people have also made qualitative changes in family financial management. As an investment unit, the demand of family for investment products and wealth growth has become increasingly urgent. The research on family investment and financial management has gradually become the focus of many scholars In terms of research results, it mainly focuses on description, and there is no systematic and comprehensive research framework and pertinence for family investment and financing.
Keywords: Family Investment and financing; Domestic; Research Summary

With the development of economy, household wealth structure is no longer limited to savings, and began to diversify. Household investment has gradually become the main topic of family meetings. Under the new historical orientation of the new era of socialism, people's pursuit of a better life is more intense. However, the increasing severity of high house price, high consumption, high medical cost, and high education cost for their children forces the residents' families to actively seek ways to maintain and increase the value of their family wealth. The ranks of family investment and financing are growing larger and larger, but their understanding of investment is not enough Clear and in-depth, unscientific and unreasonable concept of investment and financing, lack of awareness of risk management, lack of overall family investment planning and many other problems. With the upsurge of family investment and financing, many scholars have begun to pay attention to the research of family investment and financing.

The domestic research on family investment and financial management began in the early 1990s. At present, the research mainly focuses on:

1. RESEARCH ON THE INFLUENCING FACTORS OF FAMILY INVESTMENT AND FINANCIAL MANAGEMENT

Zhong Pengrong[1] thinks that ten factors should be considered in Family Investment: family financial strength, family future income, age status of family members, knowledge composition and professional characteristics, trend of general price level, position of local price level in national price level, future purchase object and price trend, maintenance performance of multiple assets, economic cycle, time of currency Inter value and opportunity cost; Li Yajun et al.[2] conducted a study on the investment behavior of urban residents in 15 provinces of China in 2009, and the results showed that risk attitude did have a significant impact on the composition of China's family investment portfolio, and the risk aversion of investment decision makers was negatively related to their probability of holding highly fragmented investment portfolio; Wang Yu et al.[3], Peng Chuan[4] respectively discussed marriage The influence of health status on the allocation and selection of family risk assets; Lu Xueliang et al.[5] believed that the difference of regional financial development level would have a certain impact on family investment behavior, and the impact of different financial industries was different. The development of securities industry and insurance industry had a strong positive impact on family stock and fund investment, while the development of banking industry had a strong positive impact on family fund investment In 2017, scholars such as LV Xueliang studied the impact of lending constraints and Financial Exclusion on China's family portfolio[6-7]; scholars such as Wu satellite, Xia Miao, Wu Yigen, Wang Cong studied the impact of age structure on family asset allocation and wealth composition[8-11]; scholars such as Wang Yiqiu[12] The urban and rural families in the full nest stage will adjust their family asset portfolio selection strategies due to the increase of the number of children, increase the holding of real estate, and reduce the holding of financial assets, which is particularly obvious in rural areas. Many scholars such as Shi Daimin, song Yan, Zou Hong, Yu Kaizhi, Wei Xianhua analyzed the financial assets of Chinese households Influencing factors of configuration[13-15].

2. RESEARCH ON THE BEHAVIOR OF FAMILY INVESTMENT AND FINANCING

Shi Yinling[16] summarized the behavior characteristics of Family Investment: strong comprehensive investment goal, safety first, consideration of investment profit and development, strong arbitrariness of investment behavior, coexistence of flexibility and blindness, short investment cycle, strong speculation, obvious exploratory and great volatility, etc.; Ru Ying and ye Xiaoying[17] analyzed the family investment and financial management under insufficient demand Behavior; Wang Baiqiang[18] made quantitative analysis on the investment motivation, investment proportion, income use plan, decision-making relying on information sources, investment return rate and other aspects of family stock investment, and the results showed that stock investment has also been paid more and more attention by family residents' financial management; Hua Tianzi[19] from the source of capital, income status of real estate investment, and The relationship between family income and other aspects reveal the characteristics of real estate investment behavior of urban residents in China; Xu Haoyang[20] selected representative countries to make an international comparison of household asset investment choice behavior, and summed up the similarities and differences of household asset investment choice behavior in various countries: the choice of household asset in developed countries represented by the United States is becoming increasingly financial The way of investment is gradually intermediary. However, the financial markets of India, South Africa, China and other emerging market countries are not yet mature, and are in the development stage. The allocation of household asset investment presents a diversified trend of bank savings.

3. RESEARCH ON THE WAY,COMBINATION, ALLOCATION AND STRATEGY OF FAMILY INVESTMENT AND FINANCING

Wu Biying[21] investigated that household investment and financial management in China is mainly savings, but began to change to diversification; Li Qianwen[22] analyzed three strategies of household investment and financial management: don't put eggs in one basket, focus on attack, flexible; Yu Xuebin et al.[23] summarized ten ways of household investment and financial management: savings, insurance , stocks, bonds, investment funds, foreign exchange investment, futures investment, gold investment, real estate investment and collectibles investment; Hao Meirui[24] analyzed the scale, investment structure and investment income of household investment in Beijing in detail; Wu Weixing et al.[25] studied the law of changes in household investment structure in China; Wu Weixing and LV Xueliang [26] passed Based on the analysis of household micro survey data in China and comparison with foreign studies, we can find out the asset allocation situation of urban households in China: Chinese households invest more in real estate, while the participation rate and participation degree of fund investment are relatively low; Zhong Yunyan and Xu Yumei[27] try to analyze the family financing strategy based on market interest rate; Wu Weixing et al., Qin Hailin, Chai Shijun discussed the effectiveness of China's household investment portfolio[28-30]; Wang Min[31] discussed two problems in the family financial asset portfolio, and then analyzed the main factors affecting the family financial portfolio; Huang Huaji and Jiao Bingxin[32] found that at present, there are still some problems in China's household financial asset allocation, such as There are some problems such as single asset structure, narrow investment channel, weak family investment consciousness, insufficient knowledge reserve and imperfect service system.

4. RESEARCH ON THE RISK OF FAMILY INVESTMENT AND FINANCING

Li Qing[33] studied the main contents of family financial risk management: avoidance, control, decentralization, transfer and commitment; Wang Yan[34] analyzed the risk categories (default risk, interest rate risk, exchange rate risk, market risk, individual risk of investors, operation risk of professional financial institutions) and risk causes of household financial investment in the post financial crisis era Lu Xiaomeng et al.[35] mainly analyzed the wind of family financial investment portfolio based on the data of 2011, 2013 and 2015 in China's family financial survey The study found that compared with European and American countries, the risk distribution of China's family financial portfolio is U-shaped, that is, there are more conservative families and adventurous families; Qi Mingzhu et al.[36] analyzed the impact of population aging on the risk preference of household investment, and thought that the risk preference degree gradually decreased with the increase of the age of residents. Generally speaking, the research on family investment and financing risk focuses on the research on the investment risk of family financial assets.

5. CONCLUSION

In terms of the number of existing research literature in China, more and more scholars begin to pay attention to the research of family based investment and financial management. As the basic unit of economy, family investment and financing has become an important part of social investment and financing. In the future, more scholars will participate in the research of this topic.

In terms of the scope of the existing research results in China, the research scope is relatively scattered, and the research results are relatively scattered. There is no systematic and comprehensive research framework for family investment and financial management, which is aimed at one or several influencing factors. Moreover, most of the current research results focus on the Research of family investment and financial management in the whole country, while China does not There are obvious differences in the economic development of the same region, and there are obvious differences in the investment preferences of families in different regions. Therefore, the research of domestic scholars lacks targeted guidance for the financial practice of ordinary residents in China, and the practical research for a specific region is even less.

In terms of the existing research quality in China, there are few high-level related research results, most of which are published in magazines with low gold content.

From the existing research content of our country, the content focuses on descriptive research, and the practical theory is more summarized in the western experience, which is quite different from the national conditions of our country and the consumer investment preferences of residents. From the specific content, the proportion of research on family financial investment and financing is high, and the research results of other family financial investment and financing are relatively few.

REFERENCES

[1]Zhong Pengrong. Ten factors need to be considered in family investment. Price and market, 1994 (02): 36-38.
[2]Li Yajun, Li Zhibing, Dong Junhua, Wu Weixing. Research on the impact of risk attitude on the decentralization of Chinese household investment. Finance and trade economy, 2015 (07): 150-161.
[3]Wang Xiang, Wu Wei. The influence of marriage on the choice of family risk assets. Nankai economic research, 2014 (03): 100-112.
[4]Peng Chuan. Research on the impact of health status on the allocation of family risk assets [D]. Anhui University of Finance and economics, 2018.
[5]Lu Xueliang, Wu Weixing. The impact of financial development on household portfolio: an analysis based on regional differences. Shanghai finance, 2015 (09): 51-59.
[6]Lu Xueliang, Wu Weixing. Empirical analysis of the impact of lending constraints on China's household portfolio. Scientific decision making, 2017 (06): 55-76.
[7]Lu Xueliang, Wu Weixing. The impact of Financial Exclusion on household portfolio: an analysis based on Chinese data. Shanghai finance, 2017 (06): 34-41.
[8]Wu Wei, Qi Tianxiang. Liquidity, life cycle and portfolio heterogeneity: An Empirical Analysis of China's Investor Behavior Survey. Economic research, 2007 (02): 97-110.
[9]Xia Miao, Wu Yigen. Population aging and the change of China's financial structure. Northwest population, 2011,32 (02): 124-129.
[10]Wu Yigen, Jia Hongwen. Correlation analysis between aging population and demand structure of financial assets in China. Northwest population. 2012 (02).
[11]Wang Cong, Yao Lei, Chai Shijun. The impact of age structure on household asset allocation and its regional differences. International financial research, 2017 (02): 76-86.
[12]Wang Yiqiu, Wang Haoyu. A study on the number of children in urban and rural families and the behavior of family portfolio selection. Finance and economy, 2018 (03): 26-32.
[13]Shi Daimin, song Yan. An Empirical Study on the choice of household financial assets. Statistical research, 2005 (10): 43-49.
[14]Zou Hong, Yu Kaizhi. Analysis of financial asset selection characteristics of urban households in China based on survey data of six urban households. Industrial technology and economy, 2009,28 (05): 19-22.
[15]Wei Xianhua, Zhang Yueyan, Wu Weixing, Xiao Shuai. Research on the influencing factors of household financial asset allocation in China. Management review, 2014,26 (07): 20-28.
[16]Shi Yinling. Characteristics of family investment behavior and related issues. Journal of Henan Normal University (PHILOSOPHY AND SOCIAL SCIENCES EDITION), 1999 (05): 43-44.
[17]Ruying, ye Xiaoying. Analysis of family investment and financial management behavior in the context of insufficient demand. Exploration of economic problems, 1999 (08): 19-20.
[18]Wang Baiqiang, Hua Tianzi. A study on the stock investment behavior of urban households. Finance and accounting communication, 2011 (18): 149-151.
[19]Hua Tianzi, Wang Baiqiang. A study on the real estate investment behavior of Chinese urban households. Friends of accounting, 2011 (20): 97-99.
[20]Xu Haoyang. International comparison of household investment allocation behavior. Accounting communication, 2014 (21): 118-119 + 123.
[21]Wu Biying. Main ways of family investment at present. Economic development, 1994 (12): 68-69.
[22]Li Qianwen. Hot perspective of family investment. Theoretical learning and research, 1994 (04): 35-36.
[23]Yu Xuebin, Jiang Guanqun. What are the ways of family investment and financing. China Statistics, 2002 (02): 41-42.
[24]Hao Meirui. Research on household investment in Beijing. Research on economy and management, 2009 (06): 77-81.
[25]Wu Weixing, Yi Zhiran, Zheng Jianming. Chinese household investment structure: Empirical Analysis Based on life cycle, wealth and housing. economic research, 2010,45 (S1): 72-82.
[26]Wu Weixing, LV Xueliang. China's urban household asset allocation and international comparison -- Analysis Based on micro data. International financial research, 2013 (10): 45-57.
[27]Zhong Yunyan, Xu Yumei. Family financing strategy based on market interest rate. Friends of accounting, 2014 (09): 21-26.
[28]Wu Weixing, Qiu Yanchun, Zhang linwan. Portfolio effectiveness of Chinese households: a study based on sharp rate. World economy, 2015,38 (01): 154-172.

[29]Qin Hailin, Li Chaowei, Wan Jiale. Financial literacy, financial asset allocation and portfolio effectiveness. Journal of Nanjing University of audit, 2018,15 (06): 99-110.
[30]Chai Shijun. Social capital and household portfolio effectiveness. China economic issues, 2017 (04): 27-39.
[31]Wang min. portfolio management of family financial assets. World economic situation, 2009 (05): 69-72.
[32]Huang Huaji, Jiao Bingxin. Study on Optimization of household financial asset allocation structure under the new normal: Analysis Based on probit and Tobit model. Journal of Zhengzhou Institute of aeronautical industry management, 2018,36 (03): 97-112.
[33]one drop, Li Qing. How to face risks in family finance. Hubei finance and taxation, 2000 (05): 14.
[34]Wang Yan. Financial investment risk of Chinese households in the post financial crisis era and its prevention. Special Economic Zone, 2011 (04): 238-240.
[35]Lu Xiaomeng, Li Yang, Gan Li, Wang Xiang. The risk of China's family financial portfolio: too conservative or too aggressive?. Management world, 2017 (12): 92-108.
[36]Qi Mingzhu, Zhang Chenggong. The impact of population aging on household investment risk preference. Population research, 2019,43 (01): 78-90.

On the Moral Personality of Contemporary College Students and Their Educational Innovation

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Abstract: the ideological and moral status of contemporary college students is related to the future of the country. Many phenomena show that the value orientation, psychological state and life style of contemporary college students are deeply influenced by The Times, family, school and other factors, which not only reflect the overall positive characteristics, but also appear many ideological and moral problems, which affect the healthy growth of college students. On the basis of discussing the basic concept of moral personality, this paper analyzes the current situation of moral personality of contemporary college students, and makes an attribution to the lack of moral personality of contemporary college students.
Keywords: moral personality; Contemporary college students; Educational innovation; Culture; way

Contemporary college students is the 21st century the main force of the socialist modernization drive in China, they are in the key stage of rapid development of moral personality, however, some college students moral apathy, poor moral self-discipline, advocate the values of consumerism and individualism, collective ideas and cooperation consciousness weakening, a variety of moral personality defect is worrying. If we can't take effective measures to correct the unhealthy moral personality of college students, it will affect their development and happiness, even the fate and future of the motherland.

1. THE BASIC CONNOTATION OF MORAL PERSONALITY

As a category of ethics, the essence of moral personality lies in the ideal goal of personal spiritual perfection and overall development and social harmony, that is, on the basis of revealing "what is a person", it focuses on revealing "how a person should behave", focusing on value. It refers to the moral norm of individual personality, which is the sum of the dignity, value and character of a person [1] . Moral personality is formed in the process of socialization and is a representation of human social characteristics. It is not only the product of the internalization of certain social morality, which reflects the characteristics of certain social morality, but also an overall behavior that dominates and decides individual moral behaviors and is expressed through the general trend of consistent behaviors.

2. CURRENT SITUATION OF MORAL PERSONALITY OF CONTEMPORARY COLLEGE STUDENTS

The mainstream moral personality of contemporary college students is good, positive, healthy and upward. However, there are still some problems that cannot be ignored, and some common tendencies in moral personality should be paid great attention to.

2.1. Utilitarian tendency of valuing interests over belief

With the development of market economy and the increasingly frequent social and economic activities, the interest relationship between people and between individuals and society becomes more and more prominent, and the traditional value of valuing justice over profit is greatly impacted. Market economy for the pursuit of interests, for the world view, outlook on life, values of the university students have not fully formed, the impact is not insignificant. Some college students have weakened the anticipation of the ideal and belief, and exaggerated the distance between the ideal and the reality. The ideal and belief are in the "wind and rain", and the communist belief and the socialist ideal are "no longer the glory". In terms of the relationship between individual ideals and social ideals, they regarded social ideals as an ethereal thing, and thought that the struggle for communism was abstract and remote and not something they should consider. In the way of the realization of the ideal, pay more attention to the individual struggle, care about the realization of their own value, care about the development of the individual future, shaken ideals and beliefs. According to statistics, 49% of college students agree with the view that "money makes the world go round", while 20% believe that "the more money, the more value of life" [xiao jun. Although these phenomena are individual, they do reflect the utilitarian tendency of contemporary college students on the issue of righteousness and interest.

2.2. The egoistic tendency of valuing the self over the collective

The successful exploration of establishing socialist market economy has enhanced the students' self-consciousness. This was supposed to be a historical advance. However, when some college students emphasize their self-worth, they tend to be self-conscious, individualistic and weak in self-regulation. In addition, the market economy has strengthened their concept of autonomy and sense of competition, and thus formed among them the egoistic tendency of valuing self over collective, which values their own survival and development, and weakens and ignores the traditional concept of collective. In their study and life, the collectivism consciousness is relatively weak, the relationship between the collective and the individual is difficult to put right, more is to favor the individual, everything starts from "I", "I" as the center, advocating "pursue self-realization, improve self-value. There are also college students, selfish at the expense of others, greedy for enjoyment, care about personal interests, only in the short term, regardless of the long-term. They place too much emphasis on creating conditions for individual development and too little on how they can contribute to the collective.

2.3. Heavy appearance light introspective flashy tendency

Under the impact of market economy, "appearance economy" is too widespread in today's society, which has brought serious negative impact on the value judgment of contemporary college students. Some female college students' values and moral values have changed and dislocation, some female college students mistakenly believe that "beauty is power", they wear fancy clothes, buy high-end cosmetics as a fashionable, high consumption psychology prominent, some even put material interests as a measure of personal success and loss. Some college students are not only vain and greedy for enjoyment, but also lack of inner cultivation. In the prosperous world of market economy, they lose their way and discard the traditional virtues of the Chinese nation such as diligence and thrift, forming a flashy mentality. In the daily etiquette, they speak with thorns, often swear, say cool, sarcastic words, taboo people progress; In terms of public health, many college students lack the awareness of public health, the dormitory is dirty and messy, spitting and littering are common; In the treatment of public property, the desk is randomly carved and scratched, library books, newspapers and other public information carriers are often stolen, books and magazines are "open gut broken belly" phenomenon often occurs, many people to "running water" and "eternal light" turn a blind eye.

2.4 The tendency of emphasizing virtual rather than reality

The modern social network is more and more closely connected with the growth of college students. According to relevant investigation research shows, some university student surfer already exceeded 80%, average university surfer also is in half above. The Internet provides a broad platform for college students to understand the society, accumulate knowledge and receive new information. Meanwhile, the virtual network also brings some negative effects. College students spend too much time on the Internet, which will lead to the alienation of interpersonal relationship. A study by the Stanford society for quantitative research found that 25 percent of people who spent more than five hours a week online said they had less contact with family and friends. At present, it is true that some college students are addicted to the Internet all day long, unwilling to contact and deal with people, thinking that only the network is close, and dealing with people in real life is too tired, boring. They take a virtual environment as the real world to experience, to a certain extent, gradually divorced from the real reality, alienation, indifference and distrust of the real world, resulting in the nihilization tendency.[2]

3. CAUSES OF MORAL PERSONALITY DEFICIENCY OF CONTEMPORARY COLLEGE STUDENTS

Through the above analysis, we can see that most college students' moral personality is good in the mainstream, but some college students' moral status is really worrying, the main reasons are as follows:

3.1. The impact of market economy on the moral personality of contemporary college students

With the establishment and development of the socialist market economy system and the expansion of the reform and opening up space, China's social and political economy have been developed and changed, and the values of the whole society have also undergone great changes. Although college students live in the special environment of campus and do not really base themselves on the society, the formation of college students' moral concept is inseparable from the objective environment of society. At present, the unhealthy tendencies and corruption phenomena in the society have a wide range of radiation, bad influence, great harm, and seriously affect contemporary college students to establish a correct outlook on life and values. Some college students have an empty mind, an aversion to politics and a sense of cynicism. When people do not bother to distinguish between good and evil, right and wrong, beauty and ugliness, or regard immoral behavior as reasonable, they will cause errors and doubts in moral cognition to college students.

3.2. The impact of political democratization on the moral personality of contemporary college students

With the deepening of reform and opening up, western ideas poured into China through various channels. College students are quick to accept new ideas, and western reasonable values such as freedom, democracy, equality and choice play a positive role in the formation of college students' independent consciousness and ability. However, the following individualism and other thoughts have led to the emergence of some college students of individual-centered, individual-based, individualistic thoughts to meet the purpose of personal desires, and individualistic behaviors occur from time to time. Most college students are the only child, develop self-centered, arrogant, lack of interpersonal communication. Life is often shown as not fit in, independent, not good at getting along with the students, and even some students, with the students when they answer them, do not need to ignore them; There are also some college students in the study room, the library as if no one is laughing, flirting with lovers, completely regardless of the public moral order in public places; There are also college students in the dormitory, regardless of other students' work and rest schedule, go their own way, seriously affecting the rest of other students, even in the cleaning, only sweep their own front snow, only clean their own piece. In the study, there are a small number of college students serious individualism thought, such as the common review materials for their own, students blocked information, not to share resources with classmates. All the above behaviors reflect the selfish individualism of contemporary college students.

3.3. Impact of popular culture on the moral personality of contemporary college students

With the rapid development of mass media in modern society, mass media has become inseparable with the daily life of college students, and has become the main channel for them to obtain information and an important way of entertainment. Therefore, the social popular culture environment constituted by mass media such as radio, television, film, newspaper and multimedia will have a negative impact on the formation and development of contemporary college students' moral personality. On the one hand, the dissemination of values and cultural forms in western countries leads to the loss of college students' values and outlook on life. With the development of information technology, the Internet connects all the countries in the world, and the cultures and ideas of different countries blend with each other on the Internet. The western way of life, individualism, hedonism, money worship, and so on have been introduced into China, which will inevitably have a bad impact on the students who lack self-control and moral judgment. On the other hand, the flood of information garbage on the Internet has caused serious harm to the formation of college students' moral personality. Spam sites promoting pornography and violence are rampant. With the spread of violent information, some college students have a serious tendency to violence, which leads to a series of campus violence and ACTS as a new protagonist of campus violence.

4. EDUCATIONAL INNOVATION OF CONTEMPORARY COLLEGE STUDENTS' MORAL PERSONALITY

The environment has a great influence on the formation of moral personality, the good environment will inevitably have a positive impact on the shaping of moral personality, and the dirty social environment will also hinder the shaping process of good moral personality. Therefore, in order to give full play to the important role of environment in influencing college students' moral personality, efforts should be made to improve and create the social environment in which college students live to promote the development of their moral personality. To create a good environment for the development of college students' moral personality, it is necessary to establish a moral personality education system with school education environment as the main body, family education environment as the foundation and social environment as the extension, so that family education, school education, social education and practical education can get a virtuous circle.[3]

4.1. Develop family moral education

Family moral education is the earliest moral education that college students receive before they enter school and society. Family morality is the foundation of the whole society. The moral norms and moral habits developed by college students in their families will have a long influence on their attitudes on all occasions outside their families. The establishment of a good family environment should start from three aspects: family style, family cultural quality and family relationship. First, the establishment of a good family style. Parenting is a subtle process, so that children do not realize the invisible education. Soviet educator makarenko said: "do not think that only when you talk to them or when you educate children, when you instruct children, you only do education. You are educating children every moment of your life, even when you are not at home. How you dress, how you talk to one another, how you talk about one another, how you laugh or worry, how you treat your enemies or friends, how you laugh, how you read the newspaper -- all these things have great significance for children." Beijing: people's education press,1957:400] therefore, it is necessary to cultivate a good family style, so that college students can form a healthy moral personality under the influence of a good family atmosphere. Second, improve family culture. A large number of facts have proved that parents with high moral sentiment, it is easier to train students with high political and ideological awareness, study hard, excellent grades. At the same time, the bad behavior of other family members also provides a bad example for college students and provides the ideological basis for the generation of their bad moral concepts. Therefore, we should strengthen the study of family members, improve the moral quality of family members, so as to set a good example for the healthy moral personality of college students. Third, build a harmonious family relationship. The quality of family relations directly affects the ideological character, work emotion and life attitude of each family member. Therefore, family members should strengthen emotional communication and exchange, to establish a stable and harmonious family relations. To cultivate good moral personality of college students, to provide an equal, harmonious, stable family environment.

4.2. Innovating moral education in universities

Faced with new situations and new problems, moral education in colleges and universities must constantly reform and innovate in order to cultivate college students with healthy moral personality required by social development and fulfill the great responsibility entrusted by The Times. Moral education in colleges and universities should be innovated from three aspects: content, method and environment of education. When planning the content of college students' moral education, it should not only reflect the socialist nature, but also accord with the law of formation and development of female college students' ideological and moral cognition and its special physiological and psychological nature. In terms of the education model, we should change the passive education situation of college students in class, make them actively participate in the process of moral education, and highlight their subjectivity. Colleges and universities must focus on the construction of campus culture and create a positive, healthy and progressive campus environment so as to cultivate the modern moral personality of college students. In terms of the educational environment, we should strengthen the construction of campus culture, strive to shape the image of architectural art in line with the connotation of campus culture, carefully design unique campus sculptures and cultural attractions, and improve the ideological value and cultural taste of school landmarks and souvenirs. At the same time, should also pay attention to building a harmonious interpersonal relationship environment, to establish a mutual concern, mutual understanding, self-discipline, tolerance to others, modesty and learning, unity and friendship, ready to help others.

4.3. Strengthening social moral education

In order to cultivate healthy moral personality of college students, the society should strengthen moral education in the following aspects: first, adhere to the correct guidance of public opinion. Mass media should, through various forms and ways, publicize and report more to those who are pioneering, innovative, practical and making contributions in all walks of life. We should strengthen the education of ideals, dedication and other noble values. As the mouthpiece of the party, the mass media must adhere to the principle of "educating people first", give priority to social benefits, and fulfill the task of "arming people with scientific theories, guiding them with correct public opinion, shaping them with noble spirit and inspiring them with excellent works". Second, create a good social environment. Accordingly, society should answer the shampoo room of those multicolor, dance hall, video hall, want to try to clean up and rectify, carry out effective management and supervision ceaselessly. Restrictive measures shall be taken against those cultures that are not conducive to the growth of college students, and the illegal yellow culture shall be banned and cracked down on according to law, so as to provide a good social environment for the formation and development of healthy moral personality of college students. Also around the school a civilized, good social environment. Finally, we should actively carry out community moral education activities. The society should open public museums, art galleries, revolutionary martyrs memorial hall and patriotism education base to college students free of charge, so as to educate college students on national traditional virtues and revolutionary traditions. Relevant departments and the community should cooperate with the school, according to the interests of students and the actual situation, to do a good job in the construction of social practice base and moral education base for college students, so as to not only train the spirit of teamwork of college students, but also improve their organizational ability.

4.4. Promoting practical moral education

Social practice activity is a kind of practice activity that college students take as the main body to understand the world and change the world. Social practice is the bridge linking the moral concept and moral behavior of female college students. To promote practical moral education, we should start from the following aspects: first, colleges and universities should attach importance to, support and organize female college students to participate in social practice. Colleges and universities should start from the social reality and the ideological characteristics of contemporary college students, take social practice as a major event, actively guide and organize college students to go into the society, and carry out various forms of social practice activities, such as three trips to the countryside, work-study program, social investigation, voluntary labor, visits and so on. Secondly, college students should take an active part in social practice. College students should not only be able to forge ahead in their study, but also actively participate in scientific research and social practice, actively seek opportunities to participate in social practice, strive to develop and exercise themselves, cultivate moral responsibility, so as to broaden their horizon in practice, improve and sublimate their moral quality. Finally, it is necessary to provide good conditions and places for the social practice of college students. Party and government organs, state-owned enterprises and institutions, and village (community) organizations should actively fulfill their social responsibilities, raise their awareness of participation in education, and actively provide college students with conditions and places for social practice. At the same time, the government should strengthen the reform, the economic system, the political system, the education system, the science and technology system, the cultural system and the health system and other aspects of scientific reform, to provide a good social environment for the cultivation of healthy personality of college students.

REFERENCES

[1]Zhang jin, guan zhiqiang. A study on the situation of college students' arrival in the new era. Economic perspective, 2012, (4).
[2]Jia xiuli. Service for promoting students' healthy development. Reference for middle school political teaching, 2012, (7).
[3]Yang qingyue. A study on the cultivation mechanism of contemporary college students' moral personality, 2010

Corporate Marketing Strategies in the Context of E-Commerce

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Abstract: Under the background of the new normal, the development of science and technology and the emergence of e-commerce have injected fresh "blood" into the market economy. At the same time, the development of science and technology and e-commerce have also put forward better requirements and development opportunities for corporate marketing strategies. To improve their strength in market competition, companies need to closely integrate marketing strategies with the development of the times. The emergence and development of e-commerce technology has made user information and data more convenient, fast and accurate. Big data technology can effectively improve the accuracy of corporate influence strategies. Fully comply with and utilize e-commerce platforms, and promote product and service marketing has become the focus and focus of various industries. The thesis explores corporate marketing strategies in the context of e-commerce, and aims to provide reference and assistance for companies in influencing the formulation and implementation of strategies, hoping to help companies better adapt to the needs of market economic development, and to provide e-commerce promotion in enterprises And innovation.

Keywords: e-commerce; enterprise; marketing strategy

1. INTRODUCTION

With the development and application of Internet technology and its related information technology, big data technology, and new media technology, the world has scored a high-speed Internet era. The development and popularization of the Internet and its derivative technologies have injected blood into the development of enterprises, increased the market vitality and motivation of the enterprises, and changed the daily management methods and approaches of enterprises. It has been 26 years since e-commerce was born in 1993. In 2018, the scale of e-commerce transactions in China broke through the 30 trillion mark in one fell swoop, and China has become a veritable e-commerce powerhouse. With the development of Internet technology, the advantages of e-commerce have also appeared in the vision of society[1].Enterprises use a variety of information technology methods, the use of third-party payment methods of transaction mode, has a huge impact on the traditional marketing model. Through the integration of advanced technologies in e-commerce and big data, enterprises can make their marketing strategies more scientific and efficient, and their marketing accuracy more accurate according to market information and user data analysis.

2. THE CHARACTERISTICS OF THE MARKETING MODEL IN THE CONTEXT OF E-COMMERCE

With the continuous deepening of reform and opening up, China ’s market economy development level has developed rapidly, and the e-commerce industry has also improved rapidly. Both in terms of transaction volume and number of users, qualitative improvements have been achieved. The e-commerce ecosystem has achieved sustained, stable and healthy development.

First of all, e-commerce has played a significant role in promoting social consumption. Under the stimulation and promotion of e-commerce, China's social consumption level has shown an explosive growth trend. Secondly, e-commerce has also driven the development of related service industries, and the education and training industries and logistics industries related to e-commerce have greatly improved. After China's entry into the WTO, our e-commerce industry has increased[2].The market competitiveness of Chinese enterprises. Third, the development of e-commerce has promoted the adjustment of China's industrial structure and promoted the transformation and development of enterprises[3].Through the use of brand advantages, enterprises can effectively serve online functions and meet the development needs of economic markets. Fourth, e-commerce has penetrated into all sectors of society and economy, and has involved people in various places in their lives and work, driving economic growth and realizing the transformation of economic structure. Fifth, e-commerce has realized efficient networked bidding in the procurement of large enterprises, which has reduced the production and operation costs of enterprises, and improved work efficiency and transparency.

From the perspective of the development trend of e-commerce, with the continuous enrichment and diversification of people's material and spiritual and cultural needs, China's e-commerce will have a diversified development trend. While diversifying, e-commerce will be refined and specialized in specific market areas. The development and application of new technologies will lead the transformation of e-commerce, and the comprehensive state of e-commerce system has been fully developed.

From the current situation of corporate marketing in the context of e-commerce, it shows many advantages. With the use of e-commerce platforms, the production and operating costs of enterprises have been reduced, and profit margins have been improved; communication, exchanges and interactions in economic markets are more convenient and efficient.

But the e-commerce model is not without its flaws. The most obvious is that the communication on the e-commerce platform lacks a sense of reality, and the trust between enterprises and enterprises, and between enterprises and customers is difficult to improve.

3. THE FORMULATION AND MANAGEMENT OF CORPORATE MARKETING STRATEGIES IN THE CONTEXT OF E-COMMERCE

(1) Strategic choices for corporate marketing in the context of e-commerce

In the context of e-commerce, corporate marketing strategies will break many restrictions on time and space. Enterprises can provide users with services around the clock. Compared with traditional marketing, it has achieved the historical development of corporate marketing. Enterprises use e-commerce platforms to rely on stand-alone marketing, which shows higher convenience and lower marketing costs. Moreover, corporate marketing strategies in the context of e-commerce show open sharing and three-dimensional playback, reflecting the full reality of the world. Consumers can obtain the products and services they need through Internet searches. During the marketing process, the communication and exchanges between users and customers presented the characteristics of interactivity, realized effective information communication, and realized corporate marketing in the information exchange and business exchange. The marketing in the context of e-commerce should meet the needs of consumers, take the customer as the center, and fully display the characteristics of relationship marketing.

(2) The integration of corporate marketing strategies in the context of e-commerce

In the integration of marketing strategies, enterprises should integrate traditional channels with e-commerce marketing. This can not only reduce the marketing costs of the enterprise, but also improve the effectiveness of marketing, enrich product sales channels, enrich marketing content, improve transaction efficiency, and achieve an efficient market construction. The use of e-commerce platforms for marketing has achieved direct connection between manufacturers and users, weakening the role of middlemen, which has threatened the interests of middlemen to a certain extent. However, from the perspective of the manufacturer, using the e-commerce platform for product sales, the enterprise has obtained the price advantage, and the user has obtained a lower price while ensuring the product quality.

(3) Formulation of marketing strategies in the context of e-commerce

First of all, in order to adapt to the e-commerce marketing situation, enterprises must strengthen their own software and hardware construction and improvement. Enterprises need to sort out and change internal business processes so that their own business processes meet the needs of e-commerce; at the same time, in order to achieve the needs of online transactions, enterprises should strengthen their own information construction level. In the formulation of marketing strategies, enterprises should innovate marketing methods based on the characteristics of e-commerce, refine and categorize their own distribution channels, and adopt targeted marketing strategies for different distribution channels.

Secondly, the marketing strategy should organically combine the enterprise and the customer, and closely integrate the needs and interests of both parties. The marketing strategy of the enterprise should be specified by the customer as the center to meet the customer's needs as a way to obtain a long-term cooperative relationship. aims. Enterprises can use information technology to collect and organize relevant data of target customers in the market, and use big data technology to analyze current customer needs, market potential customers, etc., so as to improve the accuracy of marketing strategies and conduct precise marketing; at the same time, companies should Demand, make targeted improvements and enhancements to products, and increase customer loyalty.

Thirdly, in the formulation of product prices, enterprises must improve their scientificity and rationality. Under the background of e-commerce, product prices are more open and transparent. If companies are blind to their immediate interests, they will inevitably cause loss of customers and decline in market share. Therefore, enterprises should have a clear positioning for their own products. For low-to-medium-end products, the price can be exchanged for sales. For high-end products, enterprises should pay more attention to brand building and enhance the added value of high-end products.

Fourth, companies should pay more attention to the simultaneous development of online sales and offline experiences. Compared with traditional sales, the biggest drawback of online sales is that the shopping experience of users is degraded. For example, for a clothing company, customers can understand the color and style of products through the Internet, but the customer is not 100% sure about the feel of the fabric, and the customer cannot try on. In response to this situation, offline experience stores can effectively improve the customer's shopping experience, and customers can make online payments after the offline experience. The online and offline structure not only improves the customer's shopping experience, but also a way for companies to improve customer service.

4. SUMMARY

In the era of Internet e-commerce, it has grown with advantages such as product diversification, convenience, and rapidity. In the perspective of the problems existing in marketing, we can find many limitations of traditional concepts. At this time, companies need to tailor a reasonable marketing plan. Cultivate and introduce highly sophisticated talents in online marketing. Break through the shackles of traditional marketing with strategy. Learning advanced technology and management methods has a strong positive impact on traditional business structures and the vitality of trade. In the management of modern enterprises, it shows the innovative direction of corporate marketing models.

REFERENCES

[1]Li Zeyuan. Characteristics and marketing strategies of high school students' consumption behavior based on e-commerce. China New Telecommunications. 2019 (03): 12-13.

[2]Li Xinlu. Research on marketing strategies of e-commerce companies——Taking Changchun Baolihua E-commerce Co., Ltd. as an example. Mall Modernization. 2018 (19): 111-112.

[3]Shi Qingtao. Research on countermeasures for the development of seafood e-commerce. Scientific Consulting (Science and Management). 2018 (09): 99-100.

Reform and Practice of Financial Statement Analysis

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Abstract: "Financial Statement Analysis" is a compulsory course for accounting and financial management majors. It is a theoretical and practical course. However, under the traditional teaching mode, the teaching of "Financial Statement Analysis" is generally taught, and students' ability to solve practical problems using the analytical methods learned in the classroom is not strong, resulting in a disconnect between "learning" and "use". So this article specifically teaches how to use the project teaching method to carry out teaching reforms, hoping to have a certain promotion effect on classroom teaching.
Key Words: Financial statement analysis; Teaching; Reform

1. BACKGROUND OF THE COURSE REFORM OF "FINANCIAL STATEMENT ANALYSIS"

Nowadays, more and more application-oriented universities respect "learning as the center" for curriculum reform, adhering to the idea of "using to learn", establishing course goals from "use" to "learning", and using knowledge as the starting point and end. In order to connect the curriculum content with professional standards, teaching process and production process."Financial Statement Analysis", as a professional core course in accounting, auditing and financial management, focuses on cultivating students' ability to analyze data and solve problems. However, under the traditional teaching mode, the teaching of the "Financial Statement Analysis" course is generally. After the teacher has finished the theory class, he has conducted case explanations or financial analysis software simulation training in the classroom or laboratory for two to three weeks. The students have more learned to calculate some financial indicators and have a rough understanding of these indicators. But whether each indicator applies to the analysis of all enterprises, what kind of indicator analysis should be chosen by different companies, and the basis for selection. Students cannot answer these questions, let alone the ability to use the analytical methods learned in the classroom to solve practical problems. The disconnect between "learning" and "use"[1].

In view of the two major problems in the current teaching of "Financial Statement Analysis": First, most textbooks are taken from the bottom, and the calculation and data processing of related indicators are given as the key points. The most important analysis purpose and reduction process are omitted. In terms of ratio calculation, there are more theoretical narratives than case demonstrations, focusing only on the meaning of the ratio and indicator calculation formulas themselves, ignoring what the calculated results mean for the analysis objects, and deviating from the most fundamental goal of teaching; It is because we all assign homework in the teaching class. Students in the class do the same homework. The student work is similar and plagiarism is serious. Therefore, I believe that the teaching reform of the financial statement analysis course can draw on the concepts and ideas of supply-side reform in macroeconomic regulation, start from the teaching supply side, and use the supply side of teaching to solve the current contradiction in classroom teaching. Project teaching method and homework differentiation method for teaching reform[2].

2. OVERVIEW OF THE COURSE "FINANCIAL STATEMENT ANALYSIS"

"Financial Statement Analysis", as a professional course in accounting and financial management, requires specific and in-depth study after students have completed accounting principles, intermediate financial accounting, cost accounting, and financial management. The vitality of financial statement analysis does not lie in the items of the three accounting statements, and the proposal of the concepts and calculation formulas of financial indicators.It is essentially an applied management discipline.It should be based on the principle of practicality, and it should focus on exploring and masteringfinance. Thegeneral principles, procedures, rules, and techniques of statement analysis provide guidance for a variety of different financial statement analysis subjects. Through the latest and classic financial cases at home and abroad, analyze the connotation offinancial statement analysis, and strive to reveal the internal laws of the company's financial status, operating results and cash flow from different aspects, and cultivate and enhance students' ability to find problems, analyze problems and solve problems.

3. PROCESS OF TEACHING REFORM OF "FINANCIAL

(1)Interpretation of teaching content

The content of "Financial Statement Analysis" mainly includes three parts: the first part is the explanation of financial statement analysis methods and the specific project interpretation of financial statements, focusing on theoretical teaching; the second part is the analysis of corporate financial indicators, which are divided into solvency, operating capacity, Analysis of profitability and development ability, focusing on practical teaching; the last part is the continuation and in-depth of the second part, mainly explaining the analysis of the company's comprehensive financial ability, focusing on practical teaching. Among them, the first part is the theoretical basis of this course, which mainly focuses on the interpretation of specific items in the report, which takes about 3-5 weeks. The analysis of corporate financial indicators in the second and third parts is the core content of this course, which takes about 8-10 weeks. It takes about 2-3 weeks to display and evaluate the project results[3].This course can be broken down into six sub-projects, as shown in Table 1.

Table 1 Six sub-projects of the course "Financial Statement Analysis"

Sub-project	Specific content	Time spent teaching
Familiar with corporate financial situation	Analysis method of financial statements and interpretation of specific items of financial statements	3-5 weeks
Solvency analysis	Analysis of short-term and long-term solvency	8-10weeks
Operational capacity analysis	Analysis of turnover capacity and cash availability	
Profitability Analysis	Analysis of sales profitability and asset profitability	
Development Capability Analysis	Asset growth rate,sales growth rate,capital growth rate	
Comprehensive financial capability analysis	DuPont Aanlysis,Wall score,radar chart analysis	

This course is broken down into six sub-projects and explained the specific project tasks. Teachers first need to integrate the above six projects into a total project and propose the overall project goals to the students-comprehensively evaluate the financial ability of the enterprise based on the collected corporate financial data And write a financial analysis report; secondly teach the students the theoretical basic knowledge required for the project before each subproject is launched, and the students complete the tasks of each project under the theoretical foundation framework;finally, the students integrate the aforementioned work, Write project results for evaluation.

(2)Project preparation stage

Project teaching method originated in the 19th century in the United States. This teaching method is applied to classroom education in various subject areas.The teaching method advocates teachers as guides,decomposing learning content into several sub-projects and proposing project goals. Under the premise that students have a certain theoretical foundation, the project tasks are arranged to students, and students are allowed to complete project tasks independently.The mutual evaluation and the teacher's general evaluation are used to evaluate the project results.

At the beginning of the implementation of the project teaching method, teachers first need to explain the overall project implementation plan to the students, clarify the overall goals of the project, so that students have a certain overall understanding of the teaching process, and improve student participation. Taking "analysing the comprehensive financial capabilities of enterprises and writing corporate financial analysis reports" as the overall objective of the project, the project is divided into six sub-projects (familiar with the company's financial status, solvency, operating capabilities, profitability, development capabilities, comprehensive financial capability analysis), And elaborate the specific project tasks of each sub-project.

(3)Determine project grouping and membership

Let students form a project team with 4-5 people as a group. Based on this, teachers can fine-tune according to student interests and performance to ensure that each student can participate in the project implementation process independently. In addition, a team leader should be selected in the project team, and the team leader will coordinate the division of tasks among the team members. It should be noted here that the project tasks in the division of labor should be specific to the individual, and the participation of each group member should be emphasized so as to maximize the motivation of each student.

(4)Project specific implementation

First, each group needs to collect relevant company financial data and business information on the Internet, and simply integrate and sort them out, and select the main data that needs to be analyzed. Second, teachers need to explain the theoretical knowledge involved in the project. Take the solvency analysis as an example. First, teachers need to explain how to calculate relevant indicators, evaluation standards, and issues that need attention. Second, teach how to carry out the analysis of solvency indicators in combination with actual cases.

Show past excellent project results for students' reference.

After each teacher completes the theoretical explanation of a sub-project, the project can be arranged, and the group members complete specific project tasks after class. During this period, the teacher should also play a role of guidance and supervision, The timely guidance of the problems that have been reached, and the random inspection of the completion of the student sub-projects, and urge them to complete the project tasks on time. After all six sub-projects are completed, the results of each sub-project need to be summarized and compiled to check for gaps and make up the final project results for display and evaluation[4].

(5)Evaluation of project achievements

The assessment of project achievements is the last stage of the implementation of the project teaching method. A teacher randomly selects a member in each group for a report of 5-8 minutes of results, and uses PPT to display the project results. Each group can discuss and exchange questions and learn together. In addition, teachers can ask questions about the reported results for the group members to answer, so that students can understand the deficiencies in the project task learning process in time, and accumulate experience for future learning[5].Finally,a comprehensive evaluation of the project's completion is carried out by means of mutual evaluation of students and general evaluation of teachers. The evaluation mainly includes two aspects, one is to evaluate the project results, that is, whether the data source of the report is true and valid, whether the data used in the indicator calculation process is reasonable and reasonable, whether the analysis process is reasonable, and whether the comprehensive analysis is consistent with the actual situation of the sample company;Second,evaluate the project implementation process, that is, whether the group members are actively involved and whether the analysis is novel.

4. SUMMARY

In the reform of the course of "Financial Statement Analysis", our teachers should increase guidance in the teaching process. During the implementation of the project teaching method, teachers are no longer the passers of knowledge and skills, but the guides and supervisors of students. The focus of teaching is no longer the result of learning, but the process of learning. This teaching method advocates giving play to students 'subjective initiative, cultivating students' thinking mode of finding problems and solvingproblems. At the same time, teachers can also improve their own professional practice and education and teaching level during the implementation of the project teaching method. Moreover, our teachers must continue to strengthen their understanding of corporate financial behavior and form a benign of teaching, scientific research, and practical applications. The interactive cycle finally improves one's teaching ability and teaching effect, so as to meet the needs of continuous innovation in education and teaching.

REFERENCES

[1]Li Qiang. Curriculum Reform Based on Application-oriented Universities to Serve the Local Economy——Taking Financial Statement Analysis as an Example. Science & Technology Economics Guide, 2019, 27 (14): 180.

[2]Ge Guangyu. Teaching Reform and Innovation of "Financial Statement Analysis" Course. Journal of Jilin Radio & TV University, 2018 (10): 139-140.

[3]Sun Jie. Thoughts on Teaching Reform of Financial Statement Analysis Course. Finance and Accounting Study, 2018 (23): 201-203.

[4]Zheng Tiantong, Hu Chengqun. Research and Practice on Reform of Financial Statement Analysis Course in Higher Vocational Colleges. Finance and Accounting Study, 2018 (19): 211-212.

[5]He Jingjing. Research on Teaching Reform of Financial Statement Analysis Course. Journal of Chifeng University (Natural Science Edition), 2017, 33 (18): 167-169.

Research on the Issues and Countermeasures of Cross-border E-commerce Regulation Supervision

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Abstract:Since the economic globalization, the economic and trade between countries in the world has been deepening. With the continuous application of information technology based on the Internet, the Internet of things, big data, cloud computing, etc., the position of information technology in the world trade is becoming more and more important. With the development of world economy and information technology, a new trade form, cross-border e-commerce, is in full swing. According to statistics, with the continuous rise and improvement of cross-border e-commerce, the amount of import transactions contributed by e-commerce has been increasing year by year, becoming an important part of China's international trade. The rise of cross-border e-commerce in China has not only profoundly changed China's trade pattern, but also played an important role in the world trade situation. This paper first introduces the development status of cross-border e-commerce supervision in China, then analyzes the problems existing in cross-border e-commerce supervision in China, and finally proposes effective countermeasures to regulate cross-border e-commerce supervision in China, in order to promote cross-border e-commerce supervision in China to be more scientific and standardized.

Keywords: cross-border e-commerce; supervision; regulation; problems; countermeasures

1. INTRODUCTION

Things are always contradictory and unified. As a new thing, cross-border e-commerce also has obvious advantages and disadvantages. We have mentioned the advantages of cross-border e-commerce above, but we should also be aware of the defects of cross-border e-commerce: the import of cross-border e-commerce retail goods has the characteristics of name virtualization, paperless order information, strong transaction timeliness, difficult to guarantee quality, large quantity of imported goods, etc., which brings considerable difficulties to the Import Supervision of cross-border e-commerce retail goods[1].Globalization of trade and e-commerce have become the development trend of the world economy. We can't go against the current. Although cross-border e-commerce has great difficulties in supervision, we should realize new and greater changes in supervision methods according to the actual development of China and the world; continue to simplify administration and delegate power in terms of market access threshold; adopt cross-border e-commerce retail import Negative list mode, as long as there is no clear prohibition, can carry out transactions and other measures, and comprehensively strengthen the standardization and scientific supervision of cross-border e-commerce in China.

2. DEVELOPMENT STATUS OF CROSS-BORDER E-COMMERCE TRADE

2.1. The total amount of cross-border e-commerce trade has increased significantly. With the continuous upgrading of household consumption, the continuous deepening of the development of cross-border e-commerce, and the continuous implementation of national regulatory measures, China's cross-border e-commerce trade has continued to expand, and the number of users has also increased year by year. According to relevant data statistics, as of 2019, the scale of China's cross-border e-commerce transactions reached 10.8 trillion yuan, and by the end of 2020, the scale of transactions is expected to reach 12.7 trillion yuan [2].In addition, the number of Haitao users in China exceeded 100 million in 2018 and is expected to reach 211 million by 2020.The scale of China's cross-border e-commerce transactions from 2016 to 2020 is shown in figure 1,and 2016-2020 China Haitao User Scale is shown in figure 2.

Fig.1 The scale of China's cross-border e-commerce transactions from 2016 to 2020 (Unit: trillion)

2.2. Business-to-consumer (B2C) and consumer-to-consumer (C2C) market share in the electronic consumer model is increasing. The main mode of China's cross-border e-commerce trade is still business-to-business (B2B), but with the continuous upgrade of people's consumption and the continuous development of smart products, the B2C and C2C models have also emerged as a new force, and their market share is expanding.

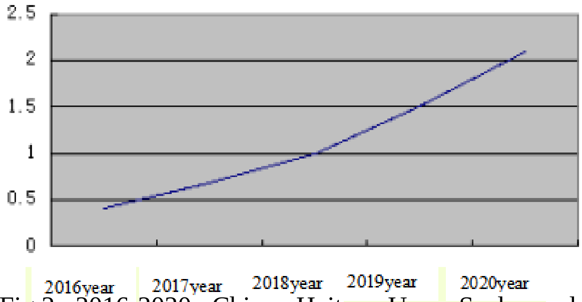

Fig.2 2016-2020 China Haitao User Scale and Forecast (Unit: 100 million people)

2.3. The import commodities of cross-border e-commerce are relatively concentrated. According to the statistical data, China's consumers tend to buy more and more goods abroad. Among them, the proportion of clothing, shoes and bags is the largest, which is about 35%, followed by baby products, which is about 21%. In addition, cosmetics are also growing rapidly, ranking the third, which is about 19%, and other products are about 25%.

3. CHALLENGES FACING CHINA'S CROSS-BORDER E-COMMERCE TRADE SUPERVISION

3.1. The regulatory model is relatively single

In order to further strengthen the supervision of cross-border e-commerce imports, our government generally adopts the personal goods supervision model. Therefore, in the process of supervision of cross-border e-commerce imported goods, we do not temporarily verify the customs clearance of the "front-line" work of online shopping bonded goods sold in some cities[3].Some commodities, including cosmetics, special foods, medical equipment and other commodities for the first import license, filing and registration work, we also do not check. Therefore, under the premise of adopting the personal goods supervision model, if China's market supervision and other departments are to carry out quality inspection work or pest monitoring on imported retail products, it will not be so easy and the difficulties will increase a lot.

3.2. Unfair trade

In the above, the author has mentioned that in some cross-border e-commerce imported goods, such as cosmetics, special food, medical devices and other goods, the first import license, filing and registration are not subject to verification in China, that is, we do not make hard requirements for the related licensing and filing registration of these goods. However, in these domestic enterprises, China has made strict regulations, such as cosmetics, medical devices, infant milk powder and other manufacturers must strictly implement the approval system of enterprise license, filing, registration, etc., which is obviously unfair for domestic enterprises.

3.3. Mixed regulatory authorities and unclear power division

In our country, the entire trade process of cross-border e-commerce will involve many departments, such as market supervision, customs, taxation, inspection and quarantine, commerce, postal and other departments. The direct result is confusion of responsibilities, unclear division of powers, responsibilities, and benefits of various departments, which leads to conflicts in the process of supervision and problems.

4. EFFECTIVE COUNTERMEASURES TO IMPROVE CROSS-BORDER E-COMMERCE TRADE SUPERVISION

4.1. Improve the supervision differentiation method

The author has already stated that China's cross-border e-commerce retail import products adopt a personal goods supervision model. At the same time, China also adopts the "general cargo" model in the process of supervision. There are differences in the way of supervision, the specific procedures of customs clearance, and the taxes and fees collected. In actual work, the customs and other departments implement general cargo supervision on the import and export of small orders of enterprises. The goods exported by the small orders of the enterprise are firstly filed, and then after there are more recorded goods, a large customs declaration form is formed and the "General Trade". In the actual supervision of cross-border e-commerce trade, we should clearly recognize that purely differentiated supervision is based on goods and personal items. This approach can no longer adapt to the increasingly popular retail product import behavior. In this regard, we can learn from the experience of other developed countries in the cross-border e-commerce supervision, and adopt tax-free supervision measures for low-value goods. The United Nations has made clear restrictions on low-value goods. The total value of goods is less than 800 US dollars, and in Europe it is less than 150 euros. Imported goods can be exempt from VAT [4]. We can fully learn from this experience and implement the declaration of natural persons and legal persons in accordance with different supervision methods of low-value goods and high-value goods.

4.2. Gradually relax market entry thresholds and gradually cancel transaction limits

In the cross-border e-commerce retail import supervision work, China clearly requires the importing body to obtain the import qualification (customs clearance form) first, but the process of handling the customs clearance form is very complicated, and strict requirements are also put forward for the inspection and quarantine procedures of commodities, which raises the entry threshold of the import market and imposes certain restrictions on the main body of imports. At the same time, in the latest policy, the individual's import consumption amount is also clearly stated, that is, the individual consumption amount of an individual cannot exceed 2,000 yuan, and the total annual consumption amount does not exceed 20,000 yuan[5].The original intention of this regulation is good, the purpose is to make the cross-border e-commerce retail import tax system consistent with the import tax of general goods, but in practice, many people have borrowed the consumption quota of others in order to circumvent this system orthe practice of stealing other people's consumption quotas has brought greater trouble to the supervision. Therefore, in the future cross-border e-commerce retail import work, it is better to gradually reduce the threshold of market access, further cancel the annual number and amount of individual consumption, and fully activate and release the market vitality of cross-border e-commerce retail import.

4.3. Clarify the management authority of the supervision department

The state should further clarify the management fields and responsibilities of the departments with supervision authority in cross-border e-commerce retail import, strengthen the unified cooperation among tax, customs, inspection and quarantine, commerce and other departments, and strengthen the cooperation between various departments and international trade, so as to form a joint supervision force of cross-border e-commerce retail import.

5. CONCLUSION

To sum up, China's cross-border e-commerce trade is still in the initial stage of transition. In order to further regulate and improve the corresponding regulatory work, the state has issued a lot of policies and documents, which plays an important role in the supervision of China's cross-border e-commerce. However, due to its own attributes and characteristics, cross-border e-commerce trade inevitably has many problems in regulatory aspects. This paper makes a brief discussion on improving the supervision system of cross-border e-commerce import, hoping to further promote the consumption of Chinese residents to continue to upgrade, constantly meet people's demand for high-quality goods with good quality and low price, optimize the production structure of domestic enterprises, and form a good ecological layout of cross-border e-commerce.

REFERENCES

[1]Liu Bin, Zhao Xiaofei, Liu Cuicui. Research on the Issues and Countermeasures of Regulatory Supervision of Cross-border E-commerce. Price Theory and Practice: 1-5

[2]Research on the Difficulties and Countermeasures of Cross-border E-commerce Customs Supervision in the New Normal State. Ma Yijing. Economic Research Guide. 2016 (12)

[3]Analysis and Suggestion of the Current Situation of China's Cross-border E-commerce. Wang Wailian, Wang Mingyu, Liu Shuzhen. E-commerce. 2013 (09)

[4]Research on China's cross-border e-commerce development and government supervision——Take small amount of cross-border online shopping as an example. Research Group of Institute of Economics, Shanghai Academy of Social Sciences, Shi Liangping, Tang Yunzhang. Shanghai Economic Research. 2014 (09)

[5]Qiang Weiwei. Research on the status and countermeasures of China's cross-border e-commerce. Yunnan Normal University, 2016.

Research on the Problems and Countermeasures of Party Construction in Private Colleges and Universities

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Abstract: In recent years, China ' s private higher education has developed rapidly, and the number and scale of private colleges and universities have also increased. However, many private colleges only focus on the rapid development of colleges and ignore the connotation construction of colleges and universities, especially their party building work. There is relatively little lag. This article mainly analyzes the necessity and urgency of the party building work in private colleges and universities under the new situation, and presents countermeasures to solve the problem. It is hoped that the party building work in private colleges and universities can be promoted and improved.
Keywords: private universities; party building work; countermeasures

1. INTRODUCTION

In recent years, the scale of private higher education has gradually expanded, and party building in private colleges has gradually been put on the agenda, and it has become an important task that cannot be ignored. Private colleges and universities have taken advantage of the situation, and have successively introduced some policies to vigorously develop party building work.[1] Various measures have strengthened the party building of private colleges and universities. The strengthening and development of party building work in private colleges and universities has also put forward higher requirements on the experience and model research of party building work in colleges and universities.

2. THE NECESSITY AND URGENCY OF PARTY BUILDING WORK IN PRIVATE UNIVERSITIES

2.1. In order to implement the strategy of rejuvenating the country through science and education, and to promote the healthy and stable development of private education, private colleges and universities have developed rapidly and achieved great results, becoming an important part of socialist higher education. Party building in private colleges and universities is an important part of party building in universities. Doing this work well is a long-term way to consolidate and develop party building in colleges and universities, and it is also an important measure for the benefit of the country and the people. Strengthening the party-building work of private colleges and universities is a powerful tool for comprehensively implementing the party's education policy, adhering to the direction of running socialist schools, promoting the healthy development of private colleges, strengthening and improving the ideological and political education of college students, continuously improving the quality of talent training, and providing a strong The guarantee of talents and human resources is of important and far-reaching significance for consolidating the party's class foundation, expanding the party's mass foundation, and strengthening the party's governing ability and advanced nature.

2.2. In recent years, in accordance with the relevant national and provincial requirements, local private colleges and universities have continuously explored and constantly worked on party building, which has led to the improvement of the party building organization system of private colleges and the strengthening of grassroots party organizations. In the new era, there are some problems that need to be solved in private universities. The importance is low, the system is not perfect, the party cadre team is not perfect, and the role of party members has not played a large role. Issues such as these have seriously hindered the development and progress of private colleges and universities, and regional private colleges are just as inevitable.[2] Therefore, we must attach great importance and spend more time thinking about improvement measures to solve current problems.

2.3. The party-building work of private colleges and universities has a long way to go. To strengthen the party-building work of private colleges and universities, we must use the theory of socialism with Chinese characteristics as a guide to comprehensively implement the specific requirements of party-building work in private colleges and universities in the new era. The actual development situation, Cai Yu's effective measures, constantly improve the party's ideology, style and system construction in private colleges and universities, fully stabilize private colleges and universities, give full play to the effectiveness of party building in private colleges and universities, and provide a strong Political security.

3. SYSTEM HARDWARE COMPONENTS PROBLEMS IN PARTY CONSTRUCTION IN PRIVATE COLLEGES AND UNIVERSITIES

3.1. Grass-roots party organizations have weak executive power. The effectiveness of the implementation of the party building governance system in private colleges and universities refers to the extent to which the system's objectives can be solved after the implementation of the party's system, and private colleges are weak in this respect. Although the branches have clear powers and responsibilities, various tasks still cannot keep up with the arrangements of higher-level party organizations, lack of familiarity with policies, and incomplete understanding of document requirements, resulting in delayed work and affecting the smooth development of work.

3.2. The ideological education of party members is not deep enough. At present, education methods for party members in private colleges and universities are relatively single and lack targeted. Earlier, the ideological education of party members only stayed in the "three sessions and one lesson", and most of them stayed at the surface, and did not seek more ways to identify it. At the same time, the educators themselves did not have deeper theoretical knowledge to carry out Commented education. Many party members rely on sufficient self-control and perseverance to maintain their status and fulfill their obligations as party members. And with the increase in the number of party members this year, the level of control over development targets is not as strict as before, so the quality of party members is uneven, which has increased the management of party members.[3]

3.3. The cost of party building work cannot keep up with the pace of party building work. There is a very realistic problem in carrying out party building work, which is the issue of funding, which is more prominent in private colleges. First of all, the funding for private colleges and universities does not have funding from higher education departments, and various funding for schools must be decided by the chairman of the board. The party organization has no financial control power. If the party organization does not have the consent and support of investors, the funds for grassroots party building activities will not be implemented in a timely manner, and the budget will not be guaranteed, which will greatly affect the efficiency and quality of party building activities.

3.4. The party building staff is highly mobile and the team is unstable. Various private universities have been strengthening the party cadre team, and the college has also been strengthening this work, such as setting up full-time organizers and selecting outstanding counselors with strong sense of responsibility as the secretary of the student party branch. But they all face the embarrassing situation of insufficient business ability and lack of professional training.[4] The overall speed of the replacement of the staff and workers of private colleges and universities is unstable, which will inevitably affect the long-term development of the party building team.

3.5. Brand awareness is not enough and lacks innovation. At present, many colleges and universities strive for innovation, want to make features and make results, but the actual results are not satisfactory. The school launched the Red Culture Innovation Festival, organized grass-roots project declarations, etc., allowing the secondary colleges to independently report and undertake related activities, which has largely promoted the vitality and creativity of the grass-roots party branches, but the implementation is very different from the assumption. There are situations where things have been dealt with.

4. ULTRASONIC RANGING PRINCIPLE COUNTERMEASURES TO PROMOTE PARTY CONSTRUCTION IN PRIVATE COLLEGES

4.1. Strengthen supervision and improve the execution of grass-roots organizations. Higher-level party organizations should play a supervisory role over grass-roots party organizations, and should increase participation and management at the necessary moments. Higher-level party organizations should provide incentives, comprehensively compare various activities, and make timely corrections and conclusions to achieve timeliness, help grass-roots party organizations to learn from experience, correct in a timely manner, and ultimately enable grass-roots organizations to have a strong executive power.

4.2. Strengthen the ideological and political education of private college students. In response to the general trend, private colleges and universities should accelerate the reform of ideological and political education courses, integrate ideology and politics into each classroom, and enable every student to enjoy the latest achievements of Sinicization of Marxism, making them the spiritual support and Thought leadership. This requires that the party organizations in private colleges and universities always maintain an aggressive and youthful attitude, and innovate methods to better integrate the feelings of home and country into the lives of students and subtlely, so as to achieve the role of "moisturizing and silent."

4.3. Safeguard Party building funds and establish a complete filing system. Funding is a necessary prerequisite for organizing and carrying out activities. The party's activity funds must be included in the school's annual budget, which is a strong guarantee for party organizations to carry out activities on time and with quality and quantity. In fact, each university has its own unique budgeting system, but the system is not perfect, and the teaching staff has not fully understood its essence. Take the college as an example, it has a better filing system itself, but the unfamiliarity of the staff and staff with the filing system is also realistic, and the grass-roots personnel are completely new to the filing system, and have not penetrated into every staff member at noon. Therefore, schools need to establish a more clear, understandable, and easy-to-operate filing system, and conduct "scatter-net" training in a timely manner. In particular, party cadres need to understand thoroughly, so that funds are timely and activities are timely.[5]

4.4. Stabilize the party cadre team and inherit the characteristic party building brand. Talent has always been the core competitiveness, and private colleges and universities also need a party building team that has always been of good quality, capable and efficient. In selection, party members with strong political quality, good mass foundation, strong business ability, and loyalty to the party should be selected. After the staff is stable, they can continue to inherit and innovate the distinctive content to form a unique party building brand.

5. SUMMARY

This article mainly analyzes the necessity and urgency of the party building work in private colleges and universities under the new situation, and presents countermeasures to solve the problem. It is hoped that the party building work in private colleges and universities can be promoted and improved.

REFERENCES

[1]Yin Feng.Practice and Innovation of Party Construction in Private Universities in the New Media Era.Journal of Neijiang Teachers College, 2017-08-25.

[2]Han Lu; Bao Xiangmei; Liang Jiemin. Research on the New Model of Party-Legal Co-construction in Private Colleges and Universities from the Perspective of New Media: A Case Study of the Business School of Southern College of Sun Yat-Sen University.Journal of Jilin Institute of Technology and Technology, 2017-04- 26.

[3]Bao Bing; Chen Liqun. New Mode of Party Building in Private Colleges and Universities from the Perspective of New Media.Journal of Kaifeng College of Education, 2017-03-20.

[4]Wang Chunyu. Discussion on Innovating the Basic-level Party Construction Work Mode in Colleges and Universities——From the Perspective of "Practice Teacher Morality and Pair Help"

[5]Qing Qiujun.Innovating working methods and strengthening the building of grass-roots party organizations.Journal of Jilin Institute of Socialism, 2017.

Cold Chain Logistics in Dongguan Based on Cross-Strait Cold Chain Logistics Pilot Cities Research on 2B & 2C Fusion Co-Matching Mode

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Abstract: The construction and development of cold-chain logistics distribution in Dongguan city is an important part of the strategic mission of "Bay Area Metropolis and Quality Dongguan". In addition, the approval of the "Cross-Chain Cold-Chain Logistics Pilot City" is an important development opportunity for fresh electricity The rapid rise of commercial vendors and the rapid development of urban B2C cold chain logistics, but the end-to-end cost of urban B2C cold chain logistics remain high, which restricts the further development of the cold chain logistics market and fresh e-commerce. Based on the above problems, this paper proposes a common distribution model of cold chain logistics with B2B & B2C integration.
Keywords: Cold chain logistics; Integrated distribution; Fresh e-commerce

1. INTRODUCTION

In the Guangdong-Hong Kong-Macao Greater Bay Area with great development potential, Hong Kong-Shenzhen-Dongguan-Guangzhou forms a golden axis. Facing the goal of building a world-class urban agglomeration in the Greater Bay Area, Dongguan has clearly defined its strategic mission and value pursuit to build a “Bay Area City and Quality Dongguan”, and proposed to build a modern ecological city.

The construction and development of cold chain logistics in Dongguan is an important part of the strategic mission of "Bay Area Metropolis and Quality Dongguan", and the market demand for cold chain logistics in the local area is increasing day by day. In order to promote the circulation of agricultural products and meet the needs of the residents for fresh agricultural products The requirements of quality and safety promote farmers' income. Dongguan City attaches great importance to the construction of cold-chain logistics, which mainly focuses on cold storage, low-temperature storage and transportation of fresh agricultural products, and the scale of cold-chain logistics continues to expand. In September 2018, the Cross-Strait Cold Chain Logistics Industry Cooperation Sub-forum of the 13th Cross-Strait Economic and Trade Cooperation and Development Forum, co-sponsored by the Ministry of Commerce and the Taiwan Affairs Office of the State Council, approved the third batch of eight cities or regions such as Dongguan and Ningbo. A pilot city for cold-chain logistics industry cooperation across the Taiwan Straits. The cold-chain logistics industry in Dongguan has ushered in a brand new period of transformation and development. It has laid a good foundation for cold-chain logistics cooperation between the two sides of the Taiwan Straits. Logistics companies provide effective ways to improve the efficiency of cold chain operation and reduce the cost of cold chain distribution, and provide decision-making references for third-party cold chain logistics companies to develop urban cold chain B2B and B2C integration and distribution services.

2. RELATED CONCEPTS AND THEORETICAL FOUNDATIONS

2.1. Cold Chain Logistics

Cold Chain Logistics means: In all links of the supply chain, the products that need to be refrigerated and frozen are always kept in a low temperature environment to reduce the loss of products and ensure the quality of the products. The definition of the cold chain in "Logistics Terminology" (GB / T 183 54-2006) is: "In order to ensure the quality of fresh, chilled and frozen foods, it makes it up and down the entire supply chain from production, transportation, sales and consumption The logistics process is always in a low temperature environment, and the logistics network is specially equipped with cold chain auxiliary equipment and facilities."

2.2. Urban Cold Chain Logistics

Urban cold chain logistics refers to the use of specialized facilities and equipment based on refrigeration technology and refrigeration technology within a reasonable range of the city's economy to ensure that fresh, refrigerated, frozen foods, medical supplies, and chemicals are always used in urban circulation. It is an important part of the concept of cold chain logistics in the specific low temperature environment required by it to maintain commodity quality, reduce losses and prevent pollution.

2.3. Characteristics of Urban Cold Chain Logistics

2.3.1. The shelf life of cold chain fresh food is short

Fresh foods such as vegetables, fruits, eggs, meat, aquatic products, and some dairy products in cold chain foods have relatively short shelf life and shelf life. Their consumption is highly time-effective and should not be backlogged or stored for a long time.

2.3.2 Cold chain products are highly sensitive to the environment

As cold chain commodities have extremely strict requirements on environmental conditions such as temperature and humidity from storage to transportation, conventional warehouse logistics cannot effectively support fresh agricultural products and cold chain medical supplies[1]. The shelf life of cold chain products refers to the date when the quality of the product is guaranteed under the specified storage conditions of the product. If the environmental factors such as temperature, humidity, and light during the distribution of the cold chain products do not meet the requirements of the product, It is likely to be shortened.

2.3.3. Decentralized distribution of cold chain goods

The last stop of cold chain goods from field sites and processing factories to consumers is through logistics and transportation. The last stop of the cold chain is the various sales terminals. There are many types of cold chain sales terminals in the city. Physical stores, virtual sales terminals such as JD.com, Tmall and other online malls[2]. Physical sales terminals are located in urban streets and alleys, and virtual sales terminal distribution needs to penetrate into various residential communities and office buildings, which has brought great difficulties to the distribution of urban food cold chains.

2.3.4. Personalization of cold chain distribution needs

As consumer logistics distribution needs become more diverse, the market places higher requirements on urban cold chain logistics, requiring consideration of a series of personalized requirements for cold chain logistics, including category, service time, and quantity. Due to part of the individual needs of customers, it is sometimes difficult for urban cold-chain logistics companies to carry out cold-chain logistics operations from an economically optimal perspective, increasing logistics costs[3].

2.4 Common Distribution

According to relevant literature, joint distribution was first proposed in Japan, which refers to "a series of activities where goods are collectively processed by a production company or third-party logistics, and vehicles are used to distribute together." In Japanese industrial standards, common distribution is defined as: "In order to improve the efficiency of logistics operations, a number of companies form cooperative relationships and jointly conduct the distribution of goods in accordance with certain cooperation agreements." In China's "National Standard Logistics Terms", common distribution is defined as "a series of activities jointly organized and implemented by multiple companies of the same level or rating to implement distribution activities"

3. DONGGUAN CITY COLD CHAIN LOGISTICS SHOWS RAPID DEVELOPMENT TREND

Dongguan has become the country's third batch of "Cross-Strait Cold-Chain Logistics Industry Cooperation Pilot Cities", and cold-chain logistics enterprises have gained development opportunities. A number of enterprises have also laid out cold-chain logistics in accordance with their respective development advantages, moving towards supply chain management systems and e-commerce industries. Since the beginning of this year, cold chain logistics has shown a rapid development trend, and forces from all sides have poured in.Giants such as SF, JD.com and Suning have entered one after another to speed up the layout. Cold chain logistics generally refers to a systematic project in which products are always in the specified temperature range during production, storage, transportation, and sales, and before consumption. In order to ensure product quality and reduce process losses. One of the most important fields of application is in the field of fresh food, especially in the area of chilled food. Because of the relatively high transportation costs, how can consumers be bought at higher prices when delivered to consumers? It is a question for operators to consider.

Xinli Industrial is the vice president unit of Dongguan Logistics Industry Association. Its subsidiary, Xinli International Agricultural Trade City, is mainly engaged in agricultural and sideline products trading. Warehouse distribution center. In addition to providing more convenient process services for existing customers, it is also an exploration of the company's attempt to establish "big data" in cold chain logistics. The development of Huaxue Logistics, another Guanxi enterprise, relies on Meiyijia, a retail store brand owned by Meiyijia of Dongguan Sugar and Wine Group. The latest news is that Meiyijia completed the opening of 5,000 new stores in one year, and the total number of stores has reached 15,000. Huaxue Logistics has in-depth cooperation with major manufacturers, convenience stores, chain catering, fresh e-commerce, and LTL trunk lines. Today, it provides multi-temporary warehouse distribution services for more than 15,000 customers in 43 cities in 5 provinces across the country. Similar to the layout of Huaxue Logistics in the cold chain industry, the development of Guangdong Jiasu Logistics Co., Ltd. also relies on the development of Jiarong, a local enterprise. The company has advantages in the range of the temperature zone and the coverage of the temperature control and supervision system. The company will build the second phase of the cold chain logistics distribution center, and is committed to creating a "high-quality cold chain logistics + processing center in the Greater Bay Area" benchmarking enterprise.

4. DESIGN OF DONGGUAN CITY COLD CHAIN 2B&2C FUSION CO-CONFIGURATION MODEL

At present, third-party cold chain logistics companies develop urban B2B, B2C cold chain logistics distribution mainly using the upstream and downstream common distribution mode. In the end distribution, they choose to load and distribute separately[4]. The B2B business distribution flowchart is is shown in Figure 1, the B2C business distribution flowchart is is shown in Figure 2.

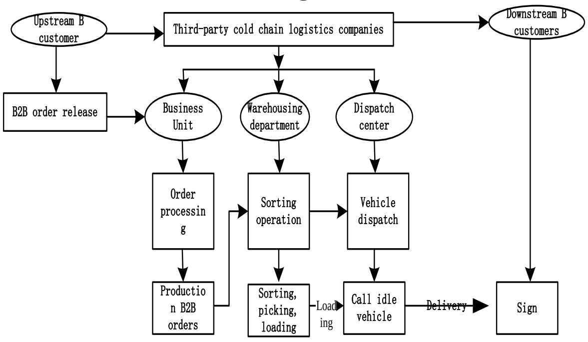

Figure 1 B2B business distribution flowchart

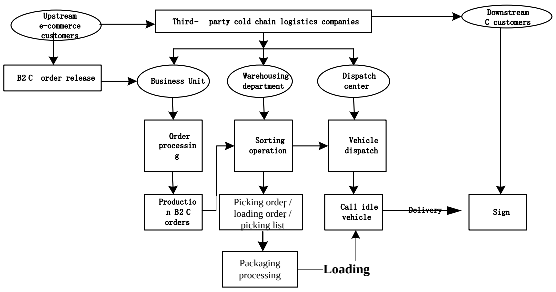

Figure 2 B2C business flowchart

At present, due to factors such as traffic factors, the concentration of B customer's receiving time, and the low efficiency of the delivery process, 2B delivery vehicles tend to have low full load rates and insufficient capacity utilization. In addition, due to the current consumer development in the B2C cold chain market, consumer demand is distributed and demand is scattered. Insufficient scale and other factors, the end-to-end cost of B2C cold chain logistics is too high, which is the main bottleneck limiting the further development of cold chain logistics. Aiming at the above problems, this article is based on the traditional upstream and downstream common distribution model, extending and optimizing it to a more micro-level. Based on the logistics company providing many-to-many services in the cold chain supply chain, the urban cold chain 2B / 2C fusion and co-allocation The model is used to solve the problem of excessive terminal delivery costs caused by the scattered demand and insufficient demand scale of B2C cold chain distribution in the current development stage of the cold chain logistics market[5]. For "last mile" distribution, the "door-to-door cold chain" is adopted. The ten-terminal cold chain self-lifting point model solves the problem of "last mile" distribution and secondary distribution. The operation process of the urban cold chain 2B / 2C fusion co-deployment model is shown in Figure 3.

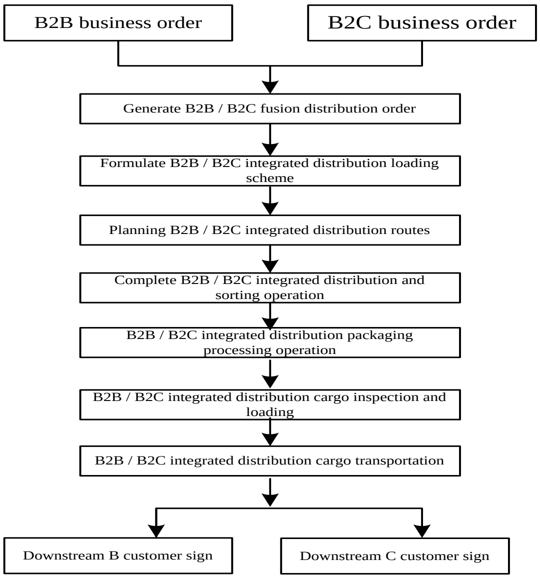

Figure 3 B2B & B2C integrated distribution model design of Dongguan cold chain logistics

5. SUMMARY

Through the development of the urban cold chain 2B / 2C integration and co-deployment model, it can effectively integrate the cold chain cargo and transportation resources in Dongguan, which is conducive to improving the efficiency of Dongguan cold chain logistics and distribution, saving transportation capacity, increasing the cargo load rate of transportation vehicles, and improving cold chain logistics distribution. The efficiency of resource utilization significantly reduces the operating cost of B2C cold chain logistics and improves the cold chain logistics distribution resource allocation system. At the same time, it is also conducive to improving Dongguan's urban transportation environment, reducing traffic congestion and air pollution, and promoting the sustainable development of society.

REFERENCES

[1]Wu Qinggang. Research on the Development Status and Countermeasures of Cold Chain Logistics in China. China Circulation Economy, 2011, (02): 24-28.
[2]Wang Huiyun, Gan Ming, Jiang Yuhong. Research on the Status and Countermeasures of Cold Chain Logistics Development. China Storage and Transportation, 2011, (11): 112-114.
[3]Peng Lixia. Research on the Development Status and Countermeasures of Cold Chain Logistics in China, Hebei University of Engineering, 2011.
[4]Zhu Shixiong. Analysis on the Status and Development Countermeasures of Cold Chain Logistics of Fresh Agricultural Products in China. Logistics Technology, 2012, (23): 133-135 + 138.
[5]Niu Xuefang. Discussion on the development model of China's cold chain logistics. Chinese and foreign entrepreneurs, 2013, (02): 26.

Research on the Innovation of Teaching Methods for Business Management Major in Higher Vocational Colleges

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Abstract: In today's network informatization, the structure of traditional commercial spaces is gradually being replaced by more innovative and highly competitive e-commerce. Most of the past enterprises and related industries were developed through indirect international trade management, and excessive links caused benefits. The ratio is declining. The rise of cross-border e-commerce has changed the state of this traditional industry. The completion of transactions through the e-commerce platform reduces the number of intermediate links, making industrial and commercial enterprise management more efficient and faster. As a vocational college for the supply of talents, in the face of the new situation of cross-border e-commerce, it is imperative to innovate teaching methods for business management. How to reform and innovate teaching methods to improve the quality of talent supply has become a hot topic in education.

Keywords: higher vocational colleges; business management majors; teaching methods; innovation research

1. INTRODUCTION

The demand for industrial and commercial enterprise management professionals stems from the rapidly developing market and expansion space. The purchase channels and transportation channels for raw materials, products, and finished products in various industries need to be effectively integrated to form a continuous supply chain. The construction of talents must take the cultivation of talents as the first task, so the reform and innovation of teaching methods for business management majors must be closely integrated with the background of the times and choose the correct development path. Nowadays, cross-border e-commerce is the most important business finance theme, and it has been gradually promoted in higher vocational colleges. Therefore, the cultivation of related talents has gradually moved towards a professional and high-end trend. Where it is, the innovative research on the teaching method of business management in higher vocational colleges must focus on the demand for professional talents after the rise of cross-border e-commerce.

2. THE BACKGROUND OF DEMAND FOR PROFESSIONAL TALENTS IN BUSINESS MANAGEMENT

At present, China's cross-border e-commerce trade is not only an emerging specialty in China, but also different from other traditional industries. It also lacks corresponding learning experience in the world. Most of the previous international transactions were conducted through the B2B model, but the disadvantages of this model are that it relies on traditional marketing methods, consumes large resources and has unstable returns. The biggest disadvantage is that the B2C model for individual consumers is difficult The formation of large-scale orders has always been a minority in the market. In order to improve the shortcomings of cross-border e-commerce business management in these two aspects, higher vocational education has opened up new ideas for students through practical teaching models [1]. Cross-border e-commerce provides consumers with a core purchase channel through effective platform trade, combining the advantages of B2B and B2C. This approach can better use marketing methods as experience teaching content for students. At present, China's higher vocational education has gradually attached importance to the training of practical abilities, and is even more competitive in social employment than undergraduate colleges. For industries that require high practical and risk control capabilities, such as cross-border e-commerce, higher vocational talent training models are obviously more suitable and can exert greater power. The training of management professionals has put forward higher requirements, and it also points out the direction for the innovation of teaching methods of business management in China's vocational colleges.

3. THE DIFFICULTIES IN THE DEVELOPMENT OF BUSINESS MANAGEMENT IN VOCATIONAL COLLEGES

The infiltration of the new concept of the era in the education field has always maintained a conservative attitude, as well as the emerging field of e-sports and cross-border e-commerce. The understanding of cross-border e-commerce is gradually developing. The business management professional provides a large number of talents for international market merchandise trade. Naturally, there are relatively many intersections with cross-border e-commerce. Therefore, cross-border e-commerce was first integrated into this professional development. Most colleges and universities in China also integrate the teaching content of cross-border e-commerce into business management courses, take enterprise management as the core, and combine the current status of cross-border e-commerce development in the international market to train and transport talents. However, the market structure is changing rapidly, and the professional development of business enterprise management in the traditional sense of vocational colleges is facing new obstacles.

First of all, from the perspective of the distribution of students in the field of education, the concept of cross-border e-commerce is still relatively vague for students who choose a business management major. The current cross-border e-commerce is not completely separated from the previous business enterprise management major, but exists as a branch course content. It is difficult to truly integrate the era of cross-border e-commerce into the business enterprise management major, causing students to learn in the course. As well as the misunderstanding of practical application and employment, this phenomenon also exists in the process of higher vocational education. How to improve the teaching effect of courses and the effect of professional employment from the actual environment is particularly urgent [2].

Secondly, higher vocational education needs to fully summarize the existing experience, especially in the training of students, they should pay attention to existing shortcomings and fully solve them. Students should obtain corresponding practical knowledge from business management majors, such as the specific implementation of market research. Collect and organize industry data and other specific knowledge. At present, the business management majors in the field of cross-border e-commerce teaching lack systematic and effective corresponding courses, and the selected textbooks lack real pertinence. As a result, students cannot improve their learning results, and there are major limitations in subsequent improvements. Learning brings greater difficulties.

In addition, cross-border e-commerce as a new industry content, already employed teachers are difficult to explain to students through practical experience, so in the teaching process must be lack of basis, the learning effect is difficult to control. The selection of professional teachers is also particularly important in the current vocational colleges.

4. SUGGESTIONS ON THE INNOVATION OF TEACHING METHODS FOR BUSINESS MANAGEMENT MAJORS IN THE NEW SITUATION

With the advancement of the policy of a strong trade country, whether it is traditional business management or a new type of cross-border e-commerce, the demand for foreign trade talents is increasing, and the quality of talents is becoming higher and higher. Theoretical knowledge and professional skills are required to adapt to the complex and changing international situation. Therefore, higher vocational colleges must keep pace with the times and actively innovate in the teaching methods of business enterprise management. Through innovation in teaching methods, improve teaching quality and enhance students' comprehensive quality capabilities to meet the market's demand for talents.

(1) clear professional positioning, improve the curriculum system

To improve the existing education problems, we need to start from a comprehensive perspective. First, the professional positioning of talent training should be more clear. Cross-border e-commerce is a branch of e-commerce marketing itself, and there should be distinctions in curriculum design and training content. Higher vocational colleges should set clear professional distinctions for students to help students choose which ones are more suitable for them professional.

In the current era, the degree of matching between the needs of business management professionals and the actual talents in the market is low. It is necessary to strengthen the connection with the actual market, especially for students' comprehensive ability training. Therefore, a comprehensive curriculum system should be established. To help students build and raise awareness of the curriculum and profession. At the same time, the content of the specific curriculum system for business management majors should be determined according to the cross-border e-commerce background. The study of business English should be enhanced, and cross-border online marketing, e-commerce platform operation, and international logistics courses can be appropriately added.

(2) Introduce professional teachers and optimize the ratio of teachers

Students in business management majors need to master a variety of international trade skills, including specific knowledge in tasks such as trade commodity knowledge, import and export business processes, customer service and after-sales services, and cross-border e-commerce platform maintenance technologies. To the actual operation of insurance and customs clearance, this way, students in business management can also show certain advantages in the cross-border e-commerce background. However, most in-service business management professional teachers do not have experience in cross-border e-commerce platforms, and the transition of teacher roles is not an overnight operation. For the teaching of specific cross-border e-commerce operation links, teachers have failed to keep up with the market rhythm Changes, professional teaching and faculty mismatch [3]. Therefore, higher vocational colleges should select teachers with corresponding experience and professional experience to complete the specific teaching work of cross-border e-commerce in accordance with the recruitment standards of industry talents, enhance the professional attributes, and form a truly benign learning effect in the business management profession. Let students have a deeper understanding of professional attributes.

(3) School-enterprise and school-university cooperation to share teaching resources

At present, most of the cross-border e-commerce industries are in a state of lack of professional talents. Higher vocational colleges and enterprises can reach internship agreements on the premise of mutual benefit and reciprocity through friendly cooperation with enterprises. It is the main goal for students to accumulate experience, and it is also the best way to manage professional practice in business enterprises. In this way, on the one hand, colleges and universities export talents to provide companies with stable human resources, while companies use practical experience to improve students' understanding of the content of the cross-border e-commerce industry. Through sincere cooperation, the two sides have created a good learning environment for students, fully combined theory and practice, and found new opportunities for cross-border e-commerce development. Higher vocational colleges can also establish cooperative and cooperative relationships with universities that have relatively good professional development in China. Schools and universities are united to share professional teaching resources, create high-quality cross-border e-commerce talents, and bring higher levels of Chinese enterprises in international trade. Skilled talent transfer.

In addition, the field of education should also accelerate the pace of professionalization and standardization of the industry. For example, organizations such as cross-border e-commerce professional associations should be improved. Higher vocational colleges can appropriately participate in activities to obtain more industry information and latest resources. Student internships provide more space and options.

5. CONCLUSION

Based on the current information platform, the role that the Internet can play in the trade chain is gradually increasing, especially in industry fields such as international trade and cross-border e-commerce. The upgrading of the industry technology will definitely bring a lot of difficulties and challenges to education, and the business management major in higher vocational colleges is responsible for cultivating high-quality and high-skilled compound talents for society. Only by improving the quality of talent training can we better assist the development of enterprises, industries and local economic construction.

REFERENCES

[1]Zhang Shuaihao. Analysis on the status quo and reform direction of business management of enterprises. Value Engineering, 2013 (19): 28-29.

[2]Yang Yongjun. Research and demonstration of business practice teaching mode for business management students under the "3 + 1" talent training mode. Knowledge Economy, 2018 (07): 127-129.

[3]Liang Ningna. Discussion on the Construction of Business Management Major for Applied Undergraduates. Economist, 2018 (02): 207-210.

A Study on the Overall Characteristics of Public Art Education in Local Universities in Henan Province in the New Era

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Abstract: In the higher education development under the situation of quality education to push, the development of local ordinary university public art education we should pay attention to and research until today in development of public art education in colleges and universities in Henan province has a history of nearly a century, with the development of our country higher education enterprise, universities in the province also on the basis of related policies, and in combination with the practical situation of the local education, established to promote local public art education of common colleges and universities work plans and measures in this paper, from the public educational artistry From the regional aspects, this paper sorts out the overall characteristics of public art education in colleges and universities in henan province, so as to make Suggestions and Suggestions for promoting the benign development of public art education in local colleges and universities.
Keywords: public art education; local colleges and universities; overall characteristics

Since the beginning of last century to today, the education development of colleges and universities in Henan province experienced the transition from traditional education to modern education province colleges and universities to better carry out quality education, art education work as characteristics to grasp, leadership attention, various universities set up the professional institutions of different names, the construction of teachers team, and the arts, and local culture resources as the backing, explores the aesthetic taste elegant arts and humanities quality has higher innovation consciousness and practice ability, intelligence and physique all-round harmonious development of student's way at present, the public art education in colleges and universities in Henan province in the flowers was put at the same time, also gradually form the following four overall characteristics.

1. A PUBLIC

The publicity of public art education is reflected in the fact that art education is a kind of universal, fair and public welfare undertaking. Public welfare is a prominent manifestation of the publicity of public art education. Xu wei pointed out in research on the transformation of public art education management in colleges and universities: "education is a public service, a basic right of citizens, and a cornerstone of promoting social equity. Promote social equity, harmony and healthy development through educational equity [1]." In addition, the publicity of public art education is also reflected in the fairness and universality of education. One of the guidelines in the outline of the national program for medium - and long-term education reform and development (2010-2020) is to make promoting equity a basic national education policy. The outline stressed that:"educational equity is an important basis for social equity. To ensure citizens' right to education according to law, the whole society should work together to promote equality in education[2]."

Policies about education fairness universality, not only manifests itself in the rational allocation of education resources, promote the balanced development of education between regions, and guarantee that citizens enjoy access to a good education, should also ensure the normal development of students, students' all-round development, therefore, public art education in colleges and universities to overcome professional elite, to overcome the differences of school discipline, to overcome because of regional differences of regional economic development imbalance, public art education in colleges and universities must face all student, should based on the development of the students, the equality of education opportunity to each student to learn art So, the implementation of art education in colleges and universities, the ministry of education requirements must be strictly implemented, ensure that every student has to accept the rights and obligations of art education on the management mode to reflect the publicness of public art education more characteristic, establish perfect the related system and mechanism, etc., and actively create conditions to ensure all students have the opportunity to participate in public art teaching and practice activities.

2. EDUCATIONAL

Mr. Wu Guanzhong, a famous painter, once said: "If painting is only for a bit of visual clarity, decorate the emptiness of a corner of the wall, it should be more than a thousand times despised by people! What is great and noble about it? Why waste so much human and material resources? But it should be able to real, a shot of a drop of blood, a whip a striation deeply printed at that time, the local people's heart, make originally want to cry and fell more than people drop tears[3]." As the spiritual product of human society, art can infect and edify people. Through art education, people can develop harmoniously and beautifully. "Art education: the need for criticism", co-authored by American art educators levie and Smith, states that "art education can achieve the following four purposes: cultivating a sense of civilization, fostering creativity, imparting effective communication skills, and providing tools to evaluate what people read, see, and hear. Therefore, this also provides a reason for the public art education to survive in the university environment. University education is an important part of education, not only a place for professional education, but also a place to cultivate people's all-round development, edify and perfect personality. It has a clear educational goal, which is to make students set up a correct aesthetic sense, feel beauty, appreciate beauty, comprehend beauty and create beauty[4]."

In a sense, as part of the university education, the importance of public art education purpose is to cultivate people's all-round development of school art education by the education ministry experience exchange meeting minutes (combination of art hall [2011] no. 1) pointed out: "In our country in the next 10 years of the development of school art education aims at: realize the benefit of all students art education with rich quality education build a complete system of art education in colleges and universities should strengthen the art education, to improve the students' accomplishment, edify sentiment, develop students' creativity, imagination and intelligence to promote the all-round development of students[5]."

3. ARTISTIC

"Art direct purpose of education is to improve the level of the individual aesthetic ability and art experience, and its deeper goal is through edify sentiment, improve the degree of harmony in terms of emotional and rational individual, to improve the character of people, and the freedom to go beyond the aesthetic pleasure brought an individual into a broad-minded detached realm of life[6]." As an ideology, art makes people feel, hear and hear in an image and moving way. Thanks to the creative labor of artists, the truth, goodness and beauty in reality are condensed into artistic works, so that people can place themselves in the world of beauty and culture, feel the edification of beauty and the charm of culture. The object of public art education is all students. Due to the different qualities of students, the ability to accept art is also different. Therefore, teachers should avoid preaching, teach students according to their aptitude, and carry out teaching activities in an artistic way.

The development of public art education activities, aims to common attention of art works and art activities, the teacher will be embedded in the information in the art, and her feelings about her work experience smoothly across to the students, the students themselves to experience and ability, so that the students can actively successful interpretation works embodies the aesthetic emotion and artistic connotation, students feel in the rich perceptual world beauty experience beauty, get aesthetic pleasure and emotional resonance, to improve the students' abilities of beauty feeling, foster their healthy and noble art taste, a high level of appreciation Therefore, in public art education and activities, teachers should give full play to the artistry of public art education, so that students can be influenced by art on the basis of participating in art activities and understanding and evaluation of art works, so as to achieve the purpose of art education.

4. REGIONALISM

Office of the ministry of education about print and distribute "national ordinary higher school public art curriculum guidelines" ([2006] no. 3) the curriculum explicitly pointed out: "according to the school subject construction in higher education institutions, areas such as education resources and teachers of the special features and research results, the advantages of various distinctive art arbitrary elective courses or seminar series, to meet the needs of different students interest and demand[7]." "We will strengthen the guidance of different types, adjust measures according to local conditions and school conditions, encourage the development of distinctive features, and create a new situation in which one school has more than one product[8]." Based on local culture, colleges and universities in Henan province give full play to their resource advantages and explore ways and strategies of public art education in colleges and universities.

In recent years, for example, Zhoukou normal college, with the advantages in the resources in local colleges, in-depth excavation of the eastern plain deep traditional culture resources, actively explore the road of the reform of public art education on the one hand, Zhoukou normal college using the hinterland of the central plains of traditional agriculture resources of traditional culture accumulate the massive advantage, set the laozi and the central plains culture research center, regional culture study platform, provides the guarantee for improving the quality of art education research, on the other hand, create a good campus culture atmosphere. For example, the school motto, "respect Taoism, value morality", "erudite and good at building", comes from the daoist classics, "tao te ching" and "Confucian classics". The design of the school emblem is based on Confucius' asking ceremony. Campus sculpture teacher soul overall design capture Confucianism Confucius and laozi as the founder of the two cultural character prototype in addition to this, and shown her agent content, the kindness of ses and etc all these cultural basis points, is to reveal their charm of the excellent traditional culture, and all the teachers and students in the fine tradition of rich cultural atmosphere, building up a heritage to carry forward the excellent traditional culture in the field of space and time. Again on the other hand, attaches great importance to the cultural inheritance, around the regional culture, the opening of a traditional culture seminar, a variety of education teaching form since 2011, every year to enter college freshmen in Zhoukou easy hexagrams surname culture and historical culture lecture series, Zhoukou, Lao tze culture activities, freshman of Zhoukou and Zhoukou culture have preliminary, and understanding of the system, so as to cultivate their love of Zhoukou school glorifying the emotion of love, to inspire self-confidence and a sense of pride, and enhance their sense of responsibility and the mission of inheritance and development of national culture.

By leaps and bounds, modern science and technology changes with each passing day, the human society has entered a new period of fast development, institutions of higher learning education also achieved historic development stage in the critical period of reform and development of education in our country, the implementation of public art education in local colleges in henan province is to adapt to the needs of the development of modern society, is the request of talent training we will fully implement the khalid ents fundamental task, promoting reform and development of new era college aesthetic education, strengthening to the understanding of the position and role of public art education in colleges and universities in the province, Full attention to the public art education in local colleges, according to the overall feature of public art education in our province, constructing scientific and effective mechanism of public art education management, gradually improve public art education curriculum system with the characteristic of local colleges and universities, thus promote the flourishing of public art education of institutions of higher learning in our province and even the whole country and healthy development.

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REFERENCE

[1]WeiXu. Research on the transformation of publ ic art education management in colleges and univ ersities. Ningbo university,2013 (06)：9.

[2]Ministry of education of the People's Republic of China. Outline of the national program for m edium-and long-term education reform and develo pment (2010-2020)[EB/OL].http://old.moe.gov.cn/pu blicfiles/business/htmlfiles/moe/info_list/201407/xxg k_171904.html?authkey=gwbux，2010-07-29.

[3]Weyu Wu. The painter wu guanzhong. Hebei e ducation press, 2009.10：23.

[4]WeiXu. Research on the transformation of publ ic art education management in colleges and univ ersities. Ningbo university, 2013 (06)：11-12.

[5]Ministry of education of the People's Republic of China. Notice of the general office of the mi nistry of education of the People's Republic of C hina on printing and distributing the summary of national school art education work experience exc hange meeting (Education, sports and arts depart ment [2011] no.1)[EB/OL].http://www.moe.gov.cn/s rcsite/A17/moe_794/moe_795/201101/t20110120_11 4962.html，2011-01-20.

[6]Chenguang Ling. Art education and cultivation of aesthetic experience. Tianjin social sciences, 2 007(03)：111.

[7]Ministry of education of the People's Republic of China. Notice of the general office of the mi nistry of education on printing and distributing th e guidance plan for public art courses in national institutions of higher learning (Education, sports and arts department [2006] no. 3)[EB/OL].http://w ww.moe.gov.cn/srcsite/A17/moe_794/moe_624/2006 03/t20060308_80347.html，2006-03-08.

[8]Ministry of education of the People's Republic of China. Strengthening aesthetic education in co lleges and universities in the new era to form a higher level talent training system[EB/OL].http://w ww.moe.gov.cn/jyb_xwfb/s271/201904/t20190411_3 77507.html, 2019-04-11.

Research on the Application of Flip Classroom Teaching Mode in Higher Mathematics Teaching

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Abstract: “Flip Classroom” is based on micro-videos recorded by teachers, and changes “post-learning” into a “post-learning” teaching mode, which weakens the abstraction of higher mathematics teaching and improves students’ learning initiative. This paper uses the multivariate compound function derivative rule on teaching platform as an example to study the reform of the teaching mode based on “the flipped classroom”, which is to optimize the teaching effect and to provide a reference for the reform of the basic teaching mode of applied undergraduates.
Keywords: The Flip Classroom; Higher Mathematics; The Design of Teaching

1. INTRODUCTION

The flipped classroom teaching mode refers to students’ self-learning of knowledge by using high-quality educational resources provided by the Internet before class. The classroom has become a place for interaction between teachers and students, between students and students, including discussions of difficulty, solving questions, comprehensive application of knowledge, etc. The teacher’s main job is to understand students’ problems and guide students to understand the application knowledge[1-2]. The popularity of the Internet and the application of online teaching resources, the ability of college students to obtain information, the diversity of learning methods and the freedom of learning time makes the flipped classroom teaching model feasible and realistic. Compared with the traditional classroom teaching model, “the flip classroom” has the following distinct features[3-5]: Firstly, reconstruct the learning process. “The flip classroom” subverts the student’s learning process. “Information transmission” is performed by students before class. “Assimilation and Internalization” is completed through interaction in the classroom. Teachers can understand students’ learning difficulties in advance. Given effective coaching in the classroom, mutual exchanges between classmates are more conducive to the process of absorbing and internalizing students’ knowledge. Secondly, the role of teachers has changed from lecturer to designer and guide. In the flipped classroom, the entire teaching activity is no longer the teacher speaking, the student listening, but the teacher and the student complete together. The single role of the teacher from the transmitter of the teaching content has become the designer of video resources and the online teaching resources provider and class organizer, facilitator, and multiple roles. Thirdly, students change from passive learning to active learning. College students have a certain self-learning ability and can learn independently. However, in traditional teaching methods, students are often passively accepted by teachers to teach them, which hampers students’ initiative. In the flipped classroom, students need to learn more focused and proactively through the learning resources released by the teacher before the class. In the classroom, students will ask more questions and interact with each other to solve problems and do researches together, such as solving the key and difficult issues in the study to gain a deeper understanding and mastery of the teaching content and greatly improve the students’ learning interest and enthusiasm.

2. THE SIGNIFICANCE OF USING THE FLIP CLASSROOM IN HIGHER MATHEMATICS CLASSROOM TEACHING

Due to the uneven mathematical foundation of the students of this school, the teaching content of higher mathematics is much more. However, the corresponding teaching hours are not enough to complete the normal teaching content and cannot be effectively combined with the students’ majors. Therefore, at the beginning of the course of higher mathematics, some students found it useless and boring. The above problems can be better solved by the flip classroom. At the same time, flipping the classroom provides students with an autonomous learning method so that students can learn relevant knowledge and the saved time can also be used for the application and expansion of professional knowledge.

3. APPLICATION OF THE FLIP CALSSROOM IN HIGHER MATHEMATICS TEACHING

3.1. Design of Pre-Class Learning Procedures

3.1.1. Record a micro video of about 20 minutes, publish the video with the help of the learning platform and set task points.

The advantages are that the video can be played back and can be paused. The completion degree of the video can be set, for example, the video cannot be dragged in or fast forwarded. Only 90% of the completed video is counted into the score, which effectively prevents students from watching the video seriously. Besides, the points that the student cannot understand can be played back and learned infinitely. The recorded micro video strives to be clear and concise. The description is easy to understand. The time should not be too long. In the micro video of the multivariate compound function derivation rule, the duration is controlled at about 20 minutes. The key of the video course is to explain: Firstly, the memory method and application of the chain rule. Secondly, it should be explained clearly that the partial derivative of the abstract function and its precautions. For the first point: students can be guided to review the derivation formula of the unary compound function. Abstract and generalize it. Guide students to draw a tree diagram and then study the function structure. Then review the counting principle: "classify and add, multiply by steps". Apply it to the process of deriving formulas and then get the chain rule of formula: "addition of sublines (classes); multiplication along lines (steps); partial derivative of forks; derivative of single path". Aiming at the second point: students can be guided to review the principle of derivation of unary compound functions: "derivative of external function to internal function multiplied by derivative of internal function". Abstract it and generalize it. Take the binary abstract function as an example:

If$z = f(g(x,y), h(x,y))$， So

$$\frac{\partial z}{\partial x} = f_1(g(x,y), h(x,y))g_x(x,y) + f_2(g(x,y), h(x,y))h_x(x,y) = f_1 g_x + f_2 h_x$$

$$\frac{\partial z}{\partial y} = f_1(g(x,y), h(x,y))g_y(x,y) + f_2(g(x,y), h(x,y))h_y(x,y) = f_1 g_y + f_2 h_y$$

That is, "the partial derivative of the external function to the first internal function is multiplied by the partial derivative of the first internal function. Then, using the number adds to the number that partial derivative of the external function to the first internal function is multiplied by the partial derivative of the first internal function."

3.1.2. Set up a basic question bank to consolidate basic knowledge.

Through the learning through teaching platform to release discussion questions, it can help students master the basic knowledge points and problem-solving skills.

Practice:

(1) Given $z = u\,\text{sinv}, u = x^2, v = e^{2x}$, find$\frac{dz}{dx}$

(2) Given$z = f(x+y, x-y)$, find$\frac{\partial z}{\partial x}, \frac{\partial z}{\partial y}$

These two exercises are written so that students can grasp the partial derivatives of multivariate compound functions and multivariate abstract functions by applying the chain rule by imitating examples. With the help of the selection function of the learning link teaching platform, five students were randomly selected to understand the problem solving situation. Then the group chat function was used for discussion and communication. Questions were raised during the discussion and the rush answer function was used to motivate students to participate and participate.

3.1.3. Set two questions of improvement to lay the groundwork for offline teaching.

Through the practice and discussion of basic practice questions, students have a certain grasp of basic knowledge points and problem-solving skills. But if the form is more complicated, they will be helpless. The grouping function of the learning through teaching platform will divide students into five groups and release two questions of improvement. The two questions are discussed as a difficult problem for students to communicate before class. It will also be used as an introduction to the classroom learning link.

Questions of Improvement:

(1) Given$z = x^2(\text{v}^2 + \text{v}), v = e^x + cosy$, find$\frac{\partial z}{\partial x}$.

(2) Given$u = f(xyz, x+y+z)$,find$\frac{\partial^2 z}{\partial x^2}$.

3.2. Teaching Design and Organization in The Classroom

3.2.1. Collaborate in groups and randomly select two groups to report on the discussion questions of the improvement questions before the lesson.

Among the five groups of study groups divided on the learning platform, randomly select two groups and each group selects a classmate to show the self-study results of the group in the classroom. During the discussion, it was found that students can grasp basic knowledge points in the video. But they are not enough to understand the difficult points. For example: they do not know how to solve the conflict problem in the first question. Besides, they are confused in the solution process of the function structure and not careful enough during the solution process in the second question.

3.2.2. Teacher guidance, analysis and discussion of problem solving skills and precautions.

On the basis of affirming the students' method of solving the problem, the students intuitively realized the skills of solving the problem, avoiding errors and effectively realizing the digestion and absorption of knowledge.

3.2.3. Summary and improvement.

Combine professional knowledge points and give play to the application-oriented characteristics of the basic process. Application-oriented undergraduate colleges emphasize the penetration of application links. In the teaching process, basic courses and professional courses of students can be combined to serve professional disciplines. Introduce professional problems as a background to arouse the interest of students so that students who have the ability to learn can find information after class to conduct research and realize hierarchical teaching.

3.3. Reflection on After-School Teaching

Master the problem-solving skills and application skills of applying the chain rule to find the partial derivatives of multivariate compound functions and the partial derivatives of multivariate abstract functions. Use the learning through teaching platform to achieve the teaching goal through the “the flip classroom” teaching mode. Students learn through collaborative learning. The mutual discussion of difficult problems can improve the initiative and consciousness of students’ learning. The sparks generated by this collision of ideas can make the teaching effect better.

4. CONCLUSION

One of the biggest features of the flip classroom is the creation of a dialogue-based teaching environment and teaching platform, which is conducive to improving teaching efficiency, achieving group discussions, teacher-student communication and collective cooperation. Students’ self-learning, collaborative communication, inquiry, language expression and other abilities encourage students to speak boldly and argue freely, which creates a collision of ideas in the debate, solves problems in the exchange and collision of ideas, constructs knowledge and enhances the teaching effect. Teachers have changed from “educators of knowledge” to “learning guides”and students have changed from “passive receivers” to“active explorers”, which reflects the teaching concept of “student-centric”.

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REFERENCES

[1]Kevin R, Clark. Examining the effects of the flipped model of instruction on student engagement and performance in the secondary mathematics classroom: An action research study. Minneapolis: Capella University, 2013.

[2]Talbert R. Inverting the linear algebra classroom. Primus, 2014, 24 (5): 361-374.

[3]Liu Tao. Problems and Reform Strategies of Higher Mathematics Teaching in Applied Undergraduate Colleges. Educational Theory and Practice, 2016, 36 (24): 47-49.

[4]Wang Rong, Liu Zhenjie, Xu Zhiyu. Research on Teaching Strategies of Higher Mathematics Flipping Classroom: Taking the Teaching of "Constant Term Series" as an Example.Researches in Higher Education of Finance and Economics, 2017, (1): 69-71, 85.

[5]Li Guohui. Improvement of College Students' Mathematical Ability Based on Flip Classroom Teaching Mode. Journal of Weifang University, 2015, 15 (2): 101-104.

On the Countermeasures and Suggestions of Only Child Education in China

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Abstract: With the improvement of living standard and the emancipation of peopleundefineds ideas, the number of only children in our country has gradually increased, and the education of only children has come into being. The problem of one-child education is widespread in the concept of family education, the content and teaching form of school education and the social education environment, so it is imperative to establish a new concept of family education, change the content and form of school education, and strengthen social education and other measures.
Keywords: only child; family education; school education; social education.

There are many problems in the education of the only child in our country, mainly in the family, school and society. Such as the phenomenon of doting in family education, the lack of communication and the lack of role model of parents, the phenomenon of "emphasizing theory, neglecting practice" and the lack of moral education in school education, the thought of "emphasizing material and neglecting spirit" in social education, the more bad social atmosphere and the excessive rendering of negative phenomena by the media, etc. These problems combined constitute the complexity and variability of education for only children and increase the difficulty of education. Therefore, the solution of these problems must also start from these three aspects. In the field of family education, we should change the concept of backward education and establish a new concept of family education; in the field of school education, we should improve the content of school education and adjust the way of school education; and in social education, we should pay attention to socialized education and cultivate studentsundefinedability to participate in society. Only through the tripartite coordination efforts, the only child education problem can be effectively solved.

1. CHANGE THE CONCEPT OF BACKWARD EDUCATION AND ESTABLISH A NEW FAMILY EDUCATION VIEW. The healthy psychology of the only child and the formation of healthy personality and the family factors have a close relationship with the family factors. At the same time, most of the life is spent in the family. Therefore, to solve the education problem of only children, we should start with family education.

1.1. Building a Family Education

Family education is not a family affair, but should become a common view of education in the whole society. The concept of family education refers to attaching importance to the influence of various family social ecological factors; emphasizing the study and development of parents themselves; emphasizing the importance of childrenundefineds subjective activities in the process of shaping their behavior; and emphasizing the irreplaceable status and role of the family in the process of transforming biological people into social people.[1]

What we used to think of family education was the process by which the older members of the family (mainly parents) purposefully influenced the education of young members. There are two limitations to this view: first, family education is regarded as a one-way process of influence, neglecting the influence of certain characteristics of children on parentsundefinededucation style, and the initiative of children in the process of exerting influence on parents; second, the influence of parentsundefinededucational purpose is regarded as the main source and only source of family education, neglecting the educational value of family daily life on children; and neglecting the whole family education environment, such as the influence of parentsundefinedmarriage, family atmosphere on childrenundefineds growth. This kind of education method cannot adapt to the modern educational environment, which leads to the failure of education. Therefore, the contemporary educational environment requires us to establish a new and modern view of family education. It is the responsibility of parents to create conditions for their children and actively encourage them to explore life actively and independently. The role of parents is to consult, refer to and soothe rather than judge, pay special attention to cultivate childrenundefineds initiative and sense of responsibility, exercise childrenundefineds ability to deal with all kinds of things independently. This is the modern, new view of family education, which will bring a lot of beneficial impact on childrenundefineds growth.

1.2. Building Scientific Intellectual Parental Love

Parents love their children, not only with the child, from the heart of care and care, but also should become a responsibility and obligation. Under normal circumstances, fatherly love is biased toward reason, is a conditional love; maternal love is biased toward emotion, is an unconditional love. However, in the education process of the only child, the fatherundefineds love representing reason is often assimilated by the motherundefineds love, and the situation of the motherundefineds love is too prosperous.[2]

Therefore, the education of the only child should let both parents know that love should make the loved one know more about love and love, in other words, the essential goal of love is to make the beloved learn the true love - to love life and to love all those who deserve it. This love is faith and courage, but also responsibility and duty.

1.3. Setting Reasonable and Realistic Expectations

Parents should build on their childrenundefineds interests and potentials to form realistic and achievable expectations. Only when the expectation of the parents is transformed into the goal that the child is eager to achieve in the heart can the effective resultant force of the childundefineds success be formed. In general, the only childundefineds parents should pay attention to some points when grasping the expectation of the child:(1) on the basis of expectation, the child can only be cultivated according to the interest, not the orientation;(2) in terms of the content of expectation, do not let the parentsundefinedexpectation replace the childundefineds plan for their own future;(3) in terms of the degree of expectation, do not let the parentsundefinedexpectation become the childundefineds impossible.

2. IMPROVE THE CONTENT OF SCHOOL EDUCATION AND ADJUST THE WAY OF SCHOOL EDUCATION

Most of peopleundefineds knowledge in life is derived from school education. School is the most influential factor in oneundefineds life in addition to the family, therefore, school education plays a vital role in the cultivation of the personality of the only child, which plays a role mainly through the content of education and the way of education.

Schools should improve the content of education and increase the physical, psychological and moral education for only children. First of all, schools should pay attention to the physical exercise of the only child. As the saying goes: the body is the capital of revolution. In recent years, with the improvement of the material life of the residents in our country and the acceleration of the upgrading of electronic technology products, many children, especially the only child in the city, have become so-called "otaku women ", and their health status has appeared many problems, such as obesity, myopia, physical decline and so on. Therefore, it is urgent to improve the health of the only child. The actual situation is that most students are reluctant to take part in physical exercise, therefore, the school should open more physical classes to urge the only child to carry out physical exercise, from the objective to improve the overall health of students; at the same time, the school should more publicity lack of exercise harm, so that students realize the seriousness of the problem, subjectively form a self-exercising consciousness. Secondly, the school should pay attention to the psychological guidance to the only child. The school can carry out psychological guidance from the following aspects: infiltration of psychological education in the teaching of various subjects in the school. The teaching of each subject in schools should combine the contents, characteristics and requirements of their own education and teaching, establish the goal of cultivating the psychological quality of adaptation, make the teaching process of each subject and the psychological education of the school promote each other, infiltrate each other, and really improve the psychological quality of the only child; optimize the cultural and psychological environment of the class collective. School education should give full play to the enthusiasm and initiative of the only child in class life by carrying out various activities and communication, cultivate their self-management ability, regulate their interpersonal relationship with other students, carry out the work of school psychological counseling, and strengthen psychological training and guidance. For example, the establishment of counseling institutions and counseling centers, such as counseling rooms, to disseminate basic psychological knowledge to students, and timely guide students who have problems, so that they can face the society with a healthy attitude and become qualified social citizens. In addition, when carrying on the mental health education to the student, must be people-oriented, according to the different psychological problems of different students, choose the appropriate psychological counseling method. Finally, schools should pay attention to the moral norms of the only child. Nowadays, there are more and more one-child moral deficiencies, which have aroused widespread concern. Among all the influencing factors, the schoolundefineds moral code for the only child is more direct and effective. The school can strengthen the moral cultivation of the only child through the following ways: to form a team spirit in the campus cultural activities. Campus culture reflects students undefined spiritual environment and cultural atmosphere. The only child has a strong sense of participation and takes the campus culture as the starting point, which can effectively play the role of ideological and moral education. The campus culture should guide the basic behavior norms of the only child, cultivate good behavior habits from its food, clothing, housing, stimulate its sense of ownership, form a correct world outlook, outlook on life, values, and seek the support of noble spirit in the network education. In contemporary society, the traditional way of education has been unable to meet the curiosity of young people, including only children, and the new way of education with Internet education as the media is favored by people. Therefore, schools should catch the Internet as a teaching media, strengthen positive guidance, and vigorously promote leading values; improve the ability to practice in social practice. The ultimate destination of the only childundefineds ideological and moral quality is to externalize the inner cognition into social practice activities and achieve unity of knowledge and practice. The school should organize students to actively participate in various types of social practice, such as social investigation, work-study, and so on, so that they can further understand and understand the society and deepen their understanding of the ideological and moral theoretical knowledge they have learned.

Schools should adjust the way of education and increase the curriculum of comprehensive practical activities Most schools are taught through classroom teaching to teach students some required knowledge and skills. Although this kind of classroom teaching method can make students master more cultural knowledge simply and effectively, it will also make students lack initiative and enthusiasm of learning and reduce learning efficiency. Therefore, the school should adjust the way of education and teaching, and increase the curriculum of comprehensive practical activities. The comprehensive practical curriculum refers to the comprehensive learning activities carried out independently by the students under the guidance of the teachers, which is based on the students undefined experience, closely related to the students undefined life and social reality, and reflects the learning activities for the comprehensive application of knowledge.[3]The curriculum of comprehensive practical activities can effectively improve its ability to solve problems, exercise its open thinking, thus stimulate the master position of the only child to participate in learning, and promote the whole teaching process.

3. ATTENTION SHOULD BE PAID TO SOCIALIZED EDUCATION AND STUDENTSUNDEFINEDABILITY to participate in society For our only child, its most obvious shortcoming is the lack of sociality. Therefore, strengthening the socialized education of the only child is an important way to promote the healthy growth of the only child and to overcome its weakness in the only child environment.

The society should focus on developing the independent ability of the only child. With strong independent ability, it is a prerequisite and important embodiment for the only child to enter the society smoothly. And the independence of the only child must be through social practice to really get exercise. Therefore, the only child parents should pay attention to cultivate the ability of the only child to participate in the society in normal life. Daily life, such as washing clothes, should encourage children to do it themselves, so that they can be fully prepared to enter the society.

Society should provide more social life for the only child. According to modern psychological research, when a child reaches the age of two or three, the demand for an only child becomes stronger. Without this satisfaction, the childundefineds personality will gradually become withdrawn and unsocial. Therefore, the only child family parents should provide more opportunities to avoid causing the child undefined withdrawn personality; the society should also provide a variety of channels to promote the socialization of the only child, such as the museum, the Childrenundefineds Palace and other public facilities to cover more scope.

The society should pay attention to cultivate the willpower of the only child. Every independent activity in society needs to be accomplished with will. Only with strong willpower, can people have the impetus to overcome the difficulties and hardships, and adapt to the complex social environment quickly. Society should organize more activities, such as summer camps, and encourage children to actively participate in order to exercise their willpower.

The education of one-child is a complicated and varied system. As a social person, the only child has the difference and the development nature, therefore, our country contemporary only child existence question is various, the family, the school and the social education existence question is only one part. In real life, these problems work together with other problems to form new and more complex educational problems. We must find out in depth the more direct and essential causes of these problems, and the concrete analysis of the specific problems, so as to explore more suitable ways to achieve a better development of the only child.

REFERENCES

[1]Lin Chongde. Chinese only child education encyclopedia. Zhejiang Province: Zhejiang Peopleundefineds Publishing House, 1999: 48.

[2]Wang Qing. On the influencing factors of the socialization of only child. Journal of Anyang Normal University, 2001 (7).

[3]Steering Group on Quality Education in Schools. moral quality education and upgrading programs for students. Liaohai Press, 2011: 23.

A Brief Analysis of the Forms and Characteristics of Public Art Education in Local Universities in Henan Province

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Abstract: Public art education as an important part of college education, by the party central committee and the state education department attaches great importance to promote the public art education, is not only the requirement of the national education policy, and fostering healthy personality and the only way for a high mental state of innovative talents in this paper, from the college society activities heritage into the campus activity high art into campus activities other artistic activities, etc., the characteristic of public art education in colleges and universities of Henan province, in order to correctly understand the value of public art education in our province and the status quo, in-depth solid The systematic development of public art education work provides certain theoretical reference.
Key words: public art education; colleges and universities; features

Public art education in colleges and universities bear the heritage of the Chinese nation culture gene to implement khalid ents the historic task of henan province has a long history and bright culture, in the province of local colleges and universities must give full play to the advantageous resources superiority, based on local culture, adjust measures to local conditions, boldly explore ways of public art education in colleges and universities and strategies as a base and a cradle for cultivating innovative applied talents, colleges and universities in Henan province comprehensively implement the party's education policy, deepening the reform of public art education, comprehensively improve the quality of public art education, has carried out many forms Multi-level art practice, promote the development of the campus art, school art taste, improve the students' cultural and artistic accomplishment, to exercise and show students can provide broad stage, to cultivate DE wisdom body beauty comprehensive development of socialist builders and successors to speed up the construction of reinvigorating China through human resource development has made the positive exploration and practice.

1. STUDENT CLUB ACTIVITIES

College student community is composed of voluntary students non-profit mass organizations, not only is an important group of college students' exercise, but also for college students to understand the society is the important channel of student associations, to adapt to the social development to adapt to the reform of education and the needs of the students to grow up, actively carry out health colorful cultural and artistic activities, to promote the student Germany wisdom body beautiful fatigue full scale development.

In Zhengzhou university as an example, the students art group to flourish, such as chorus troupe of instrumental music group jie photography association, painting and calligraphy association of film critics club arts groups such as students, most have a fixed training venues scientific training plan and professional teachers over the years, the school students creatively has conducted a diversity of artistic activities, such as campus top ten singer competition campus host contest nation ancient times new notes will sing, memory of the may fourth movement, to commemorate the December ninth movement singing contest, celebration of National Day New Year large-scale theatrical performances, sporting events large art performance, etc These activities not only have distinct themes, but also have high aesthetic value and artistic appeal, reaching a high artistic level. They complement the art education activities organized by the school and become an integral part of the school's public art education activities. [1]

2. LNTANGIBLE CULTURAL HERITAGE INTO CAMPUS ACTIVITIES

Intangible cultural heritage (hereinafter referred to as intangible cultural heritage) is an important embodiment and symbol of the outstanding traditional culture of the Chinese nation. The heritage protection work to arouse national collective memory and enhance the cultural identity of the Chinese nation has irreplaceable function awaken all citizens, especially the teenagers' cultural consciousness is the important way to carry out the intangible heritage protection into the campus activities, designed to let teenagers know the region in the perceptual experience this nation's history and culture, promote national pride and self-confidence, arouse patriotic enthusiasm, love hometown in the words of traditional folk culture, cultivate interest in traditional folk culture, active learning tradition to carry forward, become a national traditional culture foundation is hot in the love of the motherland's talent.

Zhoukou normal college, for example, the school as the first batch of 12 in henan provincial intangible cultural heritage research base, [2]one of in recent years, the school's rich and colorful intangible activities, fruitful since 2011, the school teachers are carried out in jun is too shenhou town huaiyang HaoLing huaiyang flat bread machine ruins of the ancient city of he nan zhong yuan folk custom garden xihua basket son sets shanxi pingyao ancient city zaozhuang of shandong province and other places for art, held the China's contemporary exhibition of pa ceramics (hong-wei wang zhang, 2011.4) in zhoukou normal college intangible base construction symposium (jiang unity, 2012.5) Zhang Zhenfu clay sculpture art (Zhang Zhenfu, 2013.6) the establishment of Chinese modern art and cultural heritage (2014.11) Gao Youpeng, han HuaShe injection of ten kinds of ideas (on) the (Zhang Dui, 2015.12), and other art activities, attended the 3rd Huang Hexue top BBS and the Yellow River culture industry development conference (2011.11) in kaifeng city, henan province, central China traditional art protection and inheritance discussion (2014.3), henan huaiyang, huaiyang henan province traditional art protection class (henan huaiyang, 2015.4) 2015 Chinese art anthropology international academic seminar (wuxi, jiangsu, October 2015) and other series of activities, and conference spirit timely convey the content of the activities to students, let students understand more intangible knowledge and information by conducting intangible performance into campus folk handicraft production of a variety of activities, such as to build the entire school teachers and students to learn to protect the non-material cultural heritage of the strong atmosphere, make the intangible walked into the campus, approached the students, eventually make students enhance the heritage protection consciousness, develop learning and protect intangible interest, make students to be involved in the process, the intangible promote the student Germany wisdom body beautiful fatigue full scale development.

3 HIGH ART INTO CAMPUS ACTIVITIES

To strengthen aesthetic education, raises the student good aesthetic and artistic accomplishment, the country since 2005 to carry out the high art into campus activities in November 2010, the Ministry of Education of the Ministry of Finance jointly issued guidance on high art into campus activities (combination of art [2010] no. 4) stressed:" Insist on education, facing all students across the in high art into campus activities should take the actual situation of the different parts of the different categories of colleges and universities, make more students in the fine art of beneficiaries."[3] In May 2015, Henan Provincial Education Department, Culture Department and Finance Department jointly issued the "Notice on Launching High Art Activities on Campus in 2015" (No.335 [2015] of Education Body Wei Yi) which pointed out: "In order to promote school art education and enrich campus cultural life, according to the deployment of the Ministry of Education, the Provincial Education Department, Culture Department and Finance Department will continue to organize and carry out high art activities on campus in 2015." [4]Through the analysis of the above materials, we can know the achievements of the high art activities in our province in 2015:First, the name of the activity is unified, "2015 Henan province high art into the campus activities". Secondly, the theme of the activity is clear: "approach the master, feel the classics, cultivate one's sentiment and improve one's self-cultivation." Third, the content and form of the activities are standardized. (1) Organizing national and provincial art troupes to perform classical repertoire such as symphony, ethnic music, opera, drama and Peking opera in colleges and universities in the province; (2) Organizing excellent university art troupes in the province to perform traditional and original programs such as operas, dance dramas and folk music in universities. Fourth, the activity plan is detailed, with 12 performances by state-level art troupes. The provincial art troupe performed 50 performances. 25 performances by art troupes of colleges and universities in the province; Art education experts from the Ministry of Education gave 6 lectures. The time is from April to December 2015. Fifthly, the activities are diversified in form and rich in content, which are suitable for non-art major students in ordinary colleges and universities. They have achieved very remarkable results and are warmly welcomed by the majority of students.

4. OTHER ARTISTIC ACTIVITIES

In addition to the above-mentioned activities of college students' associations, "non-heritage" into campus activities, "elegant art" into campus activities and other art education activities, while organizing and managing the teaching of art education courses, various colleges and universities actively seek their own characteristics and highlights through weekend special art performances, art lectures and academic reports, interviews with art celebrities, art inspections and art exhibitions and other activities to explore the diversified development of public art education in colleges and universities. For example, Henan University's weekly "weekend cultural square" and annual "community cultural festival", North China Water Resources and Hydropower Science's "New Year's Celebration" and "Farewell to Alma Mater Party", Luoyang Normal University's "Peony Culture Art Festival" and "Art Henan" network, zhoukou normal university's "Music Listening and Art Perception" series of lectures, "Famous Teachers Around" and "Drawing the World to Make City" and other activities have won praise from teachers and students.

5. "REALM DRAMA CLUB" OF HENAN UNIV ERSITY

The State Drama Society of Henan University was established in 1998. It is a mass art society under the direct leadership of the student affairs department (department) of the Party committee. Since its establishment, it has adapted and rehearsed a series of classic plays, such as Thunderstorm, Teahouse, Longxugou, etc., traditional crosstalk "The Three Kingdoms", double spring "Speaking and Singing", Yue opera "Lu You and Tang Wan", modern Peking Opera "Shajiabang", opera "Jiang Jie", etc. At the same time, a large number of original plays are scheduled to be performed, such as the school history play "Nine Songs", the school garden play "Choice", the scenery play "Wife", the reportage play "Nothing to Say", the pioneer play "My Li Bai" and the musical "We Are Young", which are highly praised by leaders and classmates and have a high reputation both inside and outside the province.

6. ZHOUKOU NORMAL UNIVERSITY'S "MUSIC LISTENING AND ART FEELING" SERIES LECTURES

"Music Listening and Art Perception" series of lectures was founded in 2011. According to the guiding ideology of the talent training program, zhoukou normal university adopts a combination of on-campus teachers and off-campus teachers and a combination of part-time and part-time teachers to provide public art education series of lectures. Students participating in lectures, performances or art practice activities of this series of lectures can obtain corresponding innovation credits. Innovation credits can supplement or replace credits of public art elective courses.

The series of lectures on "Music Listening and Art Perception" are jointly managed by the Academic Affairs Office, the Academy of Fine Arts, the Institute of Design, the Academy of Music and Dance, the Academy of Literature, and the School of Journalism and Media. The Academic Affairs Office is responsible for arranging, supervising and coordinating the lecture program. Relevant colleges are responsible for the selection and selection of art teachers, lecture content, art research, venue layout and other work. In order to comprehensively improve the overall requirements of college students' cultural and artistic quality, lectures cover music, fine arts, dance, drama, film and television and other artistic categories, and have various forms such as theoretical teaching, artistic appreciation and artistic practice to meet the requirements of students in terms of aesthetic concepts, artistic practice and artistic accomplishment. So far, the activity has been held for nearly a hundred times and has received more than 50,000 audiences from teachers and students. It has been well received by the majority of teachers and students. In 2013, during the evaluation of undergraduate teaching in zhoukou normal university, it was unanimously praised by evaluation experts.

7. EPILOGUE

For local colleges and universities, a good enviro nment and atmosphere is an important condition t o promote students' all-round physical and mental development. For public art education, a good ar tistic atmosphere is an important guarantee for th e overall improvement of students' humanistic qua lity. Due to the support of relevant national polici es and the fierce competition for social talents, al l kinds of colleges and universities in Henan Pro vince attach great importance to public art educati on. A series of cultural and artistic activities such as local college campus cultural festivals, concer ts, art societies, singing competitions and so on a dd luster to campus culture. However, there are s till a few schools with problems such as low pop ularization of public art education, unsound mana gement institutions, teachers' quality to be improv ed, unreasonable public art curriculum setting and so on, which have affected the development of higher education and the implementation of overal l quality education in our province, thus affecting the cultivation of comprehensive quality of colle ge students. We sum up some existing research r esults and teaching practice experience, seek effec tive ways to deepen the reform of public art edu cation by "finding the root of the problem" meth od, and organically combine all aspects of teachin g reform, so that public art education can achieve great and sustainable development in colleges an d universities in our province.

REFERENCES

[1]ZhengZhou University. Creating a series of hig h-quality products and creating characteristic educ ation [Z]. Henan university public art education e xperience exchange, luoyang normal university, 20 11 (05): 4.

[2]Dahe network. Our province announced the int angible cultural heritage research exhibition herita ge base[EB/OL].2http://newpaper.dahe.cn/hnrb/html/2010-06/11/content_328847.htm，2010-06-11.

[3] Notice of ministry of education, ministry of c ulture, ministry of finance of the People's Republi c of China on the promotion of high art on cam pus in 2010 (Education, sports and art letter [201 0] no.7)[EB/OL].http://www.moe.gov.cn/srcsite/A17/moe_794/s3743/201006/t20100621_92824.html，201 0-06-21.

[4]Education department of henan province. Notic e on the promotion of high art on campus in 20 15 (Education, sports, health arts [2015] no.335) [EB/OL].http://www.haedu.gov.cn/2015/05/27/1432707527242.html，2015-05-27.

According to the arrangement of 2015 henan eleg ant art into campus activities, only two or more universities in henan province were selected.

Reform and Exploration of Interest Teaching In Basic Classes under the Layered Teaching Mode of Higher Mathematics

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Abstract: With the advancement of the stratified teaching of advanced mathematics in our school, the first stage of stratified teaching (both basic and experimental classes) is progressing smoothly. According to the survey of teaching satisfaction of students in basic classes, there are obvious differences among the satisfaction of students in basic classes. The significant differences are mainly caused by insufficient understanding of layered teaching, insufficient attention to learning, insufficient teaching perception and individual characteristics of students and so on. [1] This paper discusses and analyzes deeply on the interest teaching of higher mathematics in the basic class. This paper starts with the importance of implementing interest teaching in the basic class in the layered teaching mode, specifically explaining the practice of the interest teaching in advanced mathematics to the students of the basic class, which proposes strategies and theoretical foundations for the further development of interest teaching in basic mathematics classes in the future.
Keywords: Hierarchical teaching; Basic classes; Interest teaching; Advanced mathematics

In recent years, due to different regions, different cultural development regions, and different historical backgrounds, there have been large differences in the cultural foundation, learning ability and potential demands for learning objectives of students. Independent colleges and private colleges have a “low starting point, multiple levels, and large gaps” and other differentiation phenomena. Following the basic principles of “teaching according to aptitude” in the process of Chinese education and teaching, and considering students’ “nearby development zone” theory, many colleges and universities, especially independent colleges and private colleges, have implemented a layered teaching model for university mathematics. [2]

Our school implemented hierarchical teaching of “Advanced Mathematics” for engineering students in September 2019. This model considers students’ psychological balance and affordability in the hierarchical stage. It does not change the original administrative class system and implements “divided into stages, Two-tier” teaching mode. That is, through appropriate grouping, students in the same group can be taught at the same time, but they are divided into different levels of classes, namely experimental classes and basic classes. They use different textbooks, different training programs and different class hours. Although this model realizes that all students have the college mathematics knowledge necessary for their majors and the cultivation of “top talents” in college mathematics, this stratification more or less affects the mentality of students in elementary classes learning advanced mathematics. The basic class students have big differences in foundation, serious personality differentiation and diversified individual ambitions. How to make students in complex basic classes like to learn advanced mathematics is an important issue explored in this paper.

As we all know, interest has a close relationship with students’ values and needs motivation and it can also have an impact on students’ cognitive psychology and emotional development. [3] As long as teachers grasp the psychology, they can stimulate interest of students and help students form a good study habit.

1. PRACTICE OF INTEREST TEACHING IN BASIC CLASSES UNDER THE LAYERED TEACHING MODE OF ADVANCED MATHEMATICS

In the process of carrying out advanced mathematics teaching in basic classes, students should be placed in the main position, change the traditional indoctrination teaching method, make full use of modern teaching mode and constantly stimulate students’ interest and enthusiasm for learning. Therefore, it can cultivate student autonomy to learn. In this paper, the following interest teaching practice is carried out for the students in the basic class under the layered teaching mode.

1.1 Take a Good Introductory Lesson, Get twice the Result with Half the Effort

After entering college, freshmen will have curiosity for a better university life and eager to pursue new things. A good mathematics teacher’s first introductory class in high mathematics is the cornerstone of students’ interest in learning advanced mathematics. The author working in the enterprise for ten years has undertaken more business training courses and has a better understanding of the trainees’ psychology. In the classroom, the author carries on practice focusing on the pursuit of students and the needs of employers.

Firstly, inform students in the basic class. Although they are in the basic class, it does not mean that their basics are worse than the experimental class. The layered teaching implements “two syllabuses, the same exam and incentives coexist.” The teacher teaches differently according to the syllabus, but in order to reflect the fairness of the educational evaluation, all students take the same test in the final exam. As an incentive, the students in the whole group are rearranged according to the final exam results of the first semester. The experimental class is reorganized. The students in basic class also have opportunity to study in the experimental class.

Secondly, inform students: The annual mathematics competition is fair to every student. As long as the students are willing to work hard, students in the basic class also have the opportunity to participate and win prizes.

Thirdly, inform students: the syllabus, teaching hours and textbook version of the basic class are the same as the students before the layered teaching. Their teachers and senior students can also learn advanced mathematics, participate in the mathematics competition and get good results. Besides, give appropriate examples to enhance their convincing.

Fourthly, inform students: entering the university means that you are an adult, adults should have a sense of responsibility and the correct three views. From the first year on, you should set a goal for yourself in life and do everything seriously from the beginning. Do not worry about the final failure. Advanced mathematics is a basic course and it is also a prerequisite course for professional courses. It is a solid course to learn from this course and the following courses can be learnt better. [4] With proper examples, the effect is great.

Through the introduction of the introductory class, students’ recognition of the school and teachers has been greatly improved. Students’ passion for advanced mathematics has been greatly improved. They are full of confidence in entering experimental classes, participating in competitions. They are confident in personal development. Students are enthusiastic about learning advanced mathematics.

1.2 Case Teaching, Focus on Application

Applying mathematics knowledge to practical work, life is an important purpose of learning mathematics and an important aspect of students’ interest in learning. [5] In the context of entrepreneurial innovation, the introduction of case teaching models into the classroom not only achieves a higher mathematics teaching model. The innovations in the book also inspire students to apply learning and practical sense of gain. In the past, the teaching of advanced mathematics often focused on the teaching of theoretical knowledge, which divided the connection between advanced mathematics and the outside world and the application value of advanced mathematics could not be fully revealed. This paper uses the method of mathematics case correctly in the teaching of advanced mathematics, organically combines the theoretical knowledge of advanced mathematics with the corresponding mathematics case and connects the boring teaching content with the rich and colorful external world.

Of course, it is impossible to complete the cultivation of students’ abilities and qualities in a short period of time. A long-term, step-by-step principle should be adopted. [6] Therefore, in the teaching of advanced mathematics, it is combined with easy to difficult, shallow to deep mathematical cases to sublimely improve students’ advanced mathematics practical ability. For example, when explaining the knowledge of functions, teachers can propose a simple and small mathematical modeling problem. Students can use the theoretical knowledge of functions and their own thinking to construct a mathematical model to solve. The next lesson can be based on this relatively difficult Mathematical modeling problems. Infiltrating mathematics modeling into the teaching model has cultivated students’ consciousness of applying advanced mathematics and also mobilized students’ interest in learning, which in turn has promoted students’ active learning of theoretical knowledge of advanced mathematics.

1.3 Small Class Tutoring, Lay a Solid Foundation

The “large class teaching” model is widely adopted. Due to the implementation of the hierarchical teaching model in our school, the basic class is mixed with several administrative small classes and majors with a number ranging from 70 to 120. This model has the following disadvantages: “Large class teaching” lacks communication and most students are difficult to obtain the opportunity to think actively and participate in the classroom [7]; the large class has a large number of students, the student source span is large and the teaching content of the teacher is less universal [8]; “large class teaching” is mostly based on teacher teaching, heuristic and inquiry. The interactive teaching methods such as the type cannot be realized effectively. [9] This greatly reduces students’ interest in active learning.

In order to effectively solve the problem of low learning initiative of this model for students in basic classes, the teaching mode of “large class teaching + after-school small class tutoring” adopted in this article. After the “large class teaching” class, add two hours of tutoring once a week, students are required to conduct “small class seminars” in groups during which students are allowed to actively raise questions or discuss topics. Thereby it can enhance students’ interest. “Large class teaching” is centered on teachers and teachers lead the classroom to realize the function of “teaching”. “After-school tutoring” is centered on students and realizes the active “learning” of students. “Large class teaching” mainly explains basic knowledge points and completes the basic tasks of the outline; “after-school tutoring” aims at the key and difficult points, and students conduct in-depth discussions and exchanges. [10]

1.4 Mixed Teaching, Class-suspended But Still Learning

2020 is an unusual year. At the time of the epidemic, our school implements mixed teaching to suspend classes without stopping learning. The traditional higher mathematics teaching mode mainly focuses on the theoretical knowledge and then follows some fixed thinking to solve problems, which is just to allow students to master some basic theoretical knowledge but lack of training their innovative ability [11] The mixed teaching method allows students to broaden their horizons through MOOC, video and live broadcast, building a three-dimensional situation for students and placing the core points on some difficult issues. It also allows students to actively participate in the production of multimedia courseware and experiences the fun of this subject. The “PPT + tablet + live broadcast” allow students to experience the ease of learning at home and the freedom to play back at any time. Learning without pressure allows students to more easily absorb knowledge.

1.5 Politics in Class, Talent Training

Advanced mathematics is a highly abstract, highly creative and has the ability to shape students’ rigorous thinking skills. It allows students to fully integrate into the study of advanced mathematics courses, let students understand current affairs politics, understand today’s learning and the community of destiny about development of the country. Besides, it can let student care for the country and pay attention to what talents and technologies that are most in short supply in the country. Based on this, it can stimulate students’ patriotism and learning enthusiasm.

For example: In May 2019, Ren Zhengfei said in an interview with the media that Huawei has at least 700 mathematicians, 800 physicists, 120 chemists, 6000 basic research experts and 60,000 engineers. For Huawei, why do most people “hoard”? First of all, in the unmanned area of major technological innovations, mathematics is the big dipper of navigation. In the current technological field, many technological innovations are actually algorithmic innovations. Solving a problem is to find an algorithm and the algorithm needs mathematics. Different algorithms are aimed at different needs, problems and stages of development. Therefore, a technology innovation company needs mathematics. Secondly, mathematics is not only a tool, but also a scientific thinking and culture. In the process of research and development of science and technology, it is a tool for problem solving. Besides, mathematical thinking and mathematical culture are needed, so that more problems can be solved. Therefore, some mathematicians and some people who study mathematics need mathematics. Besides, those who can use mathematics thinking to find problems and solve problems in their daily work also need mathematics. They can use mathematics knowledge to solve problems in real life. The problems encountered in the process brought economic and social benefits. [12]

Teaching reform and innovation must serve the market as the purpose. The entire higher mathematics teaching must meet the needs of students’ aspiration development and talent training. The author has worked in the financial industry for ten years, paying attention to the national economy and culture, current affairs politics, the operation of listed companies and can understand the needs of society and enterprises for talents. Using this is can used as a guide, it is very helpful for students to enhance their interest in learning.

1.6 Use Rewards and Punishments together to Increase Participation

In order to activate the learning atmosphere of classroom teaching, interesting classroom activities can be properly organized. College students usually pay more attention to the assessment of usual time. It is a common recruiting method for college teachers to reward and punish students by using the usual deduction method. However, college students are at an active and rich age. For example, in the course of advanced mathematics, there are 80 students in a certain class. This paper uses the “80 appointments” reward and punishment method, letting each student think of a reward agreement and a punishment agreement (both within the range of students can bear Inner).Let students write them on two pieces of paper and then put them into the reward box and punishment box respectively. After collecting the “80 appointments”, let someone keep the two boxes. Whenever there is a need for punishment and reward in the classroom, let the person draw a note to follow. Using students’ own methods to reward and punish themselves makes them easier to accept, adding classroom fun and enhancing students’ enthusiasm for learning advanced mathematics.

2. FURTHER ADVANCEMENT OF INTEREST-BASED TEACHING IN BASIC CLASSES UNDER THE LAYERED TEACHING MODEL OF ADVANCED MATHEMATICS

There are many ways to teach interest in basic classes under the hierarchical teaching mode of advanced mathematics. Under the purpose of cultivating college talents in the country, with the support of school policies and the joint discussion of the mathematics teaching and research department, advanced mathematics interests can be promoted at a deeper level.

2.1 Daily Teaching, Ability Penetration

Teachers can infiltrate competition questions into classroom teaching in daily teaching, aim at cultivating students’ thinking ability and focus on cultivating students’ thinking agility. [13] In the teaching, students are carefully prepared some open questions to attract students’ attention, which is very helpful to cultivate students’ innovative thinking. In teaching, we must also pay attention to the cultivation of competition ability, which not only helps mathematics scores, but also promotes the cultivation of learning consciousness. Therefore, teachers should pay more attention to method update, content update, model update, technology update, etc. in daily teaching. Teachers should constantly improve the quality and level of teaching, achieve the improvement and development of teaching practice. Contemporary Educational Practice and Teaching Research

2.2 Incorporate Types of Questions, Teach Students According to Their Aptitude

By referring to a large number of extracurricular subjects, in accordance with the principle of emphasis on foundation and strong inductiveness, select typical example questions to set up related practice questions, which are used to penetrate the type of questions in daily teaching and teach according to the aptitude. At the same time, taking into account students' interests and receptive abilities, penetrating open questions are presented in appropriate timing and form in daily teaching. Collect these open questions into future training materials and teach according to aptitude. Reducing the gap between basic students and experimental students can improve students' confidence and initiative in learning mathematics.

2.3 Build a High-level Teaching Team to Stimulate Students' Sense of Gain

Set up a high-quality teaching team. Regardless of whether it is an experimental class or an ordinary class, cultivating a group of aspiring and persevering students with high mathematics ability requires a team of teachers with rich teaching experience, good problem solving ability, expression ability and research ability and dedication. Interest teaching is different from ordinary classroom teaching. It is the extension and application of classroom teaching. It requires teachers to have a solid foundation to teach the class well and extensively engage in extracurricular knowledge because they can reflect the latest developments in advanced mathematics. Teachers can communicate to students new trends in higher mathematics exams at any time during teaching or training. This arouses students' interest in learning. On the other hand, it also promotes teachers' further improvement in teaching methods and contents [14].

2.4 Carry out the Second Classroom to Enrich After-school Learning

Carry out the second classroom to enrich students' extracurricular study life. But it takes a lot of extra time. The second class can take many forms, such as online class, class in class. Teachers and students can be one-to-many or one-to-one. Time period can choose in the evening or on the weekend. The location can be classroom, cafeteria, campus or online. Although these methods will affect some teachers' other time and energy, the variety and flexibility of it can weaken this effect. Teacher and student communication is also carried out in a relaxed and pleasant way. This is also an important way to enhance students' interest in learning advanced mathematics.

2.5 Talent Selection by Stepping, Training Excellent Firstly

Students are selected in a step-by-step manner. In order to stimulate the students' enterprising spirit, we must cultivate the best. The first stage is the intra-school competition. The second stage is training selection. Based on attendance assessment and examination rankings, the entry list is determined. The third stage is that some outstanding students are selected to participate in the national competition after strict assessment. Comprehensive assessment is made by teacher assessment. The three stages of concentrated training are arranged as follows: in the basic stage, the review and consolidation of the teaching materials are according to the requirements of the exam outline, so that students have a deeper understanding of the connection between knowledge points. In the consolidation stage, train the students according to the real issues before to improve students' comprehensive quality and competition ability.

3. CONCLUSION

In the process of carrying out basic class teaching under the layered teaching mode of advanced mathematics, teachers strengthen the cultivation of students' interest. It can develop a certain amount of interest in teaching through various methods, which can continuously improve the traditional teaching methods. Then it can bring students the goal of learning interest, which is to continuously consolidate and strengthen students' enthusiasm for learning, enable students to develop their own learning enthusiasm through practical operations, and to continuously strengthen the ability to cultivate students' independent learning. Therefore, it provides students with a sustainable future. The comprehensive ability of students is improved and the understanding of knowledge is more accurate and clear. This teaching mode helps to tap the potential of students, cultivate their sense of innovation and promote the overall development of students.

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REFERENCES

[1]Wang Fang. Analysis of influencing factors of college students' teaching satisfaction based on hierarchical linear model [J]. Fudan Education Forum. Teaching in Chinese University, 2018 (16-1).

[2]Wu Nengbiao, Luo Huan. Innovative thinking and practice of talent training model [J]. Teaching in Chinese University, 2018 (1): 51-55.

[3]Wang Xiujuan. The basic strategy of class management under layered teaching conditions [J]. The Road to Success, 2019 (23): 7-8.
[4]Qin Hourong, Xu Hairong. The “contact point” of ideology and politics in university mathematics curriculum and the construction of teaching system [J]. Teaching of Chinese University, 2019 (9): 61-64.
[5]Feng Qihong, Yang Hui, Ma Jianshan, etc. Curriculum reform and practice based on the concept of “student-centered” [J]. Teaching in Chinese University, 2017 (10): 68-71.
[6]Ren Zhiguang, Mei Hong. Exploring and researching on the reform of higher education and teaching under the background of double innovation [J]. Chinese Higher Education Research, 2017 (1): 86-90.
[7]Latchford P. A systematic observational study of teachers and pupils behaviors in large and small classes [J]. Learning and In-struction, 2003 (13): 569-595.
[8]Sun Yanjun, Lu Xiaodong. Small class seminar teaching: the core element of undergraduate elite education—Taking Peking University as an example [J]. Teaching in Chinese University, 2012 (8).
[9]Joseph J L. Size matters: an exploratory comparison of small-and large-class university lecture introductions [J]. English for Specific Purposes, 2009 (28): 42-57.
[10]Sun Yanjun, Lu Xiaodong. Small class seminar teaching: the core element of undergraduate elite education—Taking Peking University as an example [J]. Teaching in China University, 2012 (8).
[11]Cui Guofan, Ding Hui. Difficulties and countermeasures of advanced mathematics curriculum reform in applied technology universities [J]. Continuing Education Research, 2018 (8): 127-128.
[12]https://www.sohu.com/a/377362937_436214.
[13]Liu Lixia, Wu Guofeng. Multi-dimensional thinking of talent training in higher vocational colleges under the background of double innovation education [J]. Industry Economics Research, 2017 (23): 176-178.
[14]Na Rengele. Research on the Theory and Methods of Mathematics Classroom Teaching in Colleges and Universities——Comment on “Mathematics Classroom Teaching Research” [J]. Educational Review, 2018(1): 167-167.

Analysis of the Influence of Sports App on College Students' Extracurricular Physical Exercise Behavior

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Abstract: with the rapid development of social economy and science and technology in the new era, the wide application of mobile Internet and the increasingly perfect functions of smart phones, not only inject new vitality into the physical education and teaching work in Colleges and universities, but also help to cultivate students' sports awareness and make them actively participate in extracurricular exercises. Among them, we have to mention sports apps, which not only make students' extracurricular physical exercise behavior more continuous, let students form the habit of insisting on exercise, but also help to form sports social networking and enhance the sense of achievement of sports. Based on this, the author combined with work practice, shallow to launch sports app on College Students' extracurricular physical exercise behavior analysis.
Keywords: Sports app; college students; extracurricular physical exercise; influence

Foreword: "China's education modernization 2035" points out that "more attention should be paid to students' all-round development and lifelong learning [1]". In the process of training high-quality compound talents in the new era, it is not only necessary to promote moral education and intellectual education, but also to cultivate students' awareness of lifelong exercise, so that they have a strong physique and healthy psychology. However, it is far from enough to rely on the limited physical education classroom teaching. For this reason, teachers can focus on modern technology and intelligent application, let sports app integrate with students' daily life and extracurricular exercise organically, meet students' diverse sports needs, and make them choose their own aerobic exercise, strength training or endurance training according to their own physical quality and hobbies.

1. The current situation and main problems of College Students' Extracurricular Physical Exercises

1.1. Lack of Enthusiasm to Participate in Extracurricular Physical Exercise

With the deepening of the reform of physical education in Colleges and universities, many schools have included the students' extracurricular physical exercise behavior into the teaching evaluation, so that it is linked with the evaluation of awards, excellence and graduation, and the students' awareness of extracurricular exercise is gradually enhanced. Among them, many colleges and universities in order to promote students to participate in extra-curricular physical exercise more flexible, the introduction of the corresponding compulsory course management methods, in order to prevent the one size fits all [2]. Organizing students to participate in physical fitness test and promoting the stratification of extracurricular exercise will help to improve the teaching pertinence, but there are also many students lack of enthusiasm to participate in extracurricular physical exercise. Especially for those students who are addicted to online games and Xianxia novels, mechanical extracurricular physical exercise is far less attractive than playing mobile phones and games.

1.2. Some Students Think Extracurricular Exercise Is Boring

In order to promote students' participation in extracurricular physical exercises, it is necessary to make comprehensive exercise plans and corresponding assessment standards according to their physical fitness and interest preferences. Those students with excellent physical quality and strong sports ability can be exempted from the course, and teachers can encourage them to participate in special training, in order to build the school's characteristic sports associations and cultivate professional sports talents. For those students with poor physical quality and weak sports foundation, extracurricular physical exercise for the purpose of completing the subject goal is more like completing the task, which is boring and uninteresting.

1.3. Failure to Get Effective Guidance From Teachers In Time

College Students' extracurricular physical exercises are mostly concentrated in their spare time after class, which is no better than classroom teaching. Due to the lack of timely and effective guidance from teachers, for students with poor self-control, without the supervision of teachers and peer encouragement, the effect of exercise is not only greatly reduced, but also the frequency of exercise every week is difficult to reach the standard.

2. ON THE ADVANTAGES OF INTEGRATING SPORTS APP WITH COLLEGE PHYSICAL EDUCATION

2.1. Help to Stimulate Students' Interest in Sports

Most colleges and universities' extracurricular physical training guidance and evaluation are based on the students' health assessment and interest preference, and students have more options. Aiming at the boring problem of independent training, promoting the application of sports app helps to socialize while exercising, make students communicate with each other, and make the change of extracurricular physical exercise lively and interesting. In addition, students can punch in daily sports, such as: running in keep, happy running circle, Gudong sports, etc., drying mileage in wechat's friend circle, forming a sports record [3].

2.2. Help Students Master Sports Skills

Taking the sports app Yue running circle as an example, as a software to record running, it not only has the function of urging students to adhere to exercise, but also has a lot of sports technical guidance articles, which is helpful to achieve running guidance for college students while forming class running ranking and promoting benign competition. At the same time, the software will also score points for continuous punch and award students medals, which will help enhance their sense of running achievement and promote students to run every day.

2.3. Help to Make up for The Lack of PE Class Hours

The awareness of cultivating the comprehensive quality of college students is becoming more and more intense, and the attention of college physical education teaching is also increasing, but the physical education teaching schedule in many colleges and universities is very limited. Relying on the limited time in the classroom to promote students' exercise and enhance their physical quality has little effect. Therefore, teachers should pay more attention to the cultivation of students' interest in sports, so that they can understand the benefits of sports, and then combine sports app to encourage students to exercise more than three times a week after class, so as to develop students' various hobbies and make them have a healthy body and mind.

3. An analysis of the influence of sports app on College Students' extracurricular physical exercise behavior

3.1. It Is Conducive to Continuous Improvement of Students' Physical Literacy

Let sports app combine with college students' extracurricular physical exercise. Through sports sharing, class punch in and sports socializing, students can change their impression of boring, boring and uninteresting sports. The application of intelligent devices to record and feel their own changes is conducive to improving students' physical literacy. In addition, in addition to the advantages of sports app such as easy operation, portable intelligence, etc., they also make sports more controllable, and subdivide various sports. Teachers can recommend more suitable apps to students according to their sports needs, such as fat reduction and shaping, healthy life, exercise endurance, etc., so that students can carry out strength and muscle training, or participate in yoga, aerobics, etc Sports, enrich students' extracurricular life, let them make extracurricular physical exercise become a part of releasing pressure and healthy life.

3.2. To Improve the Mental Outlook of Students

Compared with addicting to online games and short videos on mobile phones, sports app can help students change their values, actively participate in extracurricular physical exercises, build up like-minded sports friends, enhance their willingness to exercise and realize the importance of healthy life. For example, keep not only has simple pages and complete functions, but also can carry out sports even indoors. It also has data pages, which can make sports guidance more scientific and better meet the needs of students' extracurricular exercise. Combined with relevant data statistics: it can be seen that more than 40% of the students have more than 20-30min of daily extracurricular physical exercise before using sports app; after contacting sports app, more than 50% of the students have more than 40-60min of daily exercise [4]. At the same time, the continuous extracurricular physical exercise will also make the spirit of college students a new look.

3.3. It Is Conducive to Cultivating the Tough Character of College Students

The application of sports app to actively promote college students to participate in extracurricular physical exercises will also help students form a good character and understand the significance of unity and cooperation. For example: students can group exercise after class, watch keep app, encourage each other, and then exercise and encourage each other. This not only makes the extracurricular physical exercise more interesting and continuous, but also helps the circular training, double training and multi person training. It will also make students learn to adhere to and have good endurance.

3.4. It Is Beneficial to Improve the Extracurricular Evaluation System of Physical Education

Using sports app to promote students to carry out extra-curricular physical exercise, on the one hand, it is conducive to stimulate students' sports motivation, so that they can enjoy a healthy campus life, on the other hand, it is conducive to improve the Curriculum Supervision System and achieve a comprehensive evaluation of students. After all, as an independent individual, there are objective differences among college students. While enriching the extracurricular exercise, we should also follow up the objective and comprehensive evaluation to help students find out the missing and make up for the missing, and adjust their weekly extracurricular exercise behavior. For example, teachers can observe students' extracurricular physical exercise and data track through the mobile terminal, and give constructive suggestions in stages. While urging students to exercise scientifically, teachers can evaluate students' physical exercise by combining app accurate data.

4, CONCLUSION

China's education modernization has started a new journey, which has put forward a new standard for personnel training [5]. As a college PE teacher, on the one hand, we should upgrade the teaching concept, innovate the teaching methods in PE class, let the students have extensive contact with diversified sports, and promote their personalized development; on the other hand, we should pay attention to the communication and interaction with the students, through recommending sports app, let the students carry out extracurricular physical exercises independently, make them feel the charm of fitness and sports, and form a healthy life Habit and lifelong sports consciousness. So as to improve the effectiveness of physical education guidance, break the teaching boundary, and make students actively and continuously participate in extracurricular physical exercises.

REFERENCES

[1]Liu Guang Ming. Research on the use and communication impact of fitness app for college students in Wuhan - An Empirical Study Based on the use of APP in five universities in Wuhan. Wuhan Institute of physical education, 2019 (6): 21.

[2]Yan intelligent. Research on the construction and design of campus sports management platform of Xuzhou university based on app technology. China University of mining and technology, 2019 (6): 9.

[3]Li Liwei. Research on the influence of the application of "campus running" app on the development of College Students' Extracurricular Sports Behavior - Taking Baoding Institute of technology as an example. Hebei Normal University, 2019 (5): 23.

[4]Luo Qiuxiang. Research on the application of sports app in the physical education of Guangzhou University. Guangzhou University, 2019 (5): 22.

[5] Li Nan. Research on the influence of sports app on College Students' sports behavior. Zhongbei University, 2017 (5): 20.

Discussion on Sports Injury and Prevention in Yoga Teaching

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Abstract: in recent years, there has been an upsurge of yoga in China. The pursuit of "harmony between man and nature, balance of body and mind" fully caters to the fitness concept of Chinese people, especially for female friends, yoga has become the first choice of their fitness methods. In this situation, more and more educators begin to pay attention to yoga teaching, hoping to strengthen the physical and mental quality of students through yoga, so as to achieve the basic goal of sports and health. However, due to various factors, students often have a variety of sports injuries in the actual Yoga learning, which requires teachers to take targeted preventive measures in combination with the actual situation, in order to give full play to the effectiveness of yoga.
Keywords: yoga teaching; sports injury; prevention

0. INTRODUCTION

Yoga, as a fashionable fitness program, originated in India, mainly through breathing, meditation and position training to achieve the effect of physical fitness. At present, many colleges and universities in China have set up yoga courses to improve the physical and psychological quality of students through yoga teaching, so as to promote the healthy development of students. However, due to the relatively high requirements for flexibility and coordination of students, yoga is likely to cause sports injury if the action is not standardized. Therefore, this paper introduces and expounds the common sports injuries in yoga teaching, and puts forward the corresponding preventive measures, hoping to provide some reference for teachers.

1. SPORTS INJURIES AND CAUSES IN YOGA TEACHING

1.1. Types of Sports Injuries in Yoga Teaching

Yoga teaching involves a variety of body position training, and the potential injury risks of each body position training point to different organ parts. Next, we will introduce different organ parts for sports injury, the specific contents are as follows: (1) head injury. The body position training methods that may cause head injury mainly include head upside down, hand upside down, crow style, peacock dancing style, etc. in the process of learning, students are easy to cause head bruises due to irregular movements, and serious injuries may also occur. (2) Cervical injury. The body position training methods that may cause cervical spine injury mainly include shoulder inverted, plow, side plow, head inverted and so on. Once students exert too much force in the learning process, it is easy to cause huge pressure on their own cervical spine, resulting in cervical joint dislocation. [1] (3) spinal injury. The body position training methods that may cause spinal injury mainly include latch type, up wheel type, down wheel type, pigeon King type, cobra type, etc. These body position training methods require students to repeatedly move the spine. Once the strength is too large or the posture is not correct, it is easy to cause spinal injury. (4) Sprain in the waist. The body position training methods that may cause waist injury mainly include fish King type, Lasso twist type, wind blowing tree type, triangle stretching type, etc. in the process of practice, students are easy to sprain waist muscles due to irregular movements. (5) Ligament strain in leg. The body position training methods that may cause leg ligament strain mainly include forward bending, back forward bending and stretching, toe binding, twisting forward bending and stretching, etc. These body position training requires students to stretch the legs to different degrees, which is likely to cause leg ligament strain in the process of stretching. (6) Sprain of ankle. The body position training methods that may cause ankle sprain mainly include hero sitting, couch sitting, lotus sitting, frog sitting, etc. in the process of training, once the movement is not standardized, the coordination of the whole body will be reduced, and ultimately the risk of ankle sprain will be increased.

1.2. Main Causes of Sports Injury in Yoga Teaching

1.2.1. Student factors

The occurrence of sports injury in yoga teaching is closely related to the learning state of students. If students do well in preparation activities, keep high concentration of attention, and train in strict accordance with the requirements of teachers, the possibility of sports injury is very small; if students do not do well in preparation activities, they often want to practice how to practice in the learning process, which is easy to increase their luck Risk of dynamic injury. [2] In addition, the strength of students' self-protection consciousness also determines the occurrence rate of sports injury. According to the practice investigation, the students who often have sports injury have generally low self-protection consciousness. They usually carry out high-difficulty yoga training without knowing their own physical quality, which not only makes it difficult to obtain ideal fitness effect, but also increases sports injury Risk, which is very harmful to the healthy development of students.

1.2.2. Teacher factor

In addition, the level of teachers' teaching also affects the probability of sports injury in yoga teaching. At present, many teachers who teach yoga are lack of formal training, they are generally physical education teachers in schools, they have not passed the yoga teacher qualification certificate, and they are seriously lack of practical experience. In this case, many teachers are unable to provide effective and targeted teaching guidance for students, and can not correct the wrong actions of students in time, which to a large extent has buried hidden dangers for the occurrence of sports injuries. [3] In addition, the lack of effective communication between teachers and students in teaching is also one of the reasons for the rising incidence of sports injuries. Teachers lack a comprehensive understanding of the physical quality of students, and can not make targeted teaching plans according to the actual situation of students, which is easy to increase the learning difficulty of students. At the same time, due to the lack of communication, teachers can not find students' sports injuries in time, Therefore, it is easy to delay the treatment time.

2. EFFECTIVE MEASURES TO PREVENT SPORTS INJURY IN YOGA TEACHING

2.1. Improve the Professional Quality of Teachers

As the guide and organizer of yoga teaching, teachers' teaching level directly affects the situation of sports injury. Therefore, in order to reduce the occurrence of sports injuries, teachers must constantly improve their professional quality and teaching ability in order to give full play to their guiding role, so as to provide a reliable guarantee for the healthy development of students. On the one hand, teachers should continue to learn, understand the latest teaching methods and training methods, and use information technology to exchange teaching experience at home and abroad, so as to enrich their professional knowledge. On the other hand, the school should strengthen the professional training of teachers, strengthen the teaching ability of teachers through the establishment of formal training institutions, so as to promote the continuous progress of teachers.

2.2. Arrange Training Contents Reasonably

In the actual teaching, the majority of teachers should adhere to the principle of step-by-step, individualized teaching, combined with the actual situation of students to carry out layered asynchronous teaching, in order to enhance the teaching effect, but also to meet the personalized development needs of students. This requires teachers to fully grasp the physical quality of students, formulate targeted training programs for students in combination with their sports ability, guide students to train step by step, and avoid blindly promoting in order to pursue the teaching progress, so as to reduce the risk of sports injury. It is worth noting that before teaching, in order to reduce the occurrence of sports injuries, teachers need to guide students to do a good job in preparation activities, to ensure that the full body joint activities on the basis of targeted training, so as to achieve good teaching results.

2.3. Strengthen Effective Communication between Teachers and Students

As we all know, learning yoga is a step-by-step process. Only by mastering students' learning situation can teachers provide targeted guidance for students, so as to build a systematic learning system for students. [4] This requires teachers to strengthen effective communication with students, fully understand students' learning progress, judge students' sports level according to students' learning progress, so as to make a reasonable learning plan for students. At the same time, students also need to strengthen the effective communication and interaction with teachers. In the process of learning, once there are pain or discomfort symptoms, they should report to teachers in time to avoid serious consequences.

2.4. Strengthen Students' Self-Protection Awareness

In addition, teachers should also strengthen the cultivation of students' self-protection awareness, and introduce the possible sports injuries caused by each position training in detail in order to attract students' attention. At the same time, teachers should introduce corresponding preventive measures and treatment methods for students in combination with each kind of sports injury, constantly improve students' self-help ability, so as to minimize the adverse effects of sports injury and further ensure students' physical and mental health.

3. CONCLUSION

To sum up, yoga, as an aerobic exercise, plays an important role in strengthening students' resilience, strength and coordination ability. Although Yoga seems simple, it is not so. Some asana exercises of Yoga still have great exercise intensity and professional skills. If students' movements are not standardized or correct, it is easy to cause various sports injuries, such as muscle strain, joint injury, etc., which will not only be difficult to play the effective value of yoga, but also affect the healthy development of students. In view of this, in order to prevent the occurrence of sports injuries, students must be trained step by step in the process of learning according to the requirements of teachers, do a good job in preparation activities, keep a high concentration of attention, strictly regulate their own actions, and constantly improve their awareness of self-protection. In addition, in order to reduce the incidence of sports injuries, teachers must constantly improve their own teaching level, strengthen the teaching effect through teaching guidance and scientific management, and strive to prevent students from sports injuries, but also to maximize the fitness effect of yoga.

REFERENCES

[1]Yue Haixia. Causes and prevention of sports

injuries in yoga teaching. Quality development, 2019 (01)
[2]Zhang Dingyue. Research on sports injury prevention in yoga teaching. Private technology, 2017 (01)
[3]Xiao Zhiyan. Research on sports injury and its protection strategy in yoga teaching in Colleges and universities. Enterprise guide, 2016 (21)
[4]Zhu Aiqin. Sports injury and prevention in yoga teaching. Teaching research, 2015 (10)

Analysis of Multi Factor Statistical Arbitrage Strategy Based on GARCH Model

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Abstract: statistical arbitrage is widely used in hedge funds. It is a pair of trading strategy that can get stable benefits out of market trend. In the market with short mechanism, statistical arbitrage is also widely used. The current trend of large-scale short mechanism application. The statistical arbitrage strategy is based on the pair trade portfolio. The first choice of portfolio is to have consistent price trend. When the price is relatively undervalued and the price is relatively overvalued, the securities will be short sold. When the price returns to the normal time point, the reverse operation will obtain the price difference income. However, to realize the statistical arbitrage strategy, it is necessary to determine the right time point for buying and selling, and the right stock pairs. In the past, the selection of trading portfolio was relatively simple. In this study, GARCH model was used to establish time-varying standard deviation sequence, analyze multi factor statistical arbitrage strategy, fit the residual sequence of the portfolio, build stop loss signal and trading signal, and obtain higher and more stable returns.
Keywords: GARCH model; multiple factors; statistical arbitrage

In a broad sense, statistical arbitrage strategy is one of the paired trading strategies. It extends the basic ideas and steps of paired trading to form statistical arbitrage. But the process for screening portfolios is more rigorous. The transaction signals need to be determined by special methods. Statistical arbitrage strategy makes use of the statistical law of securities price, which belongs to the probability significance. Different from risk-free arbitrage, it may have partial loss, but in the long run, the total profit can cover the total loss. China's securities market is actively trying, and statistical arbitrage is mainly based on the short market mechanism. Many institutional investors use the investment methods including statistical arbitrage. In order to obtain stable returns, many new profit models are innovated, which also promotes the maturity of the capital market.[1]

1. ESTABLISHING A DEAL MIX

Generally, the impact of banking industry is the same. The Analysis Fundamentals and evaluation system are similar. Therefore, statistical arbitrage opportunities may exist among banks. This study selects four bank stocks from 2017 to 2018, including Bank of communications, China Construction Bank, industrial and Commercial Bank of China and China Merchants Bank. The closing price is selected as the price sequence. According to the data sources of financial statements published by the bank, the provision coverage rate and non-performing loan rate in the asset treatment index are selected, and the cost income ratio, net interest rate and weighted average net asset rate of return in the profitability index are selected.

Select the closing prices of the four major banks from 2017 to 2018, and analyze the trend. There is no big gap in the basic trend, although there are some differences in the price. According to the correlation coefficient matrix of the closing price of four banks' stocks, the most relevant ones are Bank of communications and China Construction Bank. Then there are China Construction Bank and ICBC, China Merchants Bank and ICBC. But there is a lack of stock price support.[2]

The explanatory variables are capital adequacy ratio, provision coverage ratio, non-performing loan ratio, cost income ratio, net interest rate, and weighted average return on equity. The explained variable is stock price. The trading portfolio is obviously similar. As shown in the table 1, the average return on net assets is the obvious support of ICBC. Bank of communications is the weighted average return on net assets, as well as the provision coverage, the same is true for China Construction Bank. Net interest rate and non-performing loan rate support the stock price of China Merchants Bank. Therefore, Bank of communications and China Construction Bank, which have highly similar supporting factors, can be used as transaction portfolio. The trend of China Merchants Bank and industrial and commercial bank is basically the same, and the correlation coefficient is relatively high. Although there is no similar supporting factor of stock price, it can be used as a comparative transaction combination to test the effect of the model. [3]

Table 1 Statistics of regression results

Don't explain variables	Explanatory variable	Standard error	coefficient	t	P
CMB	BBFGL	0.7822	0.5267	0.6547	0.5746
	PJJZCSYL	0.3879	0.4269	1.2892	0.3257
	JLXSYL	0.5426	1.3528	-2.4956	0.0905
	BLDKL	0.9574	2.3352	2.4623	0.0964
	C	0.2468	-1.02E-10	4.29E-10	1.0000
JTYH	BLDKL	0.5623	0.8624	1.5462	0.2347
	ZBCZL	0.3782	0.6825	-1.8598	0.1628
	CBSRB	0.3037	0.6325	-2.0582	0.1285
	PJJZCSYL	0.1878	0.7325	-3.7852	0.0357
	BBFGL	0.2257	0.6525	-2.9562	0.0654
	C	0.1142	-1.02E-10	-8.95E-10	1.0000
CCB	CBSRB	0.3878	0.6826	-1.6858	0.1526
	BLDKL	1.1174	2.7625	-2.4627	0.0496
	BBFGL	1.0287	2.6436	-2.5869	0.0456
	PJJZCSYL	0.3526	1.1526	-3.2578	0.0187
	C	0.1875	-3.25E-10	1.75E-09	1.0000
ICBC	PJJZCSYL	0.2425	0.7526	-3.2584	0.0147
	C	0.2425	-2.56E-1	1.08E-10	1.0000

2. CALCULATE TRANSACTION PROPORTION

In statistical arbitrage, it is necessary to construct the price difference sequence of stock pair and the mean recovery of the price difference sequence. To test the single integration of the stock price sequence, construct the co integration relationship, correct the error, determine the transaction proportion, mainly through the co integration vector of the error correction model. This time, natural logarithm processing is carried out for the price sequence to reduce the error. According to error correction and cointegration theory, transaction signals are calculated. The results show that both Bank of communications and China Construction Bank are first-order single integers. Then the cointegration test is carried out, and the results show that there is a cointegration relationship. In order to determine the long-term equilibrium relationship, the error correction model is established and the long-term stable relationship is obtained.[4]

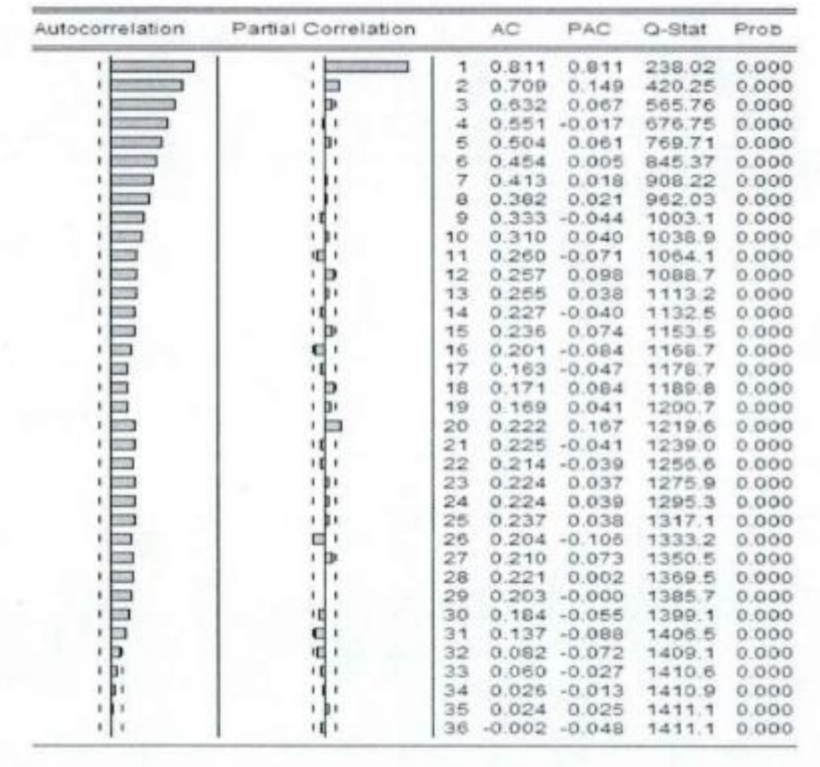
3. CONFIRM TRANSACTION SIGNAL

For mspread and spread with different positions, the trend is exactly the same, and the autocorrelation and partial correlation Q test are obtained, as shown in the Fig. 2. From the partial correlation of the first step lag, there is no obvious difference with zero, the model is established and the trend chart is obtained. There are obvious group fluctuations and large fluctuations in some places, indicating the existence of arch effect. The spread sequence has high-order arch effect. GARCH (1,1) can be used for simulation. Divide the time, divide the spread sequence into two parts, the data outside the sample and the modeling data inside the sample. GARCH model was established based on the data in the sample. The initial value of the heteroscedasticity equation, using the unconditional variance of the data in the sample. The conditional variance of data series outside the whole sample is based on the recurrence result of conditional variance formula. The results show that the coefficient lag of lag condition variance and lag bungalow error is 0.96, which is consistent with the parameter constraints. The model can fit the data well.

4. TRANSACTION RULES

Using GARCH model to obtain time-varying standard deviation, we need to explore the boundary conditions that can control the loss, and the transaction trigger interval of statistical arbitrage. To determine such a range, the feasible transaction triggering conditions need to be at least higher than the bilateral transaction costs. There are nonparametric method, hidden Markov ARMA model, mixed normal distribution method and so on. If we use the trading range determined by the data within the sample as the trading range of the data outside the sample, there will be strong volatility. Therefore, historical standard deviation is used for the prediction of reserved large interval. The statistical arbitrage results of China Merchants Bank and industrial and commercial bank have high correlation coefficient and similar trend. The internal supporting factors of stock price are not the same. The matching statistical arbitrage transaction does not have a good profit opportunity, so this combination is not suitable. In the statistical arbitrage, there is no same or similar stock price supporting factors, which has a greater risk. If there are the same or similar stock price supporting factors, there will be a relatively stable return.[5]

In a word, the statistical arbitrage strategy is based on the pair trading portfolio investment, which can break away from the market trend and obtain stable returns. The most important thing is to choose the right trading signal and the right stock pair. The results show that bank of communications and China Construction Bank have similar stock price supporting factors, high success rate of arbitrage and stable earnings.



	AC	PAC	Q-Stat	Prob
1	0.811	0.811	238.02	0.000
2	0.709	0.149	420.25	0.000
3	0.632	0.067	565.76	0.000
4	0.551	-0.017	676.75	0.000
5	0.504	0.061	769.71	0.000
6	0.454	0.005	845.37	0.000
7	0.413	0.018	908.22	0.000
8	0.382	0.021	962.03	0.000
9	0.333	-0.044	1003.1	0.000
10	0.310	0.040	1038.9	0.000
11	0.260	-0.071	1064.1	0.000
12	0.257	0.098	1088.7	0.000
13	0.255	0.038	1113.2	0.000
14	0.227	-0.040	1132.5	0.000
15	0.236	0.074	1153.5	0.000
16	0.201	-0.084	1168.7	0.000
17	0.163	-0.047	1178.7	0.000
18	0.171	0.084	1189.8	0.000
19	0.169	0.041	1200.7	0.000
20	0.222	0.167	1219.6	0.000
21	0.225	-0.041	1239.0	0.000
22	0.214	-0.039	1256.6	0.000
23	0.224	0.037	1275.9	0.000
24	0.224	0.039	1295.3	0.000
25	0.237	0.038	1317.1	0.000
26	0.204	-0.106	1333.2	0.000
27	0.210	0.073	1350.5	0.000
28	0.221	0.002	1369.5	0.000
29	0.203	-0.000	1385.7	0.000
30	0.184	-0.055	1399.1	0.000
31	0.137	-0.088	1406.5	0.000
32	0.082	-0.072	1409.1	0.000
33	0.060	-0.027	1410.6	0.000
34	0.026	-0.013	1410.9	0.000
35	0.024	0.025	1411.1	0.000
36	-0.002	-0.048	1411.1	0.000

Fig. 2 Q test results

REFERENCES

[1]Xing Zhi, Hao Jisheng. Study on the optimal threshold improvement of statistical arbitrage strategy based on co integration GARCH model. Journal of Yan'an University (NATURAL SCIENCE EDITION), 2018, 37 (3): 41-45

[2]Ding Yan, Cao Jing. Design of stock matching trading strategy based on GARCH Model -- Taking infrastructure industry as an example. Modern business, 2017 (21): 87-89

[3]Fang Jun, Li Xingye. Research on statistical arbitrage of dft-garch model based on co integration theory. Economic mathematics, 2019 (2): 57-62

[4]Wu Yuanfu. Research on the matching trading strategy of the underlying securities of margin trading based on the co integration theory and GARCH model. Economic and trade practice, 2018, 229 (11x): 150-150

[5]Zhang Zhen, Xu Sheng, Zhang Zhen, et al. Research on the influence of data frequency of stock index futures on statistical arbitrage performance -- timing trading mechanism based on dynamic prediction interval. Scientific decision, 2017 (2): 61-75

The Practice and Thinking of the Course Reform of High-rise Building Structure Design

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Abstract: With the rapid development of economy and the acceleration of urbanization in the new era, there are many skyscrapers in the city. For the civil engineering major in Colleges and universities, high-rise building structure design, as a core professional course, has a strong system and specialty, and involves a wide range of knowledge. Therefore, in the face of the increasing demand of social development for building engineering and high-rise building construction, teachers should optimize the teaching concept, attach importance to teaching innovation, promote the reform of high-rise building structure design curriculum, and cultivate more practical talents with professional ability in the new era. Therefore, this paper carries out the practice and thinking of the curriculum reform of high-rise building structure design.
Keywords: high rise building; structural design; teaching reform

0. FOREWORD

with the development of society, the demand for high-quality talents in high-rise building structure design is increasing. Colleges and universities begin to pay attention to the teaching reform, promote the organic combination of theory and practice, and cultivate students' good professional quality. In the study of civil engineering, the course of high-rise building structure design has strong comprehensiveness, high requirements for students' application consciousness and logical thinking, which requires students to have a complete theoretical knowledge system and comprehensive application consciousness. Therefore, learning the principles, advanced methods and technologies of high-rise building structure design based on building professional knowledge is helpful for students to master the structure system and layout of multi-storey and high-rise building structures [1], on the premise of meeting the load and design requirements, carry out innovative exploration, and make high-rise buildings play their own economic value, social value and building value.

1. ANALYSIS OF THE CURRENT SITUATION OF THE TEACHING OF HIGH-RISE BUILDING STRUCTURE DESIGN

1.1. Some Problems in Class Arrangement

From the perspective of practical teaching, students need to take the knowledge of construction machinery, construction measurement, concrete structure and other knowledge as the basis before learning the high-rise building structure design [2], which also shows the comprehensiveness of high-rise building structure design. In view of the wide range of knowledge involved in the subject and the strong teaching system, teachers should guide students to study in-depth, which not only needs to be guaranteed by sufficient teaching hours, so that students can master teaching skills and methods, promote the internalization of knowledge, but also need to strengthen the allocation of independent learning after class. However, the reality is that many colleges and universities have limited time arrangement for this course and less communication between teachers and students.

1.2. Low Efficiency of Traditional Teaching Methods

The traditional teaching methods, such as teaching theory, marking key points and analyzing difficult and doubtful points, can not meet the needs of students' learning and development. Filling teaching is not only difficult to stimulate students' enthusiasm for inquiry, but also can make them form the dependence of thinking, resulting in low efficiency of classroom teaching. Some students even turn the high-rise building structure design into a kind of obscure and difficult to learn.

1.3. Lack of Effective Practice Links

In terms of future employment, high-rise building structure design is a "bridge" subject, which is related to the development of students' divergent thinking and application consciousness. However, the current reality is that the schedule of class hours is compact. Some teachers blindly catch up with the teaching progress and improve the classroom capacity, resulting in overemphasis on the cultivation of students' subject ability and skills, ignoring their acceptance level, emotional attitude, etc., and slightly limited attention to the development of students' practical ability. This makes learning have certain limitations, students stay in the concept level of high-rise building structure design learning. Only by combining case analysis and practical teaching, can we promote students' absorption of new knowledge, deepen their understanding and further deepen their learning impression.

1.4. The Assessment Method Lacks

Comprehensiveness

In the assessment of high-rise building structure design, due to the lack of rationality of assessment method, students have slack mood [3]. For example, some colleges and universities integrate the teaching content of this semester to let students complete relatively complex model design homework, and take the level of student design as the standard to judge their course learning. Lack of comprehensiveness, accuracy and scientificity, the problem of plagiarism between students is difficult to be effectively solved, and the assessment value is lost.

2. THE SIGNIFICANCE OF PROMOTING THE CURRICULUM REFORM OF HIGH-RISE BUILDING STRUCTURE DESIGN

The course of high-rise building structure design is integrated with other disciplines of civil engineering, especially the students with good mechanical knowledge. Therefore, to promote the teaching reform and close the effective interaction between teachers and students with multiple teaching will help to break the limitations of teaching and enable students to use information-based teaching equipment for independent exploration, independent thinking and in-depth exploration. Thus, it can reduce the difficulty of teaching, make students better understand professional knowledge, make abstract problems vivid and pictographic, and make theory teaching and practice closely combined. This requires teachers to change the perspective of teaching in time, design teaching links with students' knowledge reserve level and understanding ability, promote the understanding of key knowledge, and enable students to go deep into specific building cases for calculation and formula application [4]. Through the integrated teaching, we can cultivate students' good comprehensive ability and application consciousness, make them have the quality of high-rise building structure design, skillfully use various high-tech structure design software, and promote the teaching to keep pace with the times.

3. THE PRACTICE STRATEGY OF THE COURSE REFORM OF HIGH-RISE BUILDING STRUCTURE DESIGN

3.1. Focus on the Needs of the Industry and Adjust the Focus of Teaching

In order to promote the curriculum reform of high-rise building structure design, we should attach importance to the combination of work and study, the cooperation between schools and enterprises, take talent demand and industry development as the guidance, improve the teaching system, carry out teaching adjustment, make teaching more directional, effective and forward-looking, and transfer high-quality compound talents to the society. Therefore, teachers need to combine the new technology, scientific research achievements, industry development trend with subject education, pay attention to the cultivation of students' innovative consciousness and application ability, promote the collection of high-quality teaching resources, unify theoretical learning and practical teaching, and actively stimulate students' enthusiasm for learning. In addition, the arrangement of teaching hours should also be scientific and reasonable. The students should form the consciousness of independent learning, and make them study and consolidate professional knowledge through MOOC and network platform.

3.2. Introduce Typical Cases to Enrich Teaching Effect

In the process of promoting teaching reform, teachers should have the consciousness of optimizing teaching, introduce typical cases that help students understand theoretical knowledge, and promote students' comprehensive learning. For example, in addition to the teaching analysis of the structural design of foreign landmark high-rise buildings, we can also enumerate Shanghai global financial center, Jinmao Tower, Beijing's Zhongguo Zun, international trade, etc., guide students to conduct internal force and displacement analysis, attract their classroom attention, make them know the essence of modern architectural design, and actively spread their thinking in learning. In addition, teachers can also introduce multiple teaching methods such as task driven teaching, mind mapping, application competition of structural design software to promote students to participate in classroom teaching and enrich their learning experience.

3.3. Innovate Teaching Mode and Give Students Opportunities to Practice

In order to cultivate the subject quality of college students, teachers should have the consciousness of innovative teaching, so that students' practical ability can be significantly improved. As a comprehensive discipline, if the teaching of high-rise building structure design course is limited to teaching materials and stops in the classroom, it will not only be difficult to reflect the value of discipline education, but also cause the problem of weak practical awareness of students. Therefore, it can form teaching alliance with well-known construction enterprises, provide more opportunities for students to participate in practice, let them go deep into the whole process of high-rise building structure design, and communicate and consult with designers in close distance. Or experts can be invited to the school to hold regular discussion and teaching guidance, to promote the innovative dissemination of practical knowledge, so that students can get more practical opportunities.

3.4. Improve the Assessment Mechanism and Give A Comprehensive Evaluation to Students

In the process of promoting teaching reform, we should pay attention to the comprehensive evaluation of students. It is difficult to form direct feedback on students' knowledge acquisition by model design and feasibility demonstration based on the proposition provided by teachers. Based on this, teachers can combine the students' daily performance, the results of group cooperative learning, students' own practical awareness, autonomous learning ability and so on, and bring them into the teaching evaluation system in a quantifiable way. In the examination at the end of the semester, we can focus on the students' innovative spirit, the solid degree of subject knowledge and practical ability to issue comprehensive examination questions, give them more time to write reports and participate in practice, and then carry out the evaluation of students' subject ability.

4. CONCLUSION

All in all, the new era not only brings new opportunities for the development of the construction industry, points out a new direction for the teaching of civil engineering in Colleges and universities, but also puts forward new requirements for teachers' teaching ability and level [5]. Therefore, we should actively promote the teaching reform of the course of high-rise building structure design, attach importance to the cooperation between school and enterprise, the combination of work and learning, promote the talent training work with the market demand as the guide, promote the coordinated development of students' professional ability, application awareness and innovation spirit, make the teaching more contemporary, effective, innovative and forward-looking, so as to better meet the needs of students' future employment development, and form a better shape Cost school teaching features, improve the core competitiveness of students, and ensure the steady development of high-rise building industry.

REFERENCES

[1]Guo Jinlong. Teaching reform of high-rise building structure course of civil engineering major in Applied Universitie. Quality education in Western China, 2019 (1): 25

[2]Wang min. teaching reform of high rise building structural design. Forum on industry and science and technology, 2019 (5): 1

[3]Cai Wei. Problems and Countermeasures in structural design of high-rise civil buildings. Housing and real estate, 2019 (2): 25

[4]Song Lian, Hu Hao, He Jian. Discussion on teaching reform of high rise building structural design. Science and technology wind, 2019 (2): 20

[5]Yang Youfa, Liang Ting, Xiao Chun. Analysis on the teaching reform of multi story building structure design. Journal of higher education, 2019 (8): 13

Thinking About the Combination of Micro Course and English Teaching in Higher Vocational Education

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Abstract: With the development of information technology, the application of micro course in the field of education is promoted to a certain extent. Compared with the traditional teaching methods, micro course can fully mobilize the enthusiasm of students, reduce the working rate of teachers, and realize the optimization of teaching effect in the process of actual teaching activities, which has been unanimously praised by the majority of educators at present. Especially in the process of English Teaching in higher vocational colleges, the application of micro courses can effectively innovate teaching methods and improve teaching level. In the introduction of the article, it mainly analyzes the advantages of micro courses in English Teaching in higher vocational colleges, and on this basis, it discusses the effective strategies of combining micro courses with English teaching, aiming to help teachers in Higher Vocational Colleges to innovate teaching mode, improve students' English knowledge level, and lay the foundation for later application and development.
Keywords: Micro course; Higher Vocational English; teaching

Micro class is a new teaching method, which can effectively mobilize the initiative and enthusiasm of students in the process of classroom application, create a good learning atmosphere for students, let students actively participate in the teaching link, promote the improvement of students' learning ability, help students develop good learning habits, and effectively promote the improvement of learning effect. In English Teaching of higher vocational colleges, the application of micro courses can promote the smooth development of teaching links, improve the quality and effect of teaching, help students to master and apply complex and boring English knowledge, improve English learning level, and promote the quality and efficiency of English Teaching in higher vocational colleges.

1. AN ANALYSIS OF THE ADVANTAGES OF MICRO COURSES IN HIGHER VOCATIONAL ENGLISH TEACHING

1.1. Realize the combination of centralized and autonomous learning

In the current stage, according to the analysis of the teaching characteristics of higher vocational colleges, the learning system of higher vocational colleges is generally three years. During the period of school, the school also arranges the time for practice and curriculum practice. The time for students to study in the school is limited to a certain extent, while the way of centralized teaching is generally adopted in the current English teaching process of higher vocational colleges, which has a certain impact on English teaching In addition, in the process of classroom teaching, English has a strong practicality, which requires continuous and repeated learning and memory, and through situational way, students can transform their English knowledge. However, the limited classroom time at the current stage obviously can not meet the needs of students' learning, which has become the main reason for the stagnation of English teaching quality in higher vocational colleges. But in the teaching process of effective combination of micro class and English teaching, in the classroom, teachers can guide students to master and memorize knowledge intensively, and students can selectively learn through the micro class video recorded by teachers in the time after class, so as to effectively combine the centralized learning mode with the independent learning mode, It can realize the personalized learning of students and lay a foundation for the improvement of teaching quality [1].

1.2. Reduce workload and improve efficiency

In the process of English Teaching in higher vocational colleges, teachers, as the leading role in teaching activities, play a very important role in teaching and educating people. This paper analyzes the teaching nature of English teachers in higher vocational colleges. The workload is very large. On the one hand, it needs to prepare lessons comprehensively in the classroom teaching to help and guide students to complete the learning and mastering of English knowledge. On the other hand, it needs to participate in the research of various academic topics to effectively promote the development of education and teaching in China. In the context of quality education, we should not only reduce the burden of students, but also reduce the pressure of teachers, so that teachers and students can complete teaching activities in a relatively relaxed environment. In the process of micro class application, it can effectively reduce the workload of teachers and improve the teaching efficiency. In the process of traditional teaching activities, teachers mainly teach and occupy the main position, but in the process of micro class and English teaching application, teachers will record the video in advance and play it repeatedly in the classroom teaching, and then let students learn selectively according to their mastering degree in the time after class to meet their learning needs. Therefore, the application of micro courses in English Teaching in Higher Vocational Colleges reduces the workload of teachers to a certain extent, and effectively promotes the improvement of teaching efficiency.

1.3. To fulfill the needs of English Teaching Reform

In the process of the continuous development of the current social market economy, new standards have been put forward for the requirements of English professionals, and reform and innovation have been carried out for the English Curriculum Teaching in higher vocational colleges. In the relevant documents issued by the national education department, it is pointed out that in the current process of English Teaching in vocational colleges, we should be good at using information technology and computer technology to effectively achieve the reform and innovation of teaching methods and teaching models, and meet the personalized learning needs of students through the combination of centralized learning and independent learning, so as to effectively promote the overall development of students. When the micro course is applied in the English Teaching of higher vocational education, it can meet the needs of the new curriculum reform and promote the English Teaching of higher vocational education.

2. RESEARCH ON THE COMBINATION OF MICRO COURSE AND HIGHER VOCATIONAL ENGLISH TEACHING

2.1. Quoting micro course resources

In the current stage, according to the analysis of the learning and mastering of English knowledge of Vocational College Students in China, dumb English has become a normalization, because in the process of teaching, too much attention has been paid to writing, and too much attention has been paid to the students' English understanding ability and creative ability, which leads to the lack of students' English listening and expression ability. Therefore, in the current process of English Teaching in higher vocational colleges, teachers can use the rich curriculum resources in micro courses to cultivate students' listening ability and expression ability, so that students can master listening methods and skills, and effectively promote students' learning effect in listening. In addition, in the current teaching process, teachers can also make use of the rich curriculum resources in the micro class for students to follow reading. This method can effectively promote the habit and ability of students to speak English, create a good environment for students, and set up the correct way in the micro class, which can effectively arouse students' interest in learning and help students in Higher Vocational Colleges to learn In the process of learning English, students can master some skills and methods, gradually improve their English learning level, promote the improvement of teaching quality and efficiency [2].

2.2. Learning from micro course teaching experience

In the process of English Teaching in higher vocational colleges, teachers can also learn from the experience of micro class teaching, and pay attention to the guidance of students' thinking quality in English learning in the process of classroom teaching. The learning method in the micro class is very important to the students of higher vocational colleges. It plays a very important role in the recruitment work and the English examination. So teachers should pay more attention to the students' logical thinking ability and expression ability when teaching the micro class. In addition, in the process of teaching, students' interest should be fully aroused. Specifically, teachers can use the way of interaction between teachers and students to complete English learning in micro class, or they can divide the students in the class into several groups, and carry out English knowledge competition between groups. Such a way can help students to promote English learning in the process of learning English To train the ability of self thinking and give full play to the combination of micro class and English Teaching in Higher Vocational Education [3].

2.3. English Teaching Strategies

In the traditional teaching process, students are still mainly reciting, teachers can not give students targeted guidance in skills, nor can they complete the teaching strategy of reading to write through micro class in the teaching process. In the process of using the micro class, teachers can use the relevant English curriculum resources in the micro class to conduct college teaching in the process of writing teaching, and use the English micro class to analyze the articles and writing methods of the teaching materials, which can effectively help students complete the course learning, and in the process of teaching, teachers can also use the strategies of listening to promote writing through the micro class video The explanation makes students understand the problems that need to be paid attention to in the process of teaching, effectively promotes the improvement of students' listening effect, and indirectly cultivates students' writing ability.

2.4. Making micro teaching video

Using the production of English micro class video to present the key points and difficulties in teaching in the form of video can effectively promote students' understanding ability. Therefore, in the process of making micro class video, teachers need to combine specific teaching material knowledge and make micro video based on the goal of the course. In the process of making video, teachers need to integrate the content of classroom practice and the interaction between teachers and students into the video system, which can help students fully master and understand the knowledge and content. However, in Teaching In the process of teaching, teachers should also pay attention to the control of teaching video and teaching content, ensure the improvement of teaching effect, and set the teaching focus reasonably.

3. CONCLUSION:

To sum up, in the process of effective combination of micro course and English Teaching in higher vocational colleges, teachers should fully grasp the course content, mobilize the enthusiasm of students through the production of micro video based on the course content, realize the innovation of teaching means and teaching mode with the help of rich course resources and teaching experience of micro course, respect the main position of students, let students participate in it, and reduce Light teachers' workload can effectively promote the improvement of teaching effect, help students develop good learning habits, and lay a solid foundation for the improvement of English teaching quality in vocational colleges.

REFERENCES

[1]Liu Qian. A study on the combination of micro courses and higher vocational English Teaching. Agricultural staff, 2019 (01): 139

[2]Ma Meili. Research on the combination path of micro courses and higher vocational English Teaching. Brand research, 2018 (06): 242 + 244

[3]Chen Yali. Thinking on the combination of micro course and higher vocational English Teaching. Guangdong sericulture, 2018,52 (10): 39-40

Maintenance and Safe Utilization of National Fitness Path from the Perspective of Healthy China

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Abstract: Under the background of Healthy China, National Fitness has risen to a national strategy, and its important position is obvious. In order to understand the development status of the national fitness path in depth, this paper investigates and analyzes the construction, management and use of the fitness path, and proposes corresponding countermeasures for its long-term and effective use in the future development process, reasonable and efficient management. It is recommended to form a scientific and perfect development system for the national fitness path, provide valuable reference and promote the further development of the national fitness. the fitness path is state general administration of sports is an important part of the national fitness project. To return to the society in the form of sports lottery welfare fund, the unified purchase and sports departments at various levels to the configuration of the social public, suitable for mass fitness activities conducted by a group or series of fitness equipment. Parts of fitness crowd, however, no movement, no master the correct basic main point, difficult to achieve the harmony of human and instruments, blind operation also can cause injuries. This study adopts the methods of documentary, interview method, from the perspective of sociology, sports science, etc., put forward the joint of fitness path the necessity and feasibility of the safe use and maintenance of scientific fitness guidance for research and demonstration.
Keywords: Healthy China; Fitness Path; Safe Use; Nursing Homes

1. INTRODUCTION

The establishment and development of physical education colleges aim to meet development demands of competitive sports and mass sports and play a driving role on social development and progress. Rational layout and scientific and open educational system in higher physical education colleges adapt to practical demands of social development. Particularly, in the information era, demands for professional talents in higher physical education colleges show the comprehensive, multi-level and diversified features [1-5].

The fitness path began in the developed countries of Europe and the United States in the 1980s. It is in parks, green spaces, riversides and other places with better environment. A kind of sports equipment is installed at intervals, and there are small paths connecting various instruments [2-8]. Called the fitness path. There is a sign next to each device, indicating the name of the device, exercise method, main functions, safety precautions, etc., and some are also marked with action images, thermal energy consumption during exercise and scoring standards. Most of these materials are made of wood or fiberglass, and their color is coordinated with the outdoor natural environment. It is a beautiful pleasure to exercise in this environment. The fitness path was springing up in economic developed countries of Western Europe in the 1980s, especially for parks, greenbelts and riversides with good environment. A kind of fitness equipment is established at a distance. In addition, they are connected by a bit of path. Therefore, people call it as the “fitness path”. Also, a nameplate is marked on the fitness equipment, including name, usage, and fitness functions of fitness equipment, and attentions of safe use. Some of nameplates are equipped with the detailed diagrams of actions, heat exhaustion in use and marking criteria. Materials in majorities of fitness equipment are woods or glass fibers [9-17]. Harmonious colors can be harmonious with outdoor natural environment. National fitness path is featured with less land occupation, simple structure and small invention; thus, it is convenient for the masses. Therefore, they are welcomed by people. In communities, “national fitness path” is a beautiful scenery line and provide more exercise and good fitness conditions. It has already become a good partner for community residents’ fitness and entertainment.

Development of colleges plays an irreplaceable role on promotional relational development. Colleges are important bases to create, accumulate and spread knowledge in regions, important carriers and platforms for scientific innovation, technical transfer and achievement transformation, and main positions for spiritual civilization and cultural construction. They undertake the special historical mission to promote health, coordination and sustainable development of economic society. Physical education colleges have the abundant human resources of social sports and can offer the most direct and the most effective talents and technological support.

The exercise path should have a quantitative exercise load, not too casual, otherwise the exercise accumulation effect is not ideal, and the fitness effect is not ideal. From the untrained people and the elderly, start to set the exercise load to be lower, about 6 to 8 weeks or more, then slowly increase, then adapt and then improve.

Whether the exercise load is appropriate should be assessed by the heart rhythm or body sensation after exercise. That is, the heart rhythm after exercise should be 60% to 85% of the maximum heart rate. After exercise, the body should feel tired and feel unsatisfactory. There is fatigue and recovery to improve. But you can't feel too tired. If you can't recover for a long time, the exercise load will be big.

2. NECESSITY FOR USING AND MAINTAINING FITNESS PATH EQUIPMENT

2.1. Necessity of Popularizing Usage of Fitness Path Equipment

Fitness path equipment is used by the masses, showing the features of simplicity, easy study and easy promotion. Fitness items of fitness path are diversified, but they must be scientific and apply the scientific, reasonable and systematic methods and means to do safe and effective exercise based on observing the activity changing law of human body. However, due to poor public sports facilities in China, public sports facilities in majorities of areas are insufficient, which obviously obstruct physical activities of the masses, resulting in enough fitness knowledge of the masses, unscientific, unreasonable and non-systematic fitness modes and methods. With the in-depth development of national fitness activities, people are enthusiastic for attending physical exercise. Unfortunately, considering unscientific, unreasonable and non-systematic fitness modes and methods, it is necessary to insist in benefiting people with public interest, focus on people’s livelihood, and release the Outline of National Fitness Program for measures of public benefit fitness and benefaction to people, but this can’t really make the masses enjoy material benefits of fitness. Therefore, it is extremely necessary to popularize usage of fitness path equipment.

2.2. Necessity of Maintaining Fitness Path Equipment

Fitness path is featured with generality, high usage rate, and fast loss. In addition, due to improper usage of fitness people, it is easy to result in safety loopholes. Furthermore, because of equipment, usage or maintenance management, the equipment can’t be maintained and managed in time. This can’t greatly serve for fitness of the masses. Fitness effect is not poor. What’s more, it even results in hazards. As a result, to reinforce management of fitness path, regularly check whether equipment joint is firm and deformed, ensure that there are no safety loopholes, improve maintenance efficiency, guarantee completeness of fitness path equipment, and ensure safety of residents’ fitness activities is very necessary to maintain fitness path equipment.

3. “SCHOOL UNION”-ZERO CONNECTION BETWEEN COLLEGES AND SOCIETY AND PLATFORM CONSTRUCTION FOR PROFESSIONALS OF FITNESS GUIDE AND EQUIPMENT MAINTENANCE

In the talent cultivation process in 21st century, colleges should closely combine with social requirements for high-quality talent specifications. The “school union” serves for the society, forms mutual benefit and win-win effect, and constructs the professional platform of fitness guide and equipment maintenance. As a result, social sport major should cope with development trends of social sports and demands of modern society for sports talents, reinforce social sport management ability cultivation of students in social sport major, cultivate professionals who are good at using fitness path equipment, and construct a platform for professionals of fitness guide and equipment maintenance.

3.1. Objective Demands-Shortage of Social Sports Talents

With the constantly increasing enthusiasm for the mass, it also reveals the situation that Chinese social sports development is short of professionals. The fitness path is “a road leading to health” and it is the important constituent part of national fitness project. National fitness not only should get the knack, but also should notice safety. Different types of equipment in fitness path have the strong pertinence to exercise different parts of human body. Users must select suitable fitness equipment in line with body status and movement level. At the same time, diversified fitness people need to develop individualized and universal fitness equipment, mobilize interest of fitness people, let fitness path develop the proper effect, and greatly serve for the society. For this reason, colleges should connect with the society, strive for mutual benefit and achieve a win-win result, and construct a platform to cultivate professionals of fitness guide, equipment maintenance and R&D. Fitness path can exercise each part of body builders, showing convenient and practical economy. However, common people have little understanding on the functions, usage (technical actions), exercise loads and attentions of new-type outdoor sport equipment and they are short of knowledge about safely using fitness path equipment and scientific body exercise. Fitness path should consider different demands of body builders and integrate with scientific and interest. Design of fitness path equipment should provide more scientific and effective forms and diversified fitness services for body builders; thus, high-quality R&D talents are required. Furthermore, fitness path equipment maintenance always has some problems. During the warranty period, producers and installation manufacturers will be responsible for maintaining the fitness path equipment. If it exceeds the guarantee period, fitness path managers in communities should oversee maintenance. Since fitness path is always exposed to the air. After they are always exposed to rain and sunshine, it is easy to wear and rust. Besides, due to unreasonable utilization, they still have potential safety loopholes and they are likely to damage body builders.

3.2. Subjective Demands-Employment Demands (College Students) and Fitness Demands (Community Residents)

Employment is the subject demands of students. Fitness is also the subjective demand of the masses. In recent years, “difficult employment” of college students has already become a focused issue concerned by the society. After implementing the college expansion plan, college graduates are rapidly increasing. Relevant data show that college education returning rate is not high. With the improvement of social life level, people’s health consciousness is gradually improving. This is complementary with the objective of professional talent training in the current social sport major. Demand proportion for full-time PE teachers in physical education colleges is gradually reducing. National fitness path equipment and other basic material resources in national fitness centers, indoor and outdoor sports facilities, fitness squares and sport parks are relatively abundant, but they are short of professionals to manage these facilities. Physical education colleges challenge employment pressure, improve social practice and high-tech innovation capacity, enhance employment capacity, and cultivate students’ ability to directly participate in social sport field and promote social sport development after graduation. Therefore, to establish a group of professionals who can master functions and features of fitness path equipment is an urgent problem to be solved. Physical education colleges are necessary to cultivate students and people’s fitness management capacity. It is good for improving students’ ability, can provide the broader space for students in social sport major to get a job, and promote social harmony.

4. SAFE USE AND MAINTENANCE OF FITNESS PATH-SPECIFIC IMPLEMENTATION MEASURES OF SCIENTIFIC FITNESS GUIDE IN THE “SCHOOL UNION”

4.1. Define the Foothold-Design the “Order-Oriented” Talent Cultivation Scheme

By combining with features and advantages of physical education colleges in each major, it is necessary to adjust the talent cultivation scheme and let fitness path equipment and technology in schools and communities realize complementary advantages and resource sharing, so as to improve pertinence and effectiveness of education, improve cultivation quality of skilled talents, intensify the practical training process to reinforce reform of course applicability and practicability, and reinforce students’ communicative ability, professional skills, innovation capability and adaptive capacity.

4.2. Grasp the Joint Point-Establish the Extramural Practice Base to Form the Resultant Force Mechanism

Based on the resultant force mechanism of the “school union”, the practice base (the second classroom) is established in communities to link with the entrepreneurial practice. this not only can consolidate professional theories and skills learned in the first classroom, but also can focus on cultivating students’ practice ability through training and practice of the second classroom on students’ innovative and entrepreneurial skills, improve students’ cultural quality, comprehensive quality, scientific innovation and entrepreneurial capacity, realize the benign interaction between the first classroom and second classroom, form coordinative development among students’ knowledge, capacity and quality, realize seamless connection between schools and society, establish the practice base of “fitness path equipment managers” in the communities, and provide scientific guide for safe use, maintenance and fitness of fitness path equipment.

4.3. Capture the Origin of Force-Guide Scientific Fitness to Fitness Path

4.3.1. Master the correct use techniques and skills in fitness path equipment

Colleges should guide students to comprehend and study the General Requirements for Safety of Outdoor Fitness Equipment(GB19272-2003) issued by SAC and General Administration of Sport of China on October 4, 2003, master terms and definition, requirements, labels and instructions of outdoor fitness equipment, then ask them to accept practical training for national fitness path in communities, and make them skillfully master various scientific use techniques of fitness path equipment. In addition, it is necessary to conduct systematic cultivation and training for students, formulate the sports guide for fitness path equipment and safety warning nameplates, conduct scientific guide for body builders, become the qualified “fitness path managers”, and strive for an employment chance. This will enlarge employment opportunities of sport students and expand space to carry out the professional ability.

4.3.2. Master mature techniques and skills for fitness path equipment maintenance

Colleges should guide students to seriously understand the General Requirements for Safety of Outdoor Fitness Equipment (GB19272-2003) issued by SAC and General Administration of Sport of China on October 4, 2003, understand design principles of fitness path equipment products, moving part structure, limit of moving parts, durability and dust tightness of moving parts, and master installation, packaging, transportation and storage of outdoor fitness equipment. Then, students go deep into community fitness path and complete maintenance management on fitness equipment: it is essential to establish a file of fitness path, comprehensively track construction, utilization and maintenance of fitness path in the jurisdiction, regularly check and maintain fitness path in the jurisdiction, find out problems to repair in time, ensure use safety, and guarantee normal and safe use state for fitness equipment, so as to safeguard use safety and make it greatly develop a role.

5. CONCLUSIONS

The “National Fitness Path” is a comprehensive fitness system that the masses use different devices to comprehensively improve their physical fitness. Fitness people choose the exercise path that suits their needs according to their age, gender, physical characteristics and their own quality and health conditions, and improve their speed, strength, flexibility, coordination, flexibility and other qualities to achieve physical fitness. To put it simply, the fitness path is “the road to health” and is an important part of the national fitness program. At the same time, the national fitness activities should pay attention to safety and security, and we must do our best, instead of challenging the limits. Establishment of fitness path can greatly improve fitness conditions of residents, adapt to physical fitness demands of the masses, further develop the integrated functions and social effect of sports, also provide the diversified fitness modes for the residents, enrich cultural life of sport culture, and promote demands of people’s comprehensive development. It is the need to achieve a goal from a sports country to sport power. Body builders with different ages in communities have the different use situations for fitness path. To explain and demonstrate usage of fitness equipment with easy understanding and strong practicability for body builders and suitably conduct fitness path equipment maintenance is the physical education colleges’ obligation for the masses to use national fitness path in a scientific, reasonable and safe manner. The “school union” contributes to promoting coordinative development of national economy and sports undertakings, constructing harmonious society and serving for the society.

REFERENCES

[1]Zhou Jian, Investigation on the current situation of the use and management of urban fitness routes in Tongling City, Journal of Tongling College. 2018.

[2]Yi Juan, Zhou Meifang, Cheng Qilian. A Comparative Study of College and Community Fitness Paths, Jiangxi Education. 2008.

[3]Dilemma of Use Maintenance in Fitness Path,http://sports.sohu.com/20111215/n329116519.shtml, 2011.

[4]Technical Committee for Standardization of National Sports Equipment, General Requirements of Outdoor Fitness Equipment Safety, China Standards Press, 2011.

[5]Chen Xiaoli, the Study on Sustainable Development of National Fitness Undertakings Based on the Self-organization Theory in China, Beijing Sport University, 2012.

[6]Gao Yuzhou, Integration with Sports Resources in Colleges to Promote Sport Development in Communities, Notification of Sports Scientific Literature, 2010.

[7]Li Xiangru, et al, Status and Countermeasure Study on Implementing the National Fitness Project in Chinese Urban Communities , Sports Science, 2011.

[8]Li Wenhui, the Status Investigation and Analysis of Implementing “National Fitness Project” in Jiangsu Urban Communities, Sport Science, 2009.

[9]Wang Liyun, Analysis of the current situation of fitness path in Honghuagang District of Zunyi City and its countermeasures , Culture and Sports Products and Technology, 2017.

[10]Yi Juan, Guo Xiaoqin. Research on the Effective Utilization of Primary Fitness Path Equipment in the Background of Sunshine Sports, Youth Sports, 2014.

[11]Lv Qing, the Status Investigation and Analysis on I Project of Beijing National Fitness, China Sport Science and Technology, 2010.

[12]ZHOU Meifang, YI Juan, CHENG Qilian, ZHANG Huiwen. Analysis of the Reasons Why College Fitness Paths in Nanchang City Are Not Fully Utilized by Universities, China School Sports, 2009.

[13]Wang Wenping, Research on core strength and fitness path exercise to improve the risk of falling in the elderly, Journal of Practical Clinical Nursing, 2017.

[14]Fu Yao, Li Chaofu. Research on the Status Quo of National Fitness Path Selection in Heilongjiang Province, Sports science, 2015.

[15]LIAO Peimin, Investigation and Research on the Use Status and Effect of Community Fitness Path in Maanshan City , Journal of Anhui Vocational College of Metallurgy & Technology, 2015.

[16]Zhang Chonglong, Jiao Weiwei, Investigation and Analysis of Satisfaction of Residents in Fitness Paths in Hebei Province, Yangtze River Series, 2018.

[17]Yao Wei, Construction of Scientific Fitness Path Based on Internet of Things, Sports & Recreation Products & Technology, 2017.

Talking about the Training Objectives and Requirements of Innovative and Entrepreneurial Talents in Business Administration

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Abstract: The shortage of entrepreneurship talents is not only one of the important reasons for the serious employment situation of college students at this stage, but also the main "bottleneck" that restricts the economic development of our country. Therefore, the author carries out research on the training objectives and related requirements of innovative and entrepreneurial talents in business administration. The relevant improvement measures are also analyzed. The study finds that there are many cases of heavy theory and light practice in the teaching process of business administration, which will not achieve the ultimate teaching purpose of business administration major and realize the essential educational value of the profession. In addition, the competition for innovative and entrepreneurial diversified talents has become the focus of international competition. How to better serve the country and promote development strategy and economic and social development has become an important topic and urgent task for the research and exploration of universities in China.
Keywords: Business Administration; Innovation and Entrepreneurship; Talent Cultivation

1. INTRODUCTION

Higher vocational colleges are the main front for cultivating professional application-oriented talents. The large number of graduates in higher vocational colleges play an important role in society and are indispensable talents for some enterprises [1]. The professional group breaks the dilemma of the division of the original professions, so that the whole chain of knowledge is connected in series, and each profession is interdependent and synergistically symbiotic [2]. Based on the construction of business administration, it highlights the important position of innovation and entrepreneurship, forms the overall synergy and competitiveness of the discipline, and jointly promotes the overall level of the professional group [3]. To this end, we must innovate the talent training model of modern education, propose constructive education reform around the social practical gap demand, and cultivate more outstanding talents for the society, and at the same time, it is also an important way to improve the educational level of colleges and universities [4].Business administration specialty not only fully reflects the attributes, regulations and requirements of market economy and enterprise management, but also extensively reflects the current situation and trend of world science, technology and Humanities development. As well as the cultural tradition, ideal goal and realistic requirement of our country, it is a specialty with strong knowledge, practicality, comprehensiveness, application and innovation [5]. Since the 1980s, many western developed countries have carried out innovative talent training mode reform. At this stage, China is also vigorously promoting innovative entrepreneurship education [6]. Under the guidance of the national development strategy of building an innovative country and adapting to the needs of the contemporary economy and society, this is a talent training mode.

The construction of an innovative country is the development strategy and medium and long-term development goal established by our country at the beginning of the 21st century. In this context, it is imperative to vigorously cultivate innovative and entrepreneurial talents with modern innovation and entrepreneurship awareness and ability [7]. It needs not only knowledge of economics, management, psychology, sociology and law, but also humanistic accomplishment and philosophical thinking. It also needs the quality and ability to widely acquire and apply knowledge, effectively and creatively carry out business activities [8]. Paying close attention to the needs of social talent training, we can ensure that the talent training port of modern business management profession is more in line with the actual needs of the market [9]. Practice has proved that the evolution from professional to professional group is an important trend in the development of modern disciplines, and it also provides a new vision and opportunity for local applied universities to integrate subject resources, optimize the layout of disciplines, and develop innovative disciplines [10]. It provides a strategic breakthrough for building high-level applied universities. The reform of the teaching mode of business administration majors in higher vocational colleges is related to the quality of students and has a great influence on the entry of students into employment after graduation.

2. THE NECESSITY OF THE CULTIVATION MODE OF ENTREPRENEURIAL TALENTS IN BUSINESS ADMINISTRATION

2.1. Problems in the training mode of business management professionals in higher vocational colleges at the present stage

With the development of the new economy and industrial upgrading, the demand for comprehensive strategic management talents and new operational management talents that adapt to the team continues to increase. According to the professional and industrial innovation and entrepreneurship application-oriented talent training objectives and the "management, financial understanding, quality, and innovation" talent training specifications. However, due to the lack of external conditions, some colleges and universities lack enough opportunities to transport students to major enterprises and complete the training of knowledge and skills. Therefore, they can only adopt a teaching method that emphasizes theory and practice. What is certain is that, first, the talent training model is a style of talent training activities. Secondly, the talent training model is a systematic category, which is an organic combination of several elements in the talent cultivation process. At this stage, the employment of college students is difficult. Every year, millions of college students are facing the problem of finding jobs. To cultivate college students' innovative spirit and practical ability, alleviate employment pressure and solve this contradiction.

2.2. Talents Training of Business Administration Specialty in Higher Vocational Colleges is the Requirement of Current Social Development

Business administration majors have strong requirements for students'application skills and practical skills, through the rational use of modern management excellence. Creative methods and means to carry out effective management and management decision-making education for students to ensure that students can adapt to the requirements of today's enterprises for their survival and development. Based on optimizing and reconstructing the teaching system of theory and practice, the train of thought of "professional core platform + personalized elective module" has been formed. Due to the lack of enough awareness of knowledge application, it is difficult for some students to effectively apply classroom knowledge to practical activities. However, it is only a kind of "refining" of the talent cultivation process, especially the management process, and does not involve the specific education and teaching process. Among them, the opportunity recognition ability and opportunity development ability are expressed as the consciousness of innovation and entrepreneurship and the ability of innovative entrepreneurial thinking. The popular saying is whether students can realize the opportunities of innovation and entrepreneurship and the ability to grasp the opportunity.

3. MEASURES FOR THE SOLUTION OF THE CULTIVATION MODE OF ENTREPRENEURIAL TALENTS IN BUSINESS ADMINISTRATION MAJORS IN HIGHER VOCATIONAL COLLEGES

3.1. Reorientation of the training goal of entrepreneurship education

Table 1 Business Management Professional Innovation and Entrepreneur Talent Quality Model

Primary indicator	Secondary indicators	Primary indicator	Secondary indicators
Know how	Public basics	Innovative ability	Creativity
	Economic and management basics		Market sensitivity
	Basic knowledge of entrepreneurship		Leadership
Skill	Professional technical ability		Emotional control
	Creative and project planning skills		Decision making
	Organizational skills		Willpower
	Communication skills		Learning consciousness
	Communication ability		Enterprising heart
	Information gathering and analysis capabilities		Pioneering spirit

The traditional teaching mode of Business Administration Specialty in higher vocational colleges does not pay enough attention to the cultivation of students'innovative spirit and entrepreneurial ability, and entrepreneurial education is often difficult to achieve effective. There is still a clear distance between the accumulation of human capital and the formation of competitive advantage. Without the relevant industrial support and policy guarantee, human capital cannot effectively play its role in promoting the economy. With the development and progress of the society, the division of labor is more meticulous and professional, and the disciplines of colleges and universities are further divided. It is impossible for universities to teach a certain subject or professional knowledge to students in just a few years. Skill structure. In the process of teaching business administration, strengthen entrepreneurship education and attach importance to the cultivation of entrepreneurial ability.

Combining the research results of other scholars and fully integrating the goal orientation of innovation and entrepreneurial talents in business management, this paper proposes that the model of innovation and entrepreneurship talents in business administration is shown in Table 1.

3.2. Improve the curriculum of entrepreneurship education

To improve the curriculum of entrepreneurship education in business administration, it is required that higher vocational colleges should make scientific, reasonable and acceptable design for students. Further targeted, selective, and innovative construction of a new curriculum with a major in business administration. To strengthen the branches, based on ensuring the realization of the basic training objectives, respect the individualized choices of students' innovation and entrepreneurship, and promote the specialties and capabilities of innovation and entrepreneurship. The formulation of this policy goal has set a landmark direction for the national talent strategic reserve. An innovative and entrepreneurial education model that provides students with the funds needed for entrepreneurship and the necessary technical advice. The other is characteristic, that is, the combination of innovation and entrepreneurship education and the school's characteristics. For example, MIT's innovation and entrepreneurship education is oriented to high-tech. Innovation and entrepreneurship education at Washington University in St.

4. CONCLUSIONS

It is an important direction of education reform of business administration specialty to cultivate double-creative talents adapted to the development of contemporary social economy. It needs training specifications, training programs, planning and design of training modes, etc. The guarantee system of innovative and entrepreneurial talents training can be divided into three parts: hardware system, software system and evaluation mechanism. Without a sound evaluation system, the idea of innovative entrepreneurship education will become a mere formality, and many policies will be published as a dead letter. At the same time, the reform and innovation of talent training model cannot be achieved overnight, but in the process of gradual progress to complete the summary and analysis of the experience of the system and model. From the current situation of China's economic development, China's human capital has gradually accumulated and formed in the past process of economic growth. Under the trend of the country's continuous development toward a better and stronger direction, several emerging enterprises and a group of young entrepreneurs with the ability, vitality and potential will emerge. To make a great contribution to the integration of our country and the world economic standards. In addition, we should actively deepen supply-side reforms, build a more comprehensive platform for the role of human capital, and increase the rate of return on human capital investment, truly enabling human capital to boost China's economic growth. Market research capabilities assess whether students can find new growth points in a diverse market.

REFERENCES

[1]Ly C T M, Vickers M H, Fernandez S. Master of business administration (MBA) student outcomes in vietnam graduate student insights from a qualitative study. Education + Training, 2015, 57(1):88-107.

[2]Alvaro P A. Relation between sleep quality and attention in students of business administration. Biological Rhythm Research, 2014, 45(1):131-142.

[3]Personality and student performance on evaluation methods used in business administration courses. Educational Assessment, Evaluation and Accountability, 2015, 27(2):171-199.

[4]Clermont M, Dirksen A, Dyckhoff H. Returns to scale of Business Administration research in Germany. Scientometrics, 2015, 103(2):583-614.

[5]Islam N. Self-Assessment in Higher Education: an Empirical Evidence from the Department of Business Administration of Shahjalal University of Science and Technology, Bangladesh. International Journal of Educational Administration & Policy Studies, 2015, 7(6):114-129.

[6]Hoque M E, Van Hal G. Acceptability of Human Papillomavirus Vaccine: A Survey among Master of Business Administration Students in KwaZulu-Natal, South Africa. BioMed Research International, 2014, 2014:1-6.

[7]Lazzarini, Sergio G. The measurement of social impact and opportunities for research in business administration. RAUSP Management Journal, 2018, 53(1):134-137.

[8]Baldarelli M G, Baldo M D. Ethics, gift and social innovation through CSR and female leadership in business administration in Italy// Springer Berlin Heidelberg, 2016:141-150.

[9]José Antonio Cavero Rubio, Mullor J R,Agustín Pérez Martín. Studies in business administration in the European higher education area: a comparative analysis in Europe. Innovations in Education & Teaching International, 2015, 52(6):575-586.

[10]Syed A M, Naushad M. Benchmarking as a Tool for Quality Improvement in College of Business Administration: An Application of AHP. Journal of Applied Sciences, 2014, 14(18):2087-2097.

Music Teaching Practice Education and Characteristic Campus Culture Construction in Application-Oriented Universities from the Perspective of Integration of Production and Education and Project Management

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Abstract: Three Full Education is one of the most important indicators of education at present, which requires that the whole staff education, the whole process education, all-round education. The implementation of applied college music culture in the process of practical education and characteristic campus culture education is an important driving force to promote school construction, student cultivation and social development. Based on this, this paper will mainly focus on the "three full education" perspective of applied college music culture in practice education and characteristic campus culture education in the construction of the way to play a specific analysis and discussion.
Keywords: Three Full Education, Applied University Music Culture; Practical Education and Characteristic; Education Construction Function

1. INTRODUCTION

Three Full Education is a new educational concept put forward under the background of current education, which meets the requirements of the development of the times. The practical education of music culture through the way of "three full education" is helpful to the achievement of practical education and characteristic campus culture education goal in applied colleges and universities. Therefore, we must take effective measures to implement the organic combination of "Three Full Education" and music culture practice education. Therefore, we will focus on several ways to play the functions of applied college music culture in the construction of practical education and characteristic campus culture education from the perspective of "Three Full Education ", so as to facilitate the future application-oriented colleges and universities to achieve the construction goal of practical education and characteristic campus culture education [1, 2].

The teaching goal of applied colleges and universities is usually that all students can have their own strengths after graduation, and the same is true in the process of educating people in the practice of music culture in colleges and universities. All students can get the opportunity to participate in music culture education, edification is an important index to achieve teaching goals in colleges and universities. Full participation is also one of the aspects in the perspective of "three complete education ". Therefore, full participation is one of the important aspects of music culture practice education and characteristic campus culture education in applied colleges and universities.

For example, colleges and universities can carry out music culture elective courses for students. First of all, music culture electives can be divided into instrumental music, vocal music, appreciation and other different types of draft; secondly, students are free to choose, and each student must sign up to participate; in addition, colleges and universities can also music education electives credit into the final total score, which is of great help to stimulate students to receive music culture education, thus effectively mobilize the enthusiasm of all students to participate, but also play the role of practical education and building characteristic campus culture. This shows that the entire staff take part in the practice of music culture is an important measure of applied university music culture in the construction of practical education and characteristic campus culture education from the perspective of "Three Full Education ".

2. MUSIC CULTURE EDUCATION

Music culture contains a relatively wide range of aspects, so all-round music culture education for students is one of the essential requirements. All-round music culture education can be carried out from two important aspects: theoretical knowledge education of music culture and practical knowledge education of music culture, to carry out all-round music education for students [3]. It is also one of the important means to realize the practical education of applied colleges and universities and the construction of characteristic campus culture education.

For example, the theory of music culture education to develop knowledge. First of all, colleges and universities can offer music theory knowledge courses, hire music instructors from relevant majors to be lecturers to teach students the theory knowledge related to music culture, so that students can have good theoretical guidance in the process of specific music practice, also enrich students' knowledge of music culture. In addition, the practice of music culture education to carry out training. Colleges and universities can set up courses for the teaching of musical instruments, such as piano and violin, and colleges and universities can also arrange the examination of musical instruments into the teaching process to encourage students to participate in the examination. As a result, students can learn about musical instruments in practice. Therefore, all-round education is one of the important operations of music culture education and campus culture education.

3. THE WHOLE PROCESS TRAINS THE UNIVERSITY MUSIC TALENTED PERSON

The cultivation of talents is often not accomplished overnight, but needs a long practice, complete process to achieve. And the characteristic campus culture educates the person construction also cannot be achieved in a short time, what needs is more investment and more pay. Therefore, applied colleges and universities should abide by the principle of "Three Full Education ", train the music practice talents of colleges and universities in the whole process and build the characteristic campus culture to educate people.

For example, first, colleges and universities can appoint several tutors for music culture teaching, and divide students into classes to assign a teacher for music teaching in each class. The tutor is responsible for the whole process of music culture training of students in the whole class. Secondly, colleges and universities can test students' music culture learning at each stage, written test and oral test are feasible, to test students' learning of music culture at each stage. Finally, for graduates, schools can also provide corresponding music training and related post internship opportunities. In this way, colleges and universities will truly achieve the requirements of the whole process of training college music talents.

Conclusion: From the perspective of Three Full Education, applied college music culture plays an important and positive role in the construction of practical education and characteristic campus culture education. To sum up, the full participation in music culture practice, all-round music culture education and the whole process of training college music talents are one of the most important functional indicators for applied college music culture education, which is worthy of in-depth study and discussion in the current applied colleges and universities, so as to continuously promote the construction of practical education and characteristic campus culture education in applied colleges and universities [3].

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REFERENCES

[1]VayLimin. Culture studying features of prospective music teachers’ singing training. ProfesìonalìzmPedagoga: Teoretičnì j Metodičnì Aspekti, 2016, (3): 42.

[2]Daisy Morris. Music Therapy and Culture: An Essential Relationship. Approaches: Music Therapy & Special Music Education, 2010, 2(1):37.

[3]Janice Waldron. User-generated content, YouTube and participatory culture on the Web: music learning and teaching in two contrasting online communities. Music Education Research, 2013, 15(3):11.

Research on the Implementation of Ideological and Political Education during Cell Biology Teaching

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Abstract: The comprehension of connotation of ideological and political education and its practical application on the regular course teaching is one of the innovative methods of ideological and political education. Taking the course of "Cell Biology" as an example, this paper analyzes the implementation method of ideological and political education in classroom teaching, excavates the effective fusion point of "cell biology" and students' ideological and political education, and regularizes the ideological and political guidance to students.
Keywords: Teaching fusion; Cell biology; Ideological and political education

1. INTRODUCTION

Moral education is a new concept of talent training in Colleges and universities, which requires strengthening the ideological and political education of students. The ideological and political work will be implemented in the whole education stage, so that students can acquire more professional knowledge and skills, and have a higher level of cognition and advanced ideas. Ideological and political education has become the key direction of education reform in Colleges and universities. It is necessary to make a summary analysis of its experience in the integration of conventional courses.

2. PRINCIPLES OF IDEOLOGICAL AND POLITICAL EDUCATION DURING CELL BIOLOGY

In the course of "cell biology", ideological and political education is not simply to insert the content of ideological and political education into the original teaching system, but to explore the inherent relationship between the teaching content and ideological and political education from the characteristics of the course of "cell biology". Through the effective integration of "Cell Biology" curriculum and ideological and political education, it helps students to establish a correct outlook on life and values, and improve their ideological and political level.

3. IMPLEMENTATION PLAN OF IDEOLOGICAL AND POLITICAL EDUCATION IN CELL BIOLOGY

3.1 Building an Integrated Teaching System for Ideological and Political Education

The integration of ideological and political education during "Cell Biology" has changed the classroom teaching goal, method and content system to a certain extent. In order to make both teaching and students adapt to this change as soon as possible and ensure the smooth and long-term implementation of ideological and political education, it is necessary to set up the integrated teaching system of ideological and political education in advance, and make reasonable design of the integrated teaching objectives, requirements, methods and methods.

For example, teachers make a detailed analysis of the structure of the teaching framework of Cell Biology, divide it into multiple modules, and clarify the core knowledge of the modules, and then conduct an in-depth analysis of the knowledge contained in each module, focusing on those parts that can be linked to the life of the students. The subject of cell biology involves a great deal of biological principles and techniques, which scientists and researchers can also use to carry out ideological and political education. For this reason, it is suggested that teachers should choose 2~3 of the characters mentioned in the textbook, collect the characters' background, life stories and so on, and pay attention to the priority of choosing the characters in China and the more interesting characters in the story background, respectively, inserted into the different teaching stages, and conduct ideological and political education for students in the way of character story analysis.

Teachers can implement the integrated teaching plan of ideological and political education as a concrete teaching plan for reference in daily teaching activities. In order to ensure the innovation and feasibility of the program, it is suggested that the teachers of the college should cooperate with the teachers who are specially responsible for ideological and political education to complete the programming work together, and do a good job of optimizing and updating the program, and find the best way integrate Cell Biology and ideological and political education through teaching practice [1].

3.2 Exploring the Knowledge Channels for Integrating Ideological and Political Education

The core knowledge module of Cell Biology includes organelle, cell structure, cell mechanism, cell cycle and so on. Take the integration of ideological and political education and organelle related knowledge as an example. The organelle module is the key module of cell biology, which occupies a large space in the teaching materials. Teachers should pay more attention to the mutual promotion relationship between theoretical knowledge and ideology and politics when carrying out integrated teaching, assist students' rational understanding with perceptual knowledge, and have a deeper understanding of theoretical knowledge while guiding their ideas to develop correctly. As explained to light in cooperation, the teacher first introduced the role and characteristics of chloroplasts in plant cells, focusing on the process of converting light energy into chemical energy by chlorophyll. Then make an appropriate extension of the process, leading students to explore, if the chloroplast is an individual or factory, its production efficiency? How about value creation? What changes will this "low cost", "high return" transformation produce if applied to personal development or factory production? Finally, students are reminded to improve the proportion of "efficiency" parameters when measuring the value of things, that is, to understand the life value of ordinary people with the rate of value creation.

In the process of teachers and students' discussion, students have been able to connect biological knowledge with personal life value, and then the perceptual knowledge formed comes from the subjective level, and teachers can successfully achieve the goal of ideological and political education with a little guidance. It should be noted that when the ideological and political education content is introduced with specific knowledge points, it should be natural and coordinated as much as possible, to avoid the content being too rigid, causing students' discomfort and affecting the normal teaching efficiency.

3.3 Clear Directions for Integration of Ideological and Political Education

A clear direction of ideological and political education integration can help teachers to correspond different ideological consciousness, ideas, spirit with specific teaching links and contents, to ensure the scientific nature of integrated teaching and reduce the pressure of teachers' daily teaching [2].

The ideological and political education of contemporary college students mainly helps students to develop good behavior habits, form positive and healthy thoughts, and transmit the ideas of loving the motherland, ecological environmental protection, scientific innovation, advocating nature, environmental protection and the rule of law. Set the above content into a number of ideological and political education themes, each theme to insert the corresponding "cell biology" teaching content, clear the direction of teaching integration, in the teaching process if explained to the corresponding content, teachers can carry out the corresponding theme education for students. For example, when explaining "organized punctuality and compatibility with the space environment", students' behavior habits can be guided; when explaining "virus breeding process", they can Health concept, cherish the concept of life penetration, at the same time the introduction of extended thinking: what are the AIDS-induced factors in life? How to do AIDS prevention in life? While giving full play to the value of ideological and political education, it can also broaden students' knowledge and make them master some healthy lifestyles that can be directly applied.

4. CONCLUSION

The integration of ideological and political education and regular curriculum becomes the main direction of ideological and political education innovation in the future. Set up the teaching system, excavate the fusion channel, make clear the fusion direction, integrate the ideological and political education into the teaching practice of "Cell Biology" in an all-round way, train more high-quality comprehensive talents.

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REFERENCES

[1]Evripidis Lanitis, George Coukos, Melita Irving. “All systems go: converging synthetic biology and combinatorial treatment for CAR-T cell therapy”, Current Opinion in Biotechnology, 2020, 65.

[2]Mastelaro de Rezende Marina, Ferreira Alice T, Paredes-Gamero Edgar J. “Leukemia stem cell immunophenotyping tool for diagnostic, prognosis, and therapeutics”, Journal of cellular physiology, 2020, 235(6).

Analysis on the Strategy of Network Informatization Construction of Party Construction in Colleges and Universities

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Abstract: The information age of the new era has changed the ruling mode of the party, the network information technology can help improve the ability of party affairs in colleges and universities, and highlight the scientific work of party building. This paper focuses on the party building website, wisdom platform and other aspects, combined with network information technology to explore the construction strategy of the party building work in colleges and universities, promote the information development of the party building work through Internet technology, make teachers and students participate in decision-making with the help of network platform, and strengthen the close connection between the party and the masses.
Keywords: Party building work; Network information; university website

1. INTRODUCTION

Under the background of the network, colleges and universities gradually change the way of party building work, with the help of the spread law and characteristics of Internet technology, promote the development of network propaganda and education is important, ensure that the party building work fits the times and the group of teachers and students, and then fill the vacancy of party building work in colleges and universities. Therefore, it is necessary to combine network information technology with party building work, highlight the effectiveness of party building work in colleges and universities in the digital age, and guide students to set up correct values.

2. BUILDING A WEB SITE FOR PARTY BUILDING

It is suggested that the school should construct the party building work website, promote the party building work, publish the party building news in the website, and strengthen the knowledge of the party building construction of the middle school students and the party organizations at all levels. At the same time, the masses can timely understand the latest changes in economic and political forms at home and abroad through the school website, and complete the guidance of public opinion. In addition, it is suggested to build a "party building theory research base" in the website, and the operators can regularly publish the political developments and the theoretical achievements of party building in various countries, so that the teachers and students of the whole school can combine the latest theoretical knowledge with practical work. In addition, it is suggested to construct a management system for the development of Party members and to guide the activists to join the Party through management the module carries on the network thought report and the thought feedback, imports the electronic version to join the party application form, and instructs the party member cadre to perfect the work flow, enhances the party construction work quality and the efficiency, highlights the new period university party construction work actual effect.

3. ESTABLISHMENT OF AN ONLINE PARTY SCHOOL

It is convenient for colleges and universities to construct the online party school system to carry on the remote teaching to the party constitution, and to realize the online party school education in combination with the specific situation of the party branch of the school itself. For example, colleges and universities can carry out special education activities for party members, party activists and party workers at the grass-roots level, and facilitate the exchange and study of party members and party activists by publishing and displaying excellent ideological report model articles and application forms in the system, so as to provide party activists with rich guidance and relevant knowledge of party materials and improve the quality of education for school party members.

Colleges and universities in the construction of party building network information construction process, need to focus on the following content: relying on advanced cultural ideas to build an Internet platform, through modern ideas to arm the whole school party members, party activists, so that under the guidance of the party to establish a correct world outlook, values, outlook on life, enrich party members' political theory and ideas, improve their thinking ability [1]. At the same time, it is necessary to strengthen propaganda and cooperate with campus broadcasting, WeChat public number and other platforms to build an efficient and active party building environment. In addition, it is suggested to optimize the content of the Party building, party building on the Internet must be time effective. Therefore, high efficiency needs to build a fixed way of news release, release timely news, and fully reflect the latest theoretical achievements of the party organization in the party constitution.

4. MAINTAINING THE PARTY BUILDING PLATFORM WITH HIGH EFFICIENCY FEATURES

Because colleges and universities are the areas where intellectual resources are very concentrated, they provide enough ideological and technical support for the work of informatization party building. Therefore, it is necessary for colleges and universities to combine their own characteristics and advantages to filter and check the internal and external link information and purify the network environment and space. At the same time, timely analysis and collection of information and public opinion in the school party building exchange platform, positioning the latest trend and situation of public opinion in the network, summing up the party building difficulties and hot issues concerned by teachers and students, and then solving the work problems according to the situation.

Table 1 System User Rights and Role Design

Role	Major Function	Authority
First level administrator	Overall management system with authority to add administrators and party organizations	All permissions
Secondary administrator	Release news, add regular users, upload files, modify information	General document management authority
Ordinary users	Enquiries, Downloads	View and download permissions

It is suggested that the school should combine the system and planning of the party building work on the net, carry on the comprehensive investigation and management to the computer equipment, network system and hard disk of the whole school computer room, and increase the investment of operation and maintenance funds. Among them, the management team needs to have Marx's theoretical and ideological level, have a strong sense of responsibility and political mission, have sufficient experience in the work of network party building, master a variety of network technology, and then promote the development of party building work in modern colleges and universities. In addition, it is suggested that colleges and universities should strengthen the security and confidentiality of party building system data, and strengthen the security management of network information through data encryption, firewall, antivirus software, etc. Household authority and role information, and then improve the scientific nature of party building information management, the specific design form is shown in Table 1. Through the establishment of the party building safety management system, combined with the principles and nature of the party building work, the party affairs information is correctly kept confidential and open to operate, to promote the rapid development of the school party building work.

5. BUILDING UP THE PARTY OF WISDOM

It is suggested that the school build the wisdom party building cloud platform with the help of cloud service, this model is mainly composed of collecting client, campus portal, WeChat public number, TV client and so on, and has the modules of grass-roots party building, information, talent work, cadre work and so on. Schools in the construction of intelligent party building platform, need to make plans, highlight the overall structure, according to the overall requirements of party building, upgrade the network center hardware and software equipment [2]. At the same time, combining with the situation of regional urban construction, we can realize the combination of various resources, complete the party building information sharing between colleges and other colleges and universities, and highlight the advantages of network party affairs, information and government affairs. In addition, colleges and universities can rely on its own bright spots, improve the level of learning, service, management, through the construction of teachers and students interactive intelligent party building platform, to help school party members and cadres to meet the requirements of the development of the information age, form Internet thinking, improve the level of party building work.

5. CONCLUSION

The network information construction of the Party building work in colleges and universities can highlight the ruling ability of the Party, which is the inevitable requirement of the social development in the new period. Therefore, it is necessary for colleges and universities to set up party building thinking, innovate working ideas, change ideas and emancipate their minds. Relying on Internet technology to build a website, exchange platform, highlight the effectiveness and pertinence of party building work, expand the content and form of party building education, combined with the pace of development of the times, improve the ability of party building work in colleges and universities.

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REFERENCES

[1]Jason M. Roberts. The Whips: Building Party Coalitions in Congress by C. Lawrence Evans. Ann Arbor, University of Michigan Press. Political Science Quarterly, 2020, 135(1).

[2]Li Guangjun, Shen Wen, Zhao Liang, Wang Tao, Pan Zhehao, Sheng Shuyin, Xu Weidong. Combined

construction of injectable tissue-engineered bone with CPC and BMMSCs and its study of repair effect on rabbit bone defect model. Journal of musculoskeletal & neuronal interactions, 2020, 20(1).

Research on the Innovation Path of School-Enterprise Cooperation in Higher Vocational Tourism Management based on Modern Apprenticeship

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Abstract: This paper mainly explores the connotation of modern apprenticeship system, and further thinks about the innovative path of cooperation between school and enterprise in higher vocational tourism management based on modern apprenticeship system. The research summarizes the establishment of pilot projects, training objectives, teaching mode and consolidation of theoretical knowledge. It is hoped that the views of this paper can provide reference for researchers concerned with this topic.
Keywords: Modern apprenticeship; Alternation of work and study; Posting practice

1. INTRODUCTION

Western countries have improved the traditional apprenticeship system and formed the modern apprenticeship system, which combines the mode of modern school education with the traditional apprenticeship system. Using the training mode of modern apprenticeship system can make schools and enterprises establish good cooperative relationship with each other.

2. CONSTRUCTION OF MODERN APPRENTICESHIP PILOT PROJECT

The purpose of setting up Tourism Management Specialty in higher vocational colleges is to transfer talents with professional knowledge to the society and realize the directional training of professional talents. Integrate theoretical knowledge into practical teaching activities and improve the practicability of tourism management teaching activities in higher vocational colleges. At present, due to the influence of the new coronavirus epidemic situation, the development of tourism will be limited to a certain extent. Therefore, the tourism management major in higher vocational colleges should strengthen the training of students, pay close attention to the demand for talents today, and keep up with the pace of the times [1]. Establish the learning mode of combining work and learning, and the school and the enterprise cooperate well. Such as a higher vocational tourism management major and a meal Shop cooperation, and held a modern apprenticeship worship ceremony, by the leadership of the College to the masters in the enterprise issued external teacher certificate. The apprentice of the modern apprenticeship class of tourism management in this school respects tea with both hands and bows, and the master returns to the apprentice, and the whole process of the teacher worship ceremony is solemn and serious. Holding this teacher worship ceremony means that the cooperation between schools and enterprises has entered a new stage of development.

3. CLEAR TRAINING OBJECTIVES FOR STUDENTS

The teaching objectives should be scientific and effective, and be able to do a good job of industry analysis while combining with the actual situation. Control the future development direction of tourism management specialty. Tourism management is closely related to other disciplines. It covers management, economics, sociology, resource science, statistics, psychology and geography. Therefore, the tourism management major is a multi-disciplinary comprehensive major, which establishes a complete teaching system to train and educate students. After finishing their studies, students can go to tourism institutions and tourism administration departments for employment. To educate students, we should improve their ideological and moral level, form a strong sense of social responsibility, have high-quality professional ethics, and have a strong ability of communication and coordination. Students should have a certain sense of innovation in their daily work and study. Learn a wealth of professional knowledge, not only to be proficient in customer service, but also in charge of modern hotels and restaurants.

4. ESTABLISHING ALTERNATING TEACHING MODE OF WORK AND STUDY

Establish the teaching mode of alternating work and study, and construct the teaching mode of cooperation between school and enterprise in the process of practical teaching. In order to train students systematically and learn theoretical knowledge, it is necessary to increase practical training courses. The teaching mode of alternating work and learning needs the support of rich curriculum content, for example, a higher vocational school divides the curriculum content into five parts, the first part is the public basic course, the purpose is to improve the students' ideological and moral level, and to cultivate the students' English ability and thinking ability. The second part is the professional basic courses, there are management introduction, western economics, tourism introduction, tourism geography, tourism psychology. To study this section, effectively enrich students' basic knowledge of tourism [2]. The third part is specialized compulsory courses, including travel agency management and management, hotel management, tourism marketing, tourism planning and development, tour guide, tourism English. The fourth part is specialized elective courses, including tourism resources country profile, tourism folklore, tourism culture, tourism Japanese. The content of the fifth part is practical courses, including tour guide business and training, front room service and skills, room service and skills, restaurant table simulation, tea training class, wine training class.

5. ESTABLISHING TASK-DRIVEN TEACHING MODEL

The establishment of task-driven teaching model can develop more comprehensive and systematic training for students. Provide guidance and help for students by assigning learning tasks to them. After the completion of the task, it is also necessary to evaluate the performance of the task of the training personnel. For example, the teacher assigned the task of designing theme rooms for students, can be banquet hall, hotel rooms. Design and arrange the banquet hall, considering the purpose and nature of the banquet and the requirements of the organizers for the banquet, will be hung above the hall. Place bonsai and flowers and plants around the banquet hall to render the banquet grand and warm the atmosphere. Wedding banquet and birthday banquet are more common, the word "Yi" or "Shou" hanging in the banquet hall eye-catching position, can also meet the requirements of customers, appropriate addition of hanging stickers or couplets. Use bonsai or flowers to decorate the table, the microphone neatly placed on the table, convenient for guests and guests to address. Pay attention to the good control of temperature and humidity in the banquet hall to avoid discomfort to the guests.

6. CONSOLIDATE THEORETICAL KNOWLEDGE THROUGH POST PRACTICE

The teaching mode of on-the-job practice for students majoring in tourism management, after learning a lot of theoretical knowledge, students can enter the relevant enterprises to carry out on-the-job practice, so as to deeply understand the actual work content of the post in the enterprise, understand the actual needs of the post to the personnel, so that the knowledge learned by the students in the school will be effectively consolidated, and the skills mastered can also be certified [3]. For example, a higher vocational college established a good and cooperative relationship with tourism management enterprises, and held a special job fair for on-the-job internships. In this job fair, there were 120 internship jobs, which were provided by 14 enterprises. Distribution of cooperative enterprises In each region, the representatives of colleges and departments first carried out positive and objective publicity activities, students after understanding the basic situation, combined with their own needs to sign up, enterprises according to the registration of students, arranged interviews, and finally announced the results of admission.

7. CONCLUSION

To sum up, based on the modern apprenticeship, the school enterprise cooperation innovation of higher vocational tourism management should actively build a modern apprenticeship pilot project. We should make clear the training objectives of students and establish the teaching mode of work study alternation. Organize post practice activities to consolidate the theoretical knowledge learned by students.

REFERENCES

[1]Malcolm Greig. Factors affecting Modern Apprenticeship completion in Scotland. International Journal of Training and Development, 2019, 23(1).

[2]Tara García Mathewson. Modern Apprenticeships Offer Path to Career-and College. Tech Directions, 2018, 77(6).

[3]Jim Campbell, Morag Gillespie. Gender analysis of spending on the Scottish Modern Apprenticeship programmed. Local Economy: The Journal of the Local Economy Policy Unit, 2017, 32(5).

Study on the Legalization of College Student Management in China

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Abstract: The essence of the legal risk of university student affairs management is the conflict between the right of university management and the right of students. The causes of legal risks are diverse, mainly focusing on the weak awareness of legal system in colleges and universities, the conflict between internal rules and regulations and laws and regulations, and the unsound student management system in colleges and universities. To prevent and control the legal risks of student affairs management, it is necessary to continuously strengthen the legitimacy construction of rules and regulations of student affairs management, promote the standardization and normalization of the construction of procedure mechanism, and practically promote the legalization construction of student affairs management.

Keywords: Legalization of management; Rule of law; College student management

1. INTRODUCTION

In recent years, Chinese colleges and universities have been frequently sued by their educational objects, which has aroused widespread concern and profound critical thinking in the society. On the one hand, it shows that students' awareness of rights protection has been constantly improved with the development of the society and the rule of law, and they begin to seriously treat rights and fight for rights. On the other hand, it reflects the non-standard relationship between school education management and educational legal order, as well as the serious problems to be solved in the management of colleges and universities.

Only under the guidance of the idea of rule of law, we should actively explore and innovate, and put forward some countermeasures, to make the management of college students adapt to the new situation.

2. ANALYSIS OF EXISTING CIRCUMSTANCE

Up to now there is no unified definition and explanation of the concept, legalization of college student management. Although the expression is different, it can be extracted to a common point, that is, under the background of legalization and high. The management of students must be carried out in accordance with laws and regulations, and full use of legal means to guide the education, management and service of students [1-3].

But still, it can be found that there are some loopholes and malpractices in the management of college students, and there are some problems to be studied and solved in the national legislation and management practice.

1) Colleges have weak legal consciousness and serious administrative tendency

At present, there are still some problems in the management of students in some colleges and universities in China, such as lack of legal concept, unclear legal relationship and weak restriction mechanism, which not only goes against the spirit of the legal system, but also seriously affects the realization of students' right to education and other legal rights. At the same time, in the process of the rule of law, teachers and students are lack of legal awareness, especially the backward legal concept, which makes the essence of university management still stay in the traditional state of administrative management.

2) College internal rules and regulations conflict with laws and regulations

The conflict between the college internal rules and regulations and the laws and regulations is the main reason for the infringement of students' rights and the legal disputes. The internal system of the school cannot keep up with the requirements of the development of the times. The relevant laws and regulations are too abstract and principled. The managers cannot manage according to law. The laws and regulations of College Students' work management are dated. The laws and regulations of College Students' management have not formed an orderly system with complete content and form. For example, all students with romantic relation and deviate from the rules shall be dismissed; all students who cheat in examinations shall be dismissed as dropouts; no degree for demerit recording or above punishment is more severe than the relevant regulations on the management of students in general colleges and Universities.

3) The university student management system is not sound

College Students' affairs management is complex and complicated, so the management system is not perfect, and there are many loopholes in the construction of the legal system. There are some disadvantages in the exercise of the right of punishment in Colleges and universities. The supervision mechanism of the management of college students is not perfect. The supervision mechanism of the legalization of student management is relatively weak. The management of College Students' affairs lacks the proper legal procedures, which are easy to be ignored. In addition, the formulation of relevant management procedures in

Colleges and universities is too rough, the legal system of student management in Colleges and universities is incomplete, and many management details are unclear. Therefore, the management regulations of colleges and universities lack operability in implementation.

3. DISCUSSION

Student management work in colleges and universities under the rule of law is a process of integrating static and dynamic, is also a systems engineering, and in promoting the rule of law under the new situation [2, 3], we should set up the concept of the rule of law, perfect the legal system, strengthen students' right relief and so on multiple levels, multiple measures simultaneously, propulsion system, searching for ways to the rule of law.

In the new situation of the society under the rule of law, the relationship between universities and students has changed greatly compared with the previous one. The relationship between universities and students is no longer the simple relationship between management and being managed in the past, but the relationship between equal subjects in front of the law. Only by effectively changing the ideology and concept, colleges and universities need to establish a new concept of student-oriented, change the previous management thinking of obligation standard, adopt rights standard, and take the realization degree of students' rights as the value standard to measure the work, can they truly achieve the realization of student management by law.

At present, China is in urgent need of forming a complete and detailed content, form of its own, orderly level, and can accurately reflect the general law of legislation and the rule of law society requirements of college student management laws and regulations system, so that college student management behavior can be done in accordance with the law. In the process of legislation, we should adhere to the principle of seeking truth from facts and consider the overall situation and integrity, and standardize the relevant work of legislation. To formulate specific laws on student management in colleges and universities, to improve the system of students' rights and interests, and to provide legal protection for students' legitimate rights and interests. In order to improve the internal management system of colleges and universities, it is necessary to be operable and forward-looking, and to standardize every link and aspect of school management in accordance with the rule of law and the school's own characteristics and development law. Adhering to the principle of fairness and justice is the premise of improving the legal system of college student management. In the process of formulating the college student management legal system, only in the form and content can adhere to the principle of fairness and justice, which can truly reflect the spirit of the rule of law, can also ensure the early realization of the rule of law in college student management.

4. CONCLUSION

State and social governance requires a combination of law and morality [4]. We must uphold the rule of law and the rule of virtue. Both law and morality are superstructures formed based on economy, which play an important role in maintaining social order and regulating people's behavior. In the process of education management in colleges and universities, the construction of the rule of law should be realized from the two different perspectives of rule of law education and ideological and moral education. In the process of law-based management, college students should attach importance to the power of morality and combine with morality instead of rejecting morality. Moral education is the basic condition to realize the rule of law. In the management of college students, we should correctly grasp the development law of moral education and give full play to the guiding role of managers and the subjective initiative of students. The rule of law is a good governance model, but the law is not omnipotent, moral education can supplement the shortcomings of the rule of law management.

REFERENCES

[1]Jin Shaorong, Tian Zaiyue. Construction of university student management ethics in the paradigm of common sense and governance. Modern educational management, 2016 (04): 119-123.

[2]Xu Xichun. Legal risks of student affairs management in universities and colleges and their prevention and control. Ideological and theoretical education, 2017 (07): 102-106 + 111.

[3]Li Maolin. The significance, problems and paths of university governance by law. Research on higher education development, March 2015.

[4]Shi Xuehua. Theory of government power. Hangzhou: Zhejiang people's publishing house, 1998.

Research on the Construction of Ideological and Political Teachers in College English Course based on Universal Learning Environment

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Abstract: Based on the concept of ubiquitous learning, this paper analyzes the obstacles existing in the construction of ideological and political teachers in college English courses, and takes full use of the ubiquitous learning environment as the core, discusses the optimization way of the construction of ideological and political teachers, so as to speed up the construction of ideological and political teachers in college English courses and promote the all-round and healthy development of students.
Keywords: Ubiquitous learning; College English teacher; Ideological and political construction

1. INTRODUCTION

The main obstacle to the construction of ideological and political teachers in college English courses is that English teachers have a serious lack of understanding of the importance of ideological and political education and have not actively carried out ideological and political education in English courses. And the relevant awareness of English teachers has been improved, in the ubiquitous learning environment, teachers' ability will be rapidly improved, and the construction of ideological and political teachers in college English courses will achieve better results.

2. LEARNING

Universal learning means that learning can be carried out in any place, specifically for anyone at any time and place to freely access the information they want to obtain. The realization of ubiquitous learning is based on digital information technology, but also on digital learning above a higher comprehensive learning behavior [1]. Compared with the traditional learning mode, ubiquitous learning has the characteristics of lifelong, accessible, instantaneous, interactive and active. In general, universal learning is to obtain relevant information immediately, discuss with relevant personnel. And under the condition that people don't expect learning interruption, learning behavior can continue all the time.

3. CONSTRUCTION OF IDEOLOGICAL AND POLITICAL TEACHERS IN COLLEGE STUDENTS' ENGLISH CURRICULUM FROM THE PERSPECTIVE OF LEARNING

In the context of learning, as described above, it places greater emphasis on the individual's willingness to learn. Therefore, from this perspective, the research on the construction of teaching staff focuses more on the promotion of teachers' awareness of learning related ideas and the strengthening of teachers' autonomous learning results.

3.1 Strengthen Ideological and Political Awareness Training for English Teachers

The most striking feature of college education is that the boundaries between the various courses are clear, teachers often do not carry out cross-disciplinary extension in the class, and at the same time, for students' comprehensiveness, they often do not have enough sense of responsibility. The internal reason of this phenomenon is not the lack of teachers' sense of responsibility, but in the cognition of college teachers, students only need to master one of them, which will have a wide space. There is no doubt that this thinking is correct, which is the majority of university teachers to their own development path of cognition, but this kind of thinking is also biased, in the process of analysis subconsciously ignored their own has received a large number of hidden education, and ideological and political education is these hidden an important representative of education.

Therefore, the relevant personnel should strengthen the ideological and political awareness training of college English teachers, which is not to raise their ideological and political awareness, but to make them realize the important value of ideological and political education for the development of students. The best way to raise this awareness is to take English teachers themselves as an example to analyze the important role of ideological and political consciousness in its development process. For English teachers, ideological and political content is a certain distance from their own, in order to ensure the long-term awareness and effectiveness, relevant personnel and departments should regularly organize ideological and political education for teachers and a new concept of education to study, so that teachers believe that ideological and political education for the development of students has an important price value, and take action to enhance their own ideological and political awareness and ideological and political education means.

3.2 Enhance the Digital Learning Awareness and Ability of English Teachers

Universal learning is based on digital learning, and strengthening the ideological and political teaching staff of college English teachers in the learning environment is a prerequisite to enhance teachers' awareness and ability of digital learning [2]. Although college teachers can be regarded as one of the top students in the society, they must face up to the fact that they are lagging in the field of digital learning. Because of the long-term use of highly specialized learning channels, they despise most of the network information, often cannot make good use of digital information for interactive learning. Especially when English teachers are engaged in a wide range of Ideological and political knowledge learning, their ability of digital learning is seriously insufficient.

Therefore, the relevant personnel should organize English teachers to improve the learning ability of digital ideological and political knowledge. First, to help English teachers to correctly understand and use digital channels, make it clear that the network channel is more abundant than the professional channel. Second, in the non-professional extremely strong knowledge acquisition, the network channel has higher efficiency. Third, the network channel high interactive characteristics make teachers have a basic understanding of the general concept of society, so that teachers can carry out targeted education. For some of the false knowledge in the network, in terms of the ability of university teachers, it has no enough confusion, and there is no need to worry about the direction of teachers' learning bias.

3.3 Establishment of a Professional Knowledge Exchange Platform

The establishment of communication platform is to provide English teachers with more convenient channels for ideological and political education knowledge learning. In the process of formation, the school public education center can coordinate or the public English education leaders can come forward to negotiate with the public ideological and political education leaders, and establish a teaching and research platform with a high degree of sharing of knowledge and experience between the two. For college English teachers, they have long been engaged in English as a tool of the nature of the subject education, the core of the curriculum for students to master skills, while ideological and political education is based on the promotion of ideological awareness as the core, English teachers in this field involved in the trial process will show strong discomfort. At this point, teachers can through this platform to professional ideological and political teachers to consult, fully absorb their accumulated educational experience, improve their own ideological and ideological education ability, accelerate the formation of English teachers ideological and political teachers. For ideological and political teachers, awareness education is long-term, only by the curriculum is not enough, plus students after-school activities are not comprehensive, English teachers take the initiative to join the education process, will greatly ease the ideological and political teachers' educational pressure, they will be happy to share their own knowledge, experience, and even actively help English teachers to improve the ideological and political related educational loopholes. In addition, the platform design process can also be considered open to students, and give students certain. In order to enhance teachers' understanding of students' ideology, English teachers can prepare more teaching materials and enhance their curriculum confidence in the premise of ideological and political education.

4. CONCLUSION

Ideological and political education is of great significance to the healthy growth and all-round development of students, and it is not enough to rely only on ideological and political courses in the process of university. English is a public course that all college students must study, and its class time design is longer, in which the infiltration of ideological and political education has a very high practical significance. Relevant personnel should strengthen the ideological and political ability building of English teachers and provide the basis for curriculum penetration.

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REFERENCES

[1]Ahmed, Javaid, Niazi, Alam, Ahmad, Baig, Khan, Ahmed. A qualitative analysis of context-aware ubiquitous learning environments using Bluetooth beacons. Technology, Pedagogy and Education, 2019, 28(1): 90.

[2]Mottus, Kinshuk, Chen, Graf, Alturki, Aldraiweesh. Teacher facilitation support in ubiquitous learning environments. Technology, Pedagogy and Education, 2018, 27(5): 89.

On the Integration of Mental Health Education and Ideological and Political Education in Colleges and Universities under the New Situation

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Abstract: In recent years, with the continuous innovation of science and technology, people's ideology also presents diversified characteristics. There are a lot of cultural and ideological contents that have a strong impact on students' psychology, and it is easy to have mental health problems of college students. Under the new teaching background, how to do a good job of students' mental health education is a problem worth thinking about. Among them, the effective integration of mental health education and ideological and political education in Colleges and universities can better improve the quality of teaching, and constantly improve the comprehensive quality of students, which has a positive practical value for the overall and healthy development of students in the future. This paper mainly analyzes how to better carry out the integration of mental health education and ideological and political education in the new situation, and puts forward some hypothetical suggestions, hoping to help improve the overall quality of teaching.
Keywords: New situation; College mental health education; Ideological and political education; Integration

1. INTRODUCTION

In the new environment of reform and innovation, the perfect integration of mental health education and ideological and political education can better cultivate new-type high-quality talents, better meet the needs of social development. Under the joint action of the two, it can better guide the students' thoughts and protect their physical and mental health growth. With the continuous transformation of the market economy environment, the ideological content also presents a trend of diversification. At this critical moment, it is more necessary to correctly guide and help students to establish a good three outlook, and then effectively deal with psychological problems, and effectively improve the comprehensive quality of students [1, 2]. In the process of Ideological and political education in Colleges and universities, the introduction of mental health knowledge can guide students' thoughts to develop in a positive direction, which also lays a good foundation for the further development of Ideological and political education.

The scientific integration of mental health teaching and ideological and political education in Colleges and universities can provide guarantee for the smooth implementation of Ideological and political education, which is also a supplement to the traditional teaching content. In the continuous practice, it can effectively improve, strengthen the effective cultivation of man-machine relationship, do a good job in the scientific integration of Municipal Education and practice, and lay a foreshadowing for the steady promotion of Ideological and political education in Colleges and universities. In the past, in the more traditional teaching methods, students are often in a passive position to accept the teacher's knowledge explanation, it is difficult to give full play to their subjective initiative, which is not conducive to the dissemination of teaching content in Colleges and universities. At present, there are many ideological and political teaching content that need to be perfectly integrated with psychological education, to better improve the comprehensive quality of blood students, which is conducive to Sustainable development of students' physical and mental health and Realization of personal maximum value.

2. HOW TO BETTER REALIZE THE EFFECTIVE INTEGRATION OF IDEOLOGICAL AND POLITICAL EDUCATION OF MENTAL HEALTH IN COLLEGES AND UNIVERSITIES

(1) Strengthen the perfect integration of mental health education and ideological and political education, and correctly guide the healthy development of students

In the development environment of the new era, the socialist value system with Chinese characteristics needs to give more active promotion to students, effectively improve the comprehensive quality of talents, and provide more talent support for the sustainable development of society. Only by actively building a scientific and reasonable teaching model, can we better realize the perfect integration of mental health education and ideological and political teaching, and for learning. The healthy growth of students is guaranteed. In the whole process, we should optimize and upgrade the content, correctly guide the students to make progress in the healthy psychological direction, and effectively realize the scientific integration of Ideological and political teaching and mental health teaching. Only in this way can we realize the continuous strengthening of the education system and ensure the further improvement of students' comprehensive quality. The scientific integration of Ideological and political education and mental health education can help students better understand the world development, set up their own development goals, and wash their hearts. From the perspective of practical teaching, in the selection of the mode of Ideological and political teaching, we can choose to use the form of forum. In the process of heart to heart talk, teachers can deliver more healthy and positive psychological guidance to students, and teachers are also easier to understand the actual situation of students, to facilitate the "treatment of diseases". With such a teaching form, students can establish more positive and good thinking. It is also an important breakthrough to improve students' consciousness and psychological quality, to strengthen and improve students' professional level, and to ensure that ideological and political education work is more convincing.

(2) Change the concept of teaching in time and firmly establish the concept of all-round development

In the past, the more traditional teaching mode often put students in a passive position, it is difficult to form a complete and effective system. In the new era development environment, teachers should do a good job in the innovation of teaching ideas, combined with the psychological characteristics of students, through a variety of effective psychological counseling forms, effectively help students to solve psychological puzzles. Scientific and reasonable integration of psychological education and ideological and political education in Colleges and universities can also improve the efficiency of education, and students can more solid and reliable master more professional technology, lay a good foundation for improving the comprehensive quality of personality, and is very conducive to the healthy development of psychology. In the process of practical education, teachers should try their best to integrate various knowledge effectively, for example, they can infiltrate psychological guidance in the process of Ideological and political teaching, so that students can easily accept these contents from their hearts, effectively realize the innovation of teaching mode, effectively help students to grasp knowledge solidly, and constantly improve students' psychological cognitive level, so that students Only in this way can we better transform thoughts into behaviors, gain more action power, and become a new type of talents to adapt to social development.

(3) Do a good job in the integration of mental health teaching and ideological and Political Teaching

There is a close relationship between mental health teaching and ideological and political teaching in Colleges and universities. In order to better achieve the purpose of inheriting and developing traditional virtues, it is necessary to optimize and upgrade the teaching methods in a timely manner. For example, when conducting ideological and political teaching, teachers can reasonably integrate the relevant knowledge of mental health, which can be carried out through topic report, case analysis and other ways, and actively In addition to instructing students to carry out some daily and interesting extracurricular practical activities, it can also reasonably use the way of adding ideological and political knowledge in the process of psychological consultation, which not only realizes the purpose of solving students' psychological confusion, but also inculcates positive and effective contents of Three Outlooks into students, which is helpful for students to further build their own psychological system. In a word, with the help of the above-mentioned methods, it can help students to build their own psychological system. The two models can better strengthen students' ideology, and effectively improve students' psychological quality in the process of ensuring the continuous improvement of students' professional level. Therefore, the full integration of Ideological and political teaching and psychological teaching can effectively open up the working face of education, improve the height of education, and the integration of psychological knowledge in moral education teaching can also change students' traditional learning cognition, make boring knowledge more interesting, and students' learning and mastering more relaxed and joyful, so as to ultimately achieve personal sustainable development and progress step.

3. CONCLUSION

According to the above, we can know that in the context of the new reform to do a good job in mental health related work, help colleges and universities to carry out comprehensive talent training. Through active ideological and political education, students can be better guided to distinguish right from wrong, improve their ideological and political moral quality, and strive to become a comprehensive composite talent.

REFERENCES

[1]Zheng Yongting. Theoretical research on improving the quality of Ideological and political education of college students. Research on ideological education, 2013 (6).

[2]Wu Qianni. Wang Fang. Methods of integrating mental health education into Ideological and political education in Colleges and universities. Science and education guide, 2014 (11).

Research on the Construction and Operation of the Internal Quality Assurance System of Higher Vocational College Students under Big Data

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Abstract: Focusing on the overall development of students, this paper aims to construct the internal quality assurance system of students' development by observing the big data of students' development. This internal quality assurance system records students' growth in real-time and serves the improvement of students' comprehensive quality, realizing the tangible record and intangible management. Practice has proved good work results and effective improvement of the college's ability to educate people.
Keywords: Big data thinking; Student development; Quality assurance

1. INTRODUCTION

The Outline of the National Medium- and Long-Term Education Reform and Development Plan (2010-2020) points out that a scientific quality concept should be established, and promoting the all-round development of human beings and meeting the needs of society should be regarded as the basic standards to measure the quality of education [1-3]. At present, vocational colleges are actively deepening the reform of education and teaching, and delving into new measures of vocational education to meet the needs of economic society for high-quality technical and skilled personnel. Zibo Vocational Institute deeply implements quality management, strengthens the research of vocational education informatization and big data construction, establishes and operates the internal quality assurance system for the overall development of students in line with the school's own development [4]. Based on three years' practice of diagnosis and reform, this paper uses big data thinking to establish development quality standards around the goal of talent training, improve the system and mechanism of quality diagnosis and improvement of students' development, and promote the overall development of students.

2. THE GOAL OF THE OVERALL DEVELOPMENT OF HIGHER VOCATIONAL STUDENTS

Human's all-round development is not only a process goal, but also a goal. As a stage of life, the all-round development of students can only be a process goal, and it is an important part of the social and historical process of "all-round development of people". From the main tasks and internal structure of ideological and political education of college students, it is not difficult to see that the overall development of college students is a social and historical process of continuous accumulation and change. The all-round development of students is not immutable, nor can it be achieved overnight. It can only be a process of dynamic development by levels and stages. In this process, the realization degree of students' all-round development is only a relative value, not an absolute value. Therefore, there will be differences between different types (levels) of university students, between the same type (level) of university students, and between the students within the same university in the realization of the overall development, which cannot be measured by the same standard and scale. The school should surpass the students' current development level, and take their "Recent Development Zone" as the starting point to actively guide the development of college students.

As far as higher vocational colleges are concerned, the goal of all-round development of students in the new era can be summarized as follows: fully implement the party's education policy, adhere to the fundamental task of building morality and cultivating people, adhere to the educational philosophy of "people-oriented, comprehensive, coordinated and sustainable" under the guidance of socialist core values, respect students' personality, improve students' subject consciousness, and make students have firm and solid ideological and political quality, rigorous and pragmatic scientific and cultural literacy, healthy and sound physical and mental health, and practical ability to develop innovation, become a compound, innovative and developmental technical talents with high professional ethics and skills.

3. RESEARCH ON THE CONSTRUCTION OF QUALITY ASSURANCE SYSTEM WITHIN STUDENTS

3.1 Defining the Connotation of Students' All-round Development

To meet the requirements of the development of the new era, combined with the group characteristics of college students, the connotation of the comprehensive development of students should at least include three aspects: the development of personality is the premise of the overall development of college students; the development of comprehensive quality and ability is the proper meaning of the overall development of college students; the harmonious development is the ultimate goal of the overall development of college students. The all-round development of college students inevitably includes the requirements of high comprehensive quality and strong abilities. According to the goal of talent training, the connotation of students' all-round development has been determined in our institute. The comprehensive development of students has been comprehensively considered from the four dimensions of ideological and political quality, scientific and cultural quality, physical and mental health quality and practical ability quality.

3.2 Improve the Quality Standard of Students' Overall Development

Centering on the development and construction plan of the college's "13th five-year plan", we gradually improve the quality standard of students' overall development (see Table 1). On the one hand, it is necessary to guide students to learn independently, ensure the quality of quality generation, independently plan school learning and practical training, and promote them to achieve the goal of comprehensive development; on the other hand, the track record of students' self-development can help improve our talent training mode, design and operate system in turn.

Table 1 quality standard elements of students' overall development

Dimension	Elements
Ideological and political quality	political performance, values, moral quality, legal and discipline concepts collective concept, labor concept, life attitude, civilization and self-cultivation
Scientific and cultural quality	learning attitude, achievements, practical skills and scientific research ability
Physical and mental health quality	physical quality, sports ability, extracurricular activities, emotional health perfect personality, interpersonal adaptation, sound will and psychological behavior
Practical ability quality	innovation ability, organization and cooperation ability, social activity ability and expansion ability

3.3 Improve the Quality Diagnosis System of Students' Overall Development

Based on the intelligent campus management platform, the quality of students' development is quantified, and the informatization of students' development quality is realized. The total score of students' development quality evaluation is automatically generated every academic year, and a scientific and comprehensive evaluation system of students' development quality is established. The total score of student development quality evaluation = score of ideological and political quality × 20% +score of scientific and cultural quality × 60%+ score of physical and mental health quality × 10%+ score of practical ability quality × 10%.

Score of ideological and political quality = basic score (80 points) +plus or minus points;

Score of scientific and cultural quality = average score of academic performance of each subject in the academic year + plus or minus points;

Score of physical and mental health quality = basic score (80 points) +plus or minus points;

Score of practical ability quality = basic score (80 points) + plus or minus points.

4. OPERATION PRACTICE OF INTERNAL QUALITY ASSURANCE SYSTEM OF STUDENTS

4.1 Implementation of Modular Early Warning of Students' Development Quality

Table 2 list of quality standards and early warning for student development

diagnostic element	standard value	target value		early warning value	data source
		good	excellent		
Ideological and political quality	80	> 80 ⩽ 90	> 90	< 80	student management system
Scientific and cultural quality	60	> 60 ⩽ 80	> 80	number of unqualified final exam scores within the semester ⩾ 3	educational administration management system
Physical and mental health quality	80	> 80 ⩽ 90	> 90	< 80	educational administration management system Student management system
Practical ability quality	80	> 80 ⩽ 90	> 90	< 80	student management system

Note: the standard value and early warning value are set by the school. Each department (Major) sets the target value of the student group according to the actual situation, and the students set their own development target value accordingly.

According to the overall actual situation of students, our college formulates the standards of qualified students, and sets four dimensions of "early warning value" (see Table 2); each major and individual student, combined with the characteristics of the major and their own reality, respectively sets the development target value of the major or individual. Through the modular information early warning of student development quality diagnosis, the process monitoring of student development quality can be realized. For students with early warning, in addition to self-warning, counselors and parents work closely together to do a good job of students' education and guidance through heart to heart talk and other forms.

4.2 Carry out Multi-dimensional Comparative Analysis of the Quality of Students' Development

Carry out multi-dimensional comparison on the key index data in the process of students' development quality. First, the core data of students in different semesters and academic years presents the data change curve of different years to realize the vertical comparison of students; second, the students' horizontal comparison is realized by comparing the ranking of students in their major, grade and class; third, the students' difference comparison is realized according to the difference between the value of each development factor and the standard value and target value. Through multi-dimensional comparison, students can find their own gaps and deficiencies, analyze the causes, and clarify the direction of their next efforts, to achieve the purpose of self-diagnosis, self-improvement and circular improvement of students.

4.3 Build a University Student Development Center Integrating Support, Evaluation and Guarantee

Adhering to the concept of "three complete education" and big data, we highlight the dominant position of students, practice the concept of follow-up education service, innovate the traditional offline management service mode and establish a "student development center" integrating support, evaluation and guarantee. This working linkage mechanism and service system of multi-party cooperation serves the all-round development of students, and provides a base for students' self-education, self-management and self-development. The student development center can present the index data of student development, such as the basic information of students, class management, learning situation, mental health, financial aid service, student association, student quality evaluation, etc., so that students themselves, their parents and school teachers can make clear the learning, work, life and training development of students in school through the student development center. Students can timely find out their deficiencies (early warning), regular personal development report, clarify the basic situation of personal development in the previous stage, and establish the development goals and measures in the next stage. Through the student development center, students can check the teachers, curriculum, professional training program, academic performance, and comprehensive evaluation results, understand their own awards and loans, rewards and punishments, mental health, complete payment and recharge, suggestions and complaints, employment recruitment, library borrowing and other affairs, and realize various online self-service.

4.4 Construction of Spiral Operation Mechanism for Quality Improvement

Adhering to the problem-oriented and student-centered concepts, we build the "eight shaped quality improvement spiral" based on facts and data, and improve the quality of students' overall development. This mechanism gives full play to the AI (Artificial Intelligence) function of massive data collection and accurate analysis in students' daily learning and life process. In the process of students' comprehensive development and quality generation, it collects and monitors relevant data and information in real time, pushes and sends early warning through data report in time. The teachers can get early warning information in time, follow up and control in time, so it can help the teacher find problems, analyze them actively, and achieve effective improvement. Therefore, the "dynamic spiral" operation speeds up and efficiency is increased. By carrying out the "three one project", each piece of work (activity), each teacher and each student will be diagnosed, and the normal, standardized and effective operation of the "static spiral" will be promoted as a whole, to continuously improve the quality of student development.

5. ACHIEVED RESULTS

The internal quality assurance system of student development is perfected. Through the quality diagnosis of students' all-round development, relying on the construction of the school's intelligent campus platform, the construction of various software and hardware for students' development is constantly improved, and the construction of internal quality assurance system for students' development is bettered. The quality of talent training is constantly improved. Under the construction of the internal quality assurance system for student development, students' individual development goals and standards are clear. They can give full play to their individual advantages in a targeted way, diagnose and improve the disadvantages of individual development, and plan their career according to the personal development report. The students get comprehensive development, and the quality of talent training in the school is constantly improving.

6. CONCLUSION

Students' comprehensive quality has been improved significantly. The four dimensions of the comprehensive evaluation system of students' overall quality well summarize all aspects of students in school. Students make self-diagnosis through vertical, horizontal and differential comparison, get to know their deficiencies of individual development through modular early warning, and clarify the direction and goal of the next step. Thus, the system realizes the circular improvement of students' self-management, self-development and self-improvement, and their comprehensive quality has been significantly improved.

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REFERENCES

[1]Zhang Rui. On the all-round development of students and school mental health education. Professional circle, 2007, (1).

[2]Hu Boxiang, Liu Dan. Theoretical analysis of promoting the comprehensive development of contemporary college students. Research on ideological and political education, 2009, (4).

[3]Xu Xingmei. Connotation and interpretation of comprehensive development of college students. Jiangsu higher education, 2014, (6).

[4]Huang Jianshun. Comprehensive development goal of college students and its realization. Journal of Fuzhou University, 2005, (4).

Where My Heart Gets Peace Where Myself Get Home

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Abstract: Rising sea levels as a result of climate change are increasing the number of environmentally displaced persons (EDPs) and pose a serious threat to the global community. How to effectively and reasonably resettle and protect EDPs has gradually become an urgent problem for all countries in the world. Mathematical statistical methods, in the case of low-altitude island countries such as Maldives, the number of people at risk and the proportion of cultural loss are as high as 50% at the end of the 21st century. The model of the potential impact analysis of EDPs proposed policies based on hierarchical analysis is established. The model revised the division of responsible countries, cultural regional autonomy and so on in the proposed policy. The fuzzy comprehensive evaluation model based on the entropy right method is established, the comparison results from the conclusion that the proposed EDPs policy can effectively improve the EDPs placement rate and the degree of cultural protection.
Keywords: Fuzzy comprehensive evaluation; Cultural loss; Level analysis; Division of responsible countries

1. INTRODUCTION

In recent years, the number and extent of global natural disasters have been intensified, and severe environmental problems such as rising sea levels and land desertification caused by environmental changes have become increasingly prominent, resulting in an increasing number of environmentally displaced persons (EDPs) [1]. The international community is also paying more and more attention to the problem of population migration related to environmental change, but the resettlement of EDPs is different from previous population migration and population migration issues. To a large extent, EDPs resettlement is carried out involuntarily by the EDPs itself. In the process of resettlement, the human rights of the EDPs itself and the cultural protection of the environment in which the EDPs is located must be considered. Therefore, how to formulate a set of effective EDPs resettlement protection strategies that are comprehensive and can run for a long time has become an urgent issue for the international community [2].

2. EDPS RISK MODEL BASED ON GEOGRAPHIC INFORMATION AND MATHEMATICAL STATISTICS

2.1 The Situation of Global Sea Level Rise

Based on IPCC's significant expertise in the field of climate change, we will develop and apply the EDPs risk model based on the latest IPCC report in this paper [3].

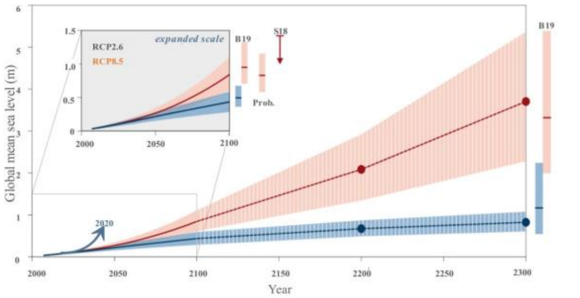

Figure 1 Projected global sea level rise (SLR) by 2300

According to the report, the statistics using observation data from global tide stations and satellite altimeters indicates that the rate of global sea level rise has increased significantly in recent decades. Since 2006, the contribution of global terrestrial glaciers and ice sheet melting to sea-level rise has exceeded the thermal expansion effect of seawater. The estimated global sea level rise by 2300 is shown in Figure 1.

2.2 Disappearance of Global Land

In order to carry out research on the risk of loss of EDPs population and culture of the original place, based on the IPCC report, this paper takes the approximate rate of global sea level rise and the average elevation of each country as the annual land loss rate of each country, see formula (1).

$$\kappa = \frac{\lambda v}{1000 * h} \times 100\% \quad (1)$$

Among them: κ is the annual disappearance rate of land; h is the average altitude of each country, m; λ is the approximate proportional coefficient of land disappearance, which depends on the actual situation; v is the sea level rise rate, 3.6mm / a.

2.3 Risk of Population and Cultural Loss

As can be seen from Figure 2, during the period from the 1960s to the 1990s in the four countries, the total number of immigrants who migrated to the country each year was greater than the total number of EDPs that occurred each year. However, starting from the 21st century, the rise in sea levels caused by the greenhouse effect has forced the four island nations to gradually appear that the total number of EDPs each year is greater than the total number of immigrants who migrate to the country [3-5]. The EDPs generated by Maldives in 2002, 2007, and 2012 even increased to more than 10,000 people, and the situation is getting more and more severe. Therefore, this section takes the low-altitude island nations such as Maldives as an example to carry out research on the risk of population and cultural loss [6].

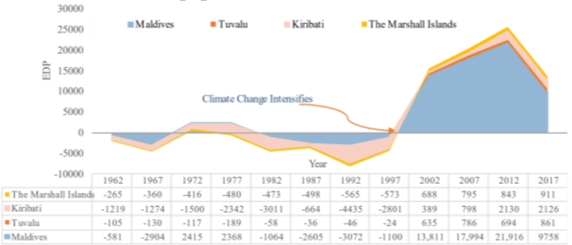

Figure 2 Example national environmentally displaced persons (EDPs) Chart (1962-2017)

3. MODEL OF POTENTIAL IMPACT OF EDPS POLICY BASED ON ANALYTIC HIERARCHY PROCESS

In order to solve the EDPs problem caused by climate change, this section will build on the above, from the perspective of human rights and cultural protection, to provide proposed protection policies for countries displaced by indigenous peoples due to climate change, and explore corresponding impact assessment model.

3.1 EDPs Proposed Protection Policy

The schematic diagram of the proposed EDPs protection policy framework designed in this paper is shown in Figure 3.

(1) EDPs Human Rights Protection Convention

From the perspective of human rights, the EDPs human rights international law protection mechanism should give EDPs dual rights protection [7].

(2) EDPs Cultural Protection Convention

From the perspective of EDPs cultural loss protection, the cultural protection mechanism should give EDPs the full or certain degree of cultural tradition in the receiving country to protect different regional cultures [8].

(3) Environmental protection conventions

Based on considering EDPs protection policies from the perspective of human rights and culture, the current international community should further strengthen the promotion of global environmental protection convention policies [9].

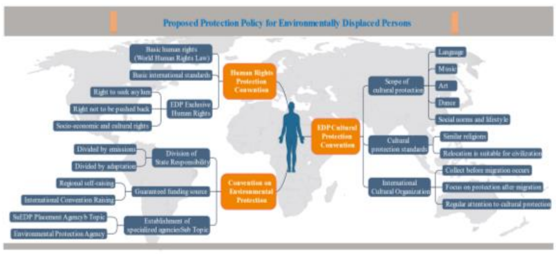

Figure 3 Schematic of the proposed protection policy framework of EDPs

3.2 Impact Analysis of EDPs Policy based on Analytic Hierarchy Process

In measuring the potential impact of the proposed policy, this article considers that there are many factors which can affect the measurement of the potential impact of the policy, and in practice it is not possible to make every element equally considered. Therefore, this paper uses the analytic hierarchy process to divide the weight of the influencing factors, and finally obtains the impact score of each measure [9].

(1) Establishment of AHP structure

By exploring the potential impacts of the proposed policy, this paper identifies eight influencing factors and establishes a hierarchical analysis structure as shown in Figure 4.

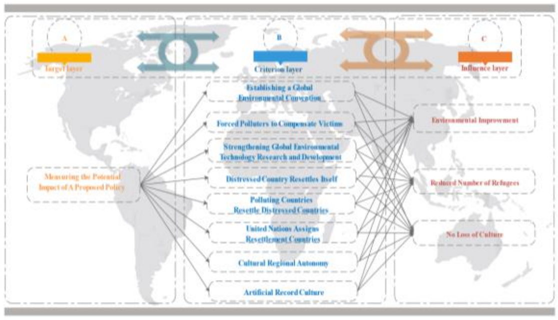

Figure 4 A hierarchical analysis structure to measure the potential impact of the proposed policy

(2) Construction of judgment matrix

According to the hierarchical structure diagram, this paper performs a pairwise comparison of each layer element to obtain a comparison judgment matrix:

Table 1 Analytic Judgment Matrix

A	B_1	B_2	B_3	B_4	B_5	B_6	B_7	B_8
B_1	1	1/3	1/3	1/3	1/4	1/5	1/3	1/4
B_2	3	1	2	1/3	1/4	1/5	1/3	1/3
B_3	3	1/2	1	1/3	1/4	1/5	1/2	1/3
B_4	3	3	3	1	1/3	1/4	3	3
B_5	4	4	4	3	1	1/3	3	3
B_6	5	5	3	4	3	1	3	3
B_7	3	3	2	1/3	1/3	1/3	1	3

By calculating the single ranking of each level of the judgment matrix, the result of the judgment matrix is finally shown in Table 2.

It can be seen from the results that the values of CR are all less than 0.10, so the judgment matrix is considered to have satisfactory consistency.

(3) Hierarchical total sorting

As can be seen from Table 3, the proposed policy has the greatest impact on the reduction of refugees, and the impact of environmental improvement is relatively minimal. Therefore, in measuring the potential impact of the proposed policy, this paper focuses on the study of the decline in refugee numbers.

4. EVALUATION MODEL OF EDPS POLICY BASED ON FUZZY COMPREHENSIVE EVALUATION

4.1 Determining the Evaluation Object sSet

Total object set: A (Study on potential impact assessment system of proposed policies) = {B1, B2, B3}={Environmental protection, Refugee resettlement, Cultural protection}

A collection of indicators at each level:

B1 (Environmental protection) = {C1 (Establishing a global environmental convention), C2 Forcing the

polluter to compensate the sufferer), C3 (Strengthening global environmental technology research and development)}
B2 (Refugee resettlement) = {C4(Self-reliance in distressed countries), C5 (Polluting countries resettle distressed countries), C6 (United Nations assigns resettlement countries)}
B3 (Cultural protection) = {C7 (Cultural regional autonomy), C8 (Artificial record culture)}

Table 2 Results of the AHP judgment matrix

Calculation Result of Judgment Matrix		*λmax*	*CI*	*RI*	*CR*
$AW=\begin{bmatrix}0.0328\\0.0542\\0.0478\\0.1465\\0.2142\\0.3071\\0.1083\\0.0891\end{bmatrix}$ $\lambda_{\max}=8.8120 CI=0.1160 RI=1.409 CR=0.0823$					
$B1\ W=\begin{bmatrix}0.6144\\0.2684\\0.1172\end{bmatrix}$	*B1*	3.0735	0.0368	0.5200	0.0707
$B2\ W=\begin{bmatrix}0.5278\\0.3325\\0.1396\end{bmatrix}$	*B2*	3.0536	0.0268	0.52	0.0515
$B3\ W=\begin{bmatrix}0.5469\\0.3445\\0.1085\end{bmatrix}$	*B3*	3.0618	0.0197	0.100	0.0478
$B4\ W=\begin{bmatrix}0.1095\\0.5816\\0.3090\end{bmatrix}$	*B4*	3.0037	0.0018	0.5000	0.0036
$B5\ W=\begin{bmatrix}0.1365\\0.6250\\0.2385\end{bmatrix}$	*B5*	3.0183	0.0091	0.5300	0.0176
$B6\ W=\begin{bmatrix}0.1168\\0.6833\\0.1998\end{bmatrix}$	*B6*	3.0246	0.0123	0.5200	0.0236
$B7\ W=\begin{bmatrix}0.1220\\0.3196\\0.5584\end{bmatrix}$	*B7*	3.0183	0.0091	0.4900	0.0178
$B8\ W=\begin{bmatrix}0.0936\\0.2797\\0.6267\end{bmatrix}$	*B8*	3.0857	0.0428	0.4900	0.0825

Table 3 Overall ranking of potential impacts of proposed policies

Level B / Level C	Total Sorting W	*B1*	*B2*	*B3*	*B4*	*B5*	*B6*	*B7*	*B8*
	$\sum_{j=1}^{8} b_j c_{ji} (i=1,2,3)$	0.0328	0.0542	0.0478	0.1465	0.2142	0.3071	0.1083	0.0891
C1	0.1776	0.6144	0.5278	0.5469	0.1095	0.1365	0.1168	0.122	0.0936
C2	0.5317	0.2684	0.3325	0.3445	0.5816	0.625	0.6833	0.3196	0.2797
C3	0.2906	0.1172	0.1396	0.1085	0.309	0.2385	0.1998	0.5584	0.6267

4.2 Structuring Evaluation Grades

The evaluation rating set is constructed to score each indicator to obtain a relative score. This study establishes a relatively fair five evaluation rating matrix [10]. The percentile method is easy to operate and widely used. In order to avoid the shortcomings of the subjectivity of the percentile method and the poor objectivity, it is used very well when filling in, better, average, poor, and poor grade. This effectively avoid the fact that the appraisers have different professional knowledge and levels, and there are differences in scoring weights and scoring, which ultimately lead to poor or good evaluation results. The evaluation score of the difference is 20 points, the average is 60 points, and the perfect score is 100 points. So, suppose S = (very good, average, poor) = (100, 60, 20).

Table 4 Evaluation grade and score

Comment set	Well	General	Difference
Score	100	60	20

Table 5 Potential impact assessment score for proposed policy

Target Layer	Total Score	Primary Indicator	First Grade Score	Secondary Indicators	Secondary Score
Construction of the Potential Impact Evaluation Index System of the Proposed Policy	79.268	Environmental protection	73.67	Establishing a global environmental convention	67.4
				Forced polluters to compensate victims	73
				Strengthening global environmental technology research	71.9
		Refugee resettlement	83.96	Self-reliance	78.6
				Polluting countries resettle distressed countries	83
				United Nations assigns resettlement countries	81.2
		Cultural protection	78.86	Cultural regional autonomy	79
				Artificial record culture	75.6

4.3 Building a Fuzzy Evaluation Matrix

The basic idea of the fuzzy statistical method is to make a clear judgment on whether a certain element on the assessment index belongs to the set on the evaluation level. For different experimenters, clear sets can have different boundaries, but they all correspond to the same fuzzy set. Combining the definition of the fuzzy comprehensive evaluation method and the data content obtained from the related literature to perform statistics, the evaluation matrix of the fuzzy comprehensive evaluation of the following index layers can be obtained.

The first-level fuzzy evaluation matrix for the potential impact assessment of the proposed policy is:

$$P_1 = \begin{bmatrix} 0.2 & 0.5 & 0.3 \\ 0.4 & 0.3 & 0.3 \\ 0.5 & 0.3 & 0.2 \end{bmatrix} \quad P_2 = \begin{bmatrix} 0.4 & 0.3 & 0.3 \\ 0.6 & 0.3 & 0.1 \\ 0.7 & 0.2 & 0.1 \end{bmatrix} \quad P_3 = \begin{bmatrix} 0.6 & 0.3 & 0.1 \\ 0.4 & 0.3 & 0.3 \end{bmatrix}$$

3) Quantitative results of the potential impact assessment of the proposed policy. The evaluation grade and score are shown in Table 4.

In the fuzzy comprehensive evaluation, the appropriate fuzzy combination layer operator is used to calculate the evaluation results, because the weighted average operator is very stable in the comprehensive evaluation process, and it will not lose any evaluation factors, and can be based on the weight of different evaluation factors Value to consider the impact on the overall evaluation, which is suitable for situations where the evaluation object has a high degree of comprehensiveness. In the comprehensive evaluation of the proposed policy potential impact evaluation index system, many factors and indicators are considered, and a weighted average operator is more appropriate.

The weighted average operator is used to calculate the comprehensive score of the potential impact assessment of the proposed policy as:

$$G = \sum_{j=1}^{3} L_j V_j = 0.6471 \times 100 + 0.1875 \times 60 + 0.1654 \times 20$$
$$= 79.268$$

Similarly, the first-level indicator and the second-level indicator can be obtained, as shown in Table 5.

REFERENCES

[1]Halstead, Erin. Citizens of Sinking Islands: Early Victims of Climate Change. Indiana Journal of Global Legal Studies, 2016, 23(2): 819-838.

[2]Ahsan, Reazul, J. Kellett, and S. Karuppannan. 19–Climate Migration and Urban Changes in Bangladesh. Urban Disasters & Resilience in Asia, 2016: 293-316.

[3]Burkett, Maxine, R. R. M. Verchick, and D. Flores. Reaching Higher Ground: Avenues to Secure and Manage New Land for Communities Displaced by Climate Change. Social science electronic publishing, 2017.

[4]Mcadam, Jane. From the Nansen Initiative to the Platform on Disaster Displacement: Shaping International Approaches to Climate Change, Disasters and Displacement. SSRN Electronic Journal, 2016.

[5]Westra, Laura, and S. Juss. Towards a Refugee Oriented Right of Asylum, 2017.

[6]Wrathall, David, and N. Suckall. Labour migration amidst ecological change. Migration & development, 2016, 5(2): 314-329.

[7]Mayrhofer, Monika, and F. Mersmann. Displaced, evicted or resettled by climate change measures: neglecting the rights of affected communities in the case of the Bujagali hydropower plant. Social Science Electronic Publishing, 2016.

[8]Vranic, Petar, and S. Milutinovic. From local sustainable development towards climate change adaptation: a case study of Serbia. International journal of sustainable development & world ecology, 2016, 23(1): 71-82.

[9]Etzold, Benjamin, and B. Mallick. Moving Beyond the Focus on Environmental Migration Towards Recognizing the Normality of Translocal Lives: Insights from Bangladesh. Migration, Risk Management and Climate Change: Evidence and Policy Responses. Springer International Publishing, 2016.

[10]Shinn, Jamie E. Toward anticipatory adaptation: Transforming social-ecological vulnerabilities in the Okavango Delta, Botswana. Geographical Journal, 2017, 184(2).

Research on Status Quo and Countermeasures of Public Management and Service Construction of Smart Tourism

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Abstract: With the continuous deepening of reform and opening up, living standards of people have greatly improved, their pursuit for wealthy material has been unable to meet their needs, and more and more people are pursuing the enjoyment of spiritual civilization. At present, in the fast pace of life, tourism has become a relaxing item for many people. The rapid rise of tourism brings new problems in public management and service construction. This study analyzes status quo of tourism and explores related measures for public management and service construction of tourism.
Keywords: Smart tourism; Public service system of tourism; Construction

1. INTRODUCTION

With the development of the times, economic strength of China has been steadily improved, and international status has been gradually strengthened, which has further strengthened our cultural charm and increased our international appeal. As a result, it has promoted the rapid development of tourism industry in China. According to the data, inbound and outbound tourism in China has crowded into the top three in the world, and it keeps growing year by year, which has brought new challenges to public management and service construction. Therefore, it is necessary for China to build public service system [1].

2. DEVELOPMENT STATUS OF PUBLIC SERVICE SYSTEM OF SMART TOURISM

Public service is a social construction method born in China after historical precipitation. The construction of public service can enhance the level of tourism. The construction of public service in a tourist area not only serves external population, but also serves the local people. The extremely high level of public service construction can effectively enhance the service level of tourist area and enhance the charm and reputation of tourist area. Smart tourism can effectively improve the level of public services and highlight distinctive features of current public services of tourism. The construction of public services of smart tourism is supported by the government, and it is legal and is extremely helpful to maintaining the public service system. In the past, tourism service system was one of public service constructions, but now tourism industry has risen rapidly, tourism resources have also increased. The construction of smart tourism is no longer limited to tourism industry, but has risen to the level with public service construction system. The tourism industry is developing rapidly, and tourism basic measures, hospitality services, and government planning and construction are also slowly improving. However, there are still many shortcomings, such as small investment in tourism, imperfect tourism public service system, and poor service. Economy of China has made a qualitative leap, but uneven economic development has led to uneven development of tourism public services in various regions. Developed areas such as Beijing, Shanghai, and Guangzhou have strong economic strength and comprehensive tourism development. They can obtain high income from tourists' food and accommodation. However, due to the influence of economic strength, tourist attractions in some backward areas cannot achieve the same effect as developed areas. Their income mainly depends on tickets, which is a relatively backward tourism management mode.

3. MAIN PROBLEMS IN TOURISM MANAGEMENT AND SERVICE CONSTRUCTION

3.1 Insufficient Public Service of Tourism

In recent years, with the rise of tourism industry, the level of tourism service has not kept up with the development of tourism industry. There is no consensus between public service management and tourism management, and they do not attach importance to tourism public service. Therefore, public sectors should improve the construction of tourism public service system. The main reason for inadequacy of public tourism services is the lack of a sound system, which makes management of public services lack of favorable guarantee, restricts the development of public services and hinders the development of tourism economy [1].

3.2 Chaotic Public Management System of Tourism and Lack of Supervision

Each industry will have its own departments to perform their duties to ensure the stable growth of industry, and each industry will have its own headquarters. The General Administration of Tourism can manage international travel agencies, the Communist Youth League can manage China Youth agency, the overseas Chinese tourism organization can manage the central China Travel Agency, and the rest of tourism organizations are managed by an independent system. To sum up, we can see how important the tourism industry occupies in this era. With the development of tourism industry, there will be many tourism organizations, and the competition and contradiction among them will also be upgraded. The lack of effective system for restriction and supervision will easily lead to confusion of public management system, which is not conducive to the healthy development of various organizations in tourism industry.

3.3 Lack of Intelligent Management in Information Platform

Under the background of new era, the national government strongly supports the development of tourism industry, and many tourism enterprises develop rapidly, which leads to the phenomenon of malicious competition and fierce contradiction, and there are a lot of repeated construction and waste in tourism industry. Many tourism organizations are the same. Without novel management and service, nor clear system to support, the information of tourism information platform can not achieve intelligent management service. And it can not improve personalized service, nor improve the level of tourism public service.

3.4 Inconsistent with Actual Service and Reduce Tourists' Sense of Experience

In order to attract tourists, some tourism organizations have exaggerated the service content displayed on information platform, but they have no strength to do so. Tourists have chosen the tourism organization with expectation, but they have not enjoyed the treatment they should have enjoyed, which is far from their expectation, seriously affecting the tourism experience of tourists. Due to lack of sound system and supervision, poor tourism products in the market has gradually replaced high-quality products, while illegal acts are not severely punished, and the tourism industry has been questioned.

4. RELEVANT MEASURES TO IMPROVE PUBLIC SERVICE AND CONSTRUCTION OF SMART TOURISM

4.1 To Adhere to People-oriented Service Attitude

Tourism is a service industry. The original intention of development of tourism is to bring people better tourism experience and pleasure. After the country strongly supports the development of tourism industry, tourism organizations gradually value interests and lack of sound system. In order to obtain high profits, some tourism organizations make illegal acts and luxury and exaggerated publicity, but there is no corresponding service to provide. Tourists who do not know the truth are misled by false publicity information, and they can not enjoy the service experience they deserved, which seriously reduces the tourist experience and increases complaints. This prevailing trend has brought great harm to the healthy development of tourism industry. So relevant departments should improve relevant systems, strengthen supervision, and reduce the probability of false service organizations. Only when the anti-counterfeiting is done well can tourists regain their confidence in tourism organization. Only if tourism experience of tourists is improved, can tourism industry develop healthily [2].

4.2 To Improve Information Platform System

In the era of information explosion, online platforms have become the travel basis on which people rely. The construction of information platform of tourism industry is worthy of improvement. Many people will check the information on Internet when they are traveling, and they will be fully prepared before traveling. The weather information, accommodation information, traffic information, and surrounding food information on travel platform will become the basis for tourists' reference for traveling. These information must be updated in real time and accurate to provide tourists with effective assistance. With the improvement of tourism public services, the development of tourism will be healthier and faster.

4.3 To Clarify the Goals of Public Service System Construction

The tourism construction system must be clearly planned. First of all, the tourism information consulting service must be detailed and accurate, and tourism packages can be provided according to tourists' preferences to achieve smart tourism services. Second, the security guarantee system will provide many hidden dangers in tourism. Public services should prevent accidents, and it is necessary to provide an emergency report mechanism and strengthen the publicity and supervision of safety education. Finally, the improvement of convenience services construction must be fast and convenient on the itinerary of outbound tourism. The establishment and management of public toilets need to be improved and transportation must be convenient to improve the construction of tourism public service system comprehensively.

5. CONCLUSION

To sum up, construction of smart tourism and public services has received great attention from the society. We should do a good job in planning, systems and supervision, resist illegal acts, strive to improve the level of tourism public services, and build a smart tourism system.

REFERENCES

[1]Cao Lijuan. Research on the Establishment and Management of Public Service Platform of Smart Tourism in the New Situation. China Business Review, 2016 (31): 51-52.

[2]Liu Zongqun. Preliminary Study on the Construction of Smart Tourism and Tourism Public Service System. Youth and Society: Part I, 2015: 2.

Research on the Development of Quantitative Financial Investment

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Abstract: With the continuous development of modern science and technology, the financial industry has gradually introduced advanced computer technology to promote development. Quantitative financial investment is the use of computer technology for modern financial investment. Quantitative financial investment is based on modern statistics and mathematics method to find a variety of "high probability" strategies that can bring excess returns from massive historical data and disciplinely follow the quantitative model constructed by these strategies to guide investments to achieve stable, sustainable, and above-average Excess returns. This thesis introduces quantitative financial investment, the development of quantitative financial products in China, and the innovation and supervision of quantitative financial products, and finally gives suggestions on how to make quantitative financial development in China.

Keywords: quantitative financial investment; finance; excess returns; financial risk

1. INTRODUCTION

After experiencing an abnormal volatility in 2015, China's stock market has been reflecting on the causes of this abnormal volatility, the defects of the market system, and future reforms [1]. Quantitative production and development of financial products and transactions in China. The time is not long, but it has played a relatively important role in the abnormal fluctuations of the stock market [2]. Recently, the Shanghai and Shenzhen Stock Exchange and the China Securities Exchange issued programmatic trading implementation rules, which also caused the market to develop quantitative financial transactions. Attention to the direction. Combining with the actual development of China's capital market, conscientiously summing up and studying quantitative financial development issues will undoubtedly be of great significance to strengthen financial supervision, improve the healthy development of China's capital market, and prevent systemic financial risks.

2. QUANTITATIVE FINANCIAL INVESTMENT

Quantitative investment is to use modern statistical and mathematical methods to find a variety of "high probability" strategies that can bring excess returns from massive historical data, and to discipline the quantitative model constructed in accordance with these strategies to guide investment efforts to achieve stability quantitative investment belongs to the category of active investment. Its essence is the quantification of qualitative investment. The theoretical basis of practice is that the market is ineffective or weak. Effective quantitative financial investment has the following characteristics:

(1) A broader investment perspective. With the help of computers to efficiently and accurately process massive amounts of information, look for broader investment opportunities in the entire market.

(2) Investment is more disciplined. Strictly implement investment recommendations given by quantitative investment models to overcome human weaknesses.

(3) Strong dependence on historical data.

3. DEVELOPMENT OF QUANTITATIVE FINANCIAL PRODUCTS IN CHINA

Quantitative finance is a new form of finance created by the combination of financial product diversification, multi-layered financial product trading markets, and programmatic financial product trading methods, and its history is not long. Since the 1990s, the US and European hedge fund markets have developed rapidly. After that, various methods of quantitative finance have emerged one after another. The premise of quantitative finance is the diversification and derivation of financial products. It should be said that the U.S. and European financial markets underwent financial innovation in the 1980s and formed stocks, fixed income bonds, and Foreign exchange is the main underlying spot market; then, futures markets associated with stocks, bonds, and foreign exchange are derived through spot price fluctuations; after further development, there are options markets that are long or short based on stocks, bonds, and foreign exchange, and different the types of stock index futures and options trading markets provide a prerequisite and basis for the development of quantitative finance. At the beginning of the 21st century, with the implementation of loose real estate financial policies in the United States, the over-the-counter market developed a variety of derivative finance based on real estate mortgage credit defaults. Products, namely credit default swaps (cds) and secured debt certificates (cdo). Diversification and derivative of financial products. As a result, various hedge funds have provided financial products that can be traded for the pursuit of relative returns, and the development of computer technology has led to the emergence of high-frequency trading, programmatic trading, and algorithmic trading. Various hedge funds and speculators use microseconds speed differences and different transaction price differences carry out cross-market arbitrage, cross-product arbitrage and cross-time arbitrage, which constitute the main content of quantitative financial transactions in modern financial markets. Since 2013, with the steady advancement of interest rate marketization reform, the trust wealth management market Rapid development and relaxation of restrictions on the innovation of asset management business of securities companies, the rapid development of off-market financial products in China, and the rapid expansion of shadow banking assets. According to statistics, when the market for banking wealth management products peaked in 2013, its size reached 28 trillion yuan; in 2015, at the end of September, the scale of trust assets reached 15.6 trillion yuan. At the end of June 2015, the asset management scale of securities companies exceeded 10 trillion yuan, the scale of margin financing and short-term securities financing was 23,000 yuan, and the scale of private equity fund management assets was 3 trillion yuan. Contracted repurchase of 1 trillion yuan. In addition, there are homs funding by private funding companies, personal online lending (p2p) Internet financial distribution, Stock income rights swap funding and grading fund funding, etc.The huge bank wealth management scale and over-the-counter funding market were initially based on high interest rate financing that real estate companies had to carry out due to real estate tightening policies, and later based on the stock market's soaring High leverage and high interest rate financing have become the main reasons for abnormal fluctuations in China's stock market.

4. INNOVATION AND SUPERVISION OF QUANTITATIVE FINANCIAL PRODUCTS

At this stage, China's financial industry implements separate management. Banks, securities, and insurance have their own inherent development models. Many innovation activities are also conducted around different target products. After reviewing the innovation of financial products since 2014, it is found that due to the continued emergence of the capital market rising prices. Many bank wealth management products, trust products, insurance asset management products, grading funds, and securities company asset management products are directly or indirectly the stocks of the underlying assets, including off-market allocations, umbrella trusts, etc. [3]. The core feature is gambling against stock price fluctuations, high levels of leverage and direct sales to retail investors. Some private equity funds also use programmatic trading, algorithmic trading and other forms to carry out cross-futures and spot transactions. Although these innovations mainly focus on the underlying target assets are unfolded, and derivatives are not strong and there are not many levels of derivatives. However, we must see that China's capital market is generally immature, the marketization foundation is still weak, and stock price fluctuations are more violent than mature markets. Investors use retail investors with insufficient risk tolerance as Master, any financial innovation must carefully evaluate the market affordability to prevent possible negative effects. And systemic risk.

First of all, the degree of risk associated with financial innovation products in China is much higher than the CDS derivatives of the 2008 US financial crisis. The U.S. only corresponds to credit defaults on real estate mortgage securities, and its high leverage and derivative risks are mainly between institutions. China is high the corresponding target of leveraged financing is high price-earnings stocks. The leverage ratio of private equity companies is as high as 1:10, and the leverage ratio of umbrella trusts is up to 1:5. Although bank wealth management products are prioritized, the leverage ratio of private equity funds that borrow funds from wealth management products is also. At around 1:2, or 1:3, when the stock market fell, high leverage financing to close out positions became the main force for the stock market to "stomp." Second, there was a large arbitrage space between stock index futures and spot, with a large proportion of speculative disks. In the spot market, due to the "stomping" of the closing position and the negative arbitrage of stock index futures, the reverse arbitrage interaction has exacerbated the abnormal fluctuations of the stock market. Especially the quantitative trading method of the stock index futures market, through the programmatic direction of reading buy and sell the transaction exacerbated the double selling pressure on the current market during the stock market period, and some accounts reported a total of tens of thousands of sales, and the cancellation rate was as high as 99.18%. Once again, most of the funds must be allocated in the OTC (over the counter) market. Market, lack of centralized and unified statistical monitoring and supervision, the use of the homs system by private funding companies has changed the inherent transaction settlement model of China's capital market, and increased the difficulty of identifying systemic risks. Therefore, quantitative financial products are viewed from a micro level although it is only the innovation of financial products, at the macro level, systemic financial risks may arise and must be developed gradually.

Similarly, the order of financial innovation is particularly critical. The first is to carry out spot business innovation, then to leverage business innovation, and finally to derivatives innovation, or can they be carried out at the same time, or in random order, which is a question worth pondering. The activity has its regularity. In the early stage, any innovative product with stable underlying assets, simple innovation mechanism, weak speculative attributes, and strict wind control was not only easy to be accepted by the market, but also did not form excessive risks, otherwise it would easily cause problems. At the same time, the market's acceptance and tolerance of innovative products have a gradual process. Especially in China, investment entities and investment environments are very different from mature markets, and financial innovation activities, such as procedures, that are more common in mature markets. If you do not strengthen control, you may face many problems such as unfair transactions and market manipulation.

5. CONCLUSION

Through the introduction of quantitative finance in this article, the following points are summarized as suggestions for the development of quantitative finance in China: 1) Quantitative financial products and transactions are market segments derived from seeking technical differences in prices under the conditions of full competition in the financial market It should be financial innovation in mature markets. The development of quantitative financial innovation requires careful attention to the choice of targets and the order of innovation. 2) Adhere to the principles of on-market and centralization and steadily develop quantitative financial products. 3) Strengthen the programmatic trading of quantitative financial products Regulation.

REFERENCES

[1]Li Fengwen. Quantitative assessment of financial institutions can help alleviate the financing difficulties of SMEs. Securities Times, 2020.01.

[2]Gao Yuanyuan, Zhao Beibei. Research on the effectiveness of Hebei Province's science and technology financial policy based on policy quantification. Science and Technology Innovation Herald, 2019, 12(09): 1-4.

[3]Gold Industry. Research on Quantitative Trading Strategy and Risk in Financial Markets. Financial Economy, 2019, 15(16): 124-125.

CG has Promoted the Internationalization of Chinese Films

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Abstract: Since the introduction of CG technology in the Chinese film industry, CG technology has promoted the internationalization of Chinese films and their development in the international market. By analyzing the development of CG films at home and abroad at present, it is concluded that while developing the advantages of CG technology, the Chinese film industry should not forget to improve the story of the film itself.
Keywords: CG technology; Internationalization of Chinese Film; Advantages of CG

1. INTRODUCTION

At the end of the 20th century, a new type of art called "digital media" quickly entered the stage of contemporary art history, and its main means of expression was computer graphics (CG) technology. This technology refers to a set of techniques for creating art using computers. Since then, the film industry has grown rapidly under the influence of CG. The extraordinary expressiveness of computer technology combined with film art has given viewers an unprecedented level of appeal and a better quality content experience. After decades of development, CG technology has gradually become an important force to promote and change the production and dissemination of international film industry.

Since the Chinese film industry participated in the international market in the 1990s, it has been facing fierce competition and challenges. In the last two decades, in the context of the prevalence of high-tech movies, Chinese audiences have become familiar with them and began to expect Chinese blockbusters. Therefore, the vigorous development of CG technology has become a key factor in the success of Chinese films in international competition. This article will be considered from three aspects of how to use CG to improve film shooting efficiency, the innovation of movie production process, and the appearance of creative themes, combined with "The Wandering Earth", "Crazy Alien" these Chinese films, to discuss how the application of CG technology can help domestic films effectively cope with the impact of imported films and promote the internationalization of Chinese local films.

2. IMPROVEMENT OF FILM SHOOTING EFFICIENCY

In order to increase the competitiveness and internationalization of Chinese films, the best way is to ensure that the films released are in line with current public trends and the psychological tendencies of the audience. This requires from the beginning of the concept, to the final version, should be completed in as short a time as possible. During the preview of a movie, the application of CG makes it possible for the director and the artist to work simultaneously in the pre-production process. When artists create virtual scenes and effects, the director can closely monitor the progress of the scene and arrange the details during the shooting according to these scenes. In the same way, the artist can get the latest guidance and advice from the director at any time, and modify unnecessary content in time. This new mode of work significantly shortens the review cycle and increases the speed of feedback. Therefore, the current domestic pre-production is obvious faster than before [1].

Another efficiency increasing factor is that CG movies are less affected by external environments and conditions than real-life shots, such as weather and number of participants. For example, during the filming of “Adam 2: The Mirror”, the photography team used a virtual production method to combine partial real shots with the virtual scenes, and successfully restored the expected image. This helped the crew solve the problem of mismatch between the light and the plot and avoid time wasting in repeated shooting. The advantage of computer processing is also fully reflected in the domestic CG film "The Wandering Earth". Beijing in extreme weather has been simulated by computer, which reduces the burden of simulating severe weather in reality. This virtual making technique not only improves the production efficiency of "The Wandering Earth", but also promotes the picture effect of the film to a higher quality.

To improve production efficiency, it is not only necessary to shorten the time consumption, but also to reduce the expenditure of funds reasonably, which can also be achieved through CG. After CG was applied to the domestic film and television industry, almost all CG elements will be considered before the official shooting, which allows visual effects producers to create a more detailed budget. This basically solves the problem of exceeding the budget in the traditional production process and reduce the chances of the film being paused, ensuring that most movies will be released as planned.

However, the cost of completing a large-scale or entirely computer-generated movie is sometimes much higher than real-life shooting, which is one of the unsolvable problems of current CG technology. For example, the full CG movie shooting time is three times that of a live movie, and the resulting cost of modeling and hiring artists is many times that of inviting live actors and field devices [1]. At present for China, CG is still used to make difficult scenes or virtual characters, so the problem of high expenditure of CG is not particularly obvious. In general, whether it is saving time or reducing budget, CG technology does help domestic films enhance the competitiveness and international influence.

3. INNOVATION IN THE FILM PRODUCTION PROCESS

The impact of computer software technology on domestic film industry to cope with imported films is also reflected in the innovation of production process. In the early stage of CG technology, it was often used as an artistic special effect in the later stage of film and television production. With the maturity and wider application of CG technology, it has expanded from post-production to the entire process of film production. In the last ten years, China has followed this new process, one is to ensure the high level of film, and the other is to realize the cooperation between the Chinese team and mature foreign CG companies, and further promote the internationalization of domestic films.

Although CG technology runs through the entire process, sophisticated late video rendering and special effects additions are the most important, especially for China, where CG technology is not yet mature. In this step, the virtual character or virtual scene will be combined with actual clips, which directly affects the visual experience of the final film. This can not only improve the level of domestic film, but also achieve cooperation with international teams. The importance of strengthening international cooperation is to introduce professional and comprehensive design concepts and skills into China more quickly in practice. It can be seen that it is necessary for native movie industry to follow the new form dominated by CG artists to achieve a leap in the CG film.

In the creative stage of the film script, as CG can create any scene and is no longer limited by time and space, Chinese writers can break the traditional way of thinking, choose a richer theme and create more attractive scripts. La Peikang, chairman of the Board for the China Film Corporation, has described that the reason for restricting Chinese film is the lack of science fiction genre [2], so the emergence of novel themes is an indispensable way for domestic films to participate in the international market as well. The movie "The Wandering Earth" is a sci-fi movie work based on virtual scenes which is considered to be the most successful attempt by domestically produced films to build scenes that could only be seen in American action movies.

In addition to sci-fi movies based on virtual scenes, there are also those who use virtual characters as the protagonist of the movie, like "Crazy Aliens". This extends the theme of domestic films to the interaction between humans and alien creatures. A deeper development is the combination of virtual scenes and virtual characters, which promotes the emergence of a series of hyper-reality movies, such as "Alita: Battle Angel". Regrettably, this kind of film is currently lacking in China. In short, the expansion of creative theme under the influence of CG has helped domestic films open the door to the international film market, however the hidden potential problems still cannot be ignored.

From the perspective of visual effects, the biggest problem with CG making digital characters is that it may cause "The Uncanny Valley " phenomenon, which refers to a character who wants to completely replicate the various characteristics of human beings, but it becomes very strange due to the immature technology [3]. For instance, the facial expression and manners of Alita are almost identical to those of a human, but her unusually large eyes always make the audience who just contacted her feel scared. Its production team has made great achievements in the field of computer creation of characters, but still causes this problem, thus, domestic movies producers should pay more attention.

Because of the "The Uncanny Valley" phenomenon, digital figures may not pose any substantial threat to live actors. The reason is that this phenomenon itself reflects the fact that the authenticity of most CG film characters still does not meet the standards of the audience or the market. In order to avoid causing panic, the live actor is still a better choice. To make the virtual characters more vivid and real, motion capture technology was created, which captures the motion or expression of real actors through devices. Consequently, the emergence of CG technology is not to replace actors, but to assist in the production of films [3].

In addition to figures, sometimes the render authenticity of a virtual scene does not meet the expectation, or it takes a long time and accurate calculations. The film director will still choose real shots on some large scene shots. Christopher Nolan, director of The Pirates of the Dream, believes that no matter how complex the effects are, it cannot reproduce the real feeling, and shooting the real scene helps actors to truly feel the situation as well [4]. In order to ensure the reality, “The Wandering Earth" production team chose to actually make the engine and dungeon model. This reflects the pursuit of high-quality films by Chinese producers and the desire for internationalization of domestic films.

However, the common phenomenon in China is that some filmmakers overuse of CG, leading to mass production and shoddy production in the film industry. The main reason is that they try to get profit by making movies quickly and cheaply through CG, which has no benefit to the development of movie making. Additionally, the movie story of "The Wandering Earth" is slightly monotonous, which reflects the issue that the use of CG makes directors overly dependent on special effects, while ignoring the plot. From the essence of movies, if the film lacks the support of storyline, even the special effect is not attractive to the audience. If domestic CG movies are to be more vigorously developed, the problems brought about by CG should be well studied and overcome.

In summary, though there are some problems with Chinese CG films, it is of great significance to try to combine art and technology in localization. CG technology helps improve efficiency by shortening the film production cycle and reducing budgets, which may make native films more go with the flow. The use of CG in the film has been widely promoted reflects it does subvert traditional film production and may help more effective planning. But the success of film works, technology is the key, the core lies in the story (ibid) [4]. The sale of domestic cosmic film box office also reflects the importance of the theme of the story to open the international market. Therefore, while vigorously developing computer graphics technology, and not forgetting to improve the story of the film itself, the final the leap of Chinese native film industry can be realized.

REFERENCES

[1]Kirsten, M. G. 2015. Why are CGI-animated films so expensive? [Online] Available at: http://naturalrecordsstudios.com/why-are-cgi-animated-films-so-expensive/ [Accessed: 14 5 2019]

[2]Yan, A. 2019. What can Chinese sci-fi cinema achieve in the post-'Wandering Earth' period? [Online] Available at: https://news.cgtn.com/news/3d3d514f77637a4e32457a6333566d54/index.html. [Accessed: 20 4 2019]

[3]The Los Angeles Film School. 2017. The Uncanny Valley. [Online] Available at: https://www.lafilm.edu/blog/the-uncanny-valley/ [Accessed: 20 4 2019]

[4]Beyl, C. 2017. Christopher Nolan: The Ultimate Guide to His Films and Directing Techniques [Online] Available at: https://indiefilmhustle.com/christopher-nolan/ [Accessed: 20 4 2019]

Analysis of Strategy for Spread of Red Culture in the Era of New Media

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Abstract: Red culture is transmitted by tangible objects. It fully displays the intangible national spirit and red genes, and successfully transforms the abstract socialist core view into daily life, which greatly helps promote core values of socialism. The appeal, affinity and popular recognition of core values of socialism have been further improved, and the implementation effect of core values of socialism has been really strengthened.
Keywords: Era of new media; Red culture; Communication strategy

1. INTRODUCTION

Red culture is the traditional culture of Chinese nation and is of great significance for the realization of great rejuvenation of Chinese nation. The theme of red culture has a certain seriousness, and audience's access to channels has changed greatly, so that the spread of red culture has been restricted. Therefore, red culture needs to be spread through various new media technologies in the era of new media. And communication methods and channels of red culture should be innovated to make red culture closer to people's lives to increase the influence of red culture.

2. CURRENT STATUS OF THE SPREAD OF RED CULTURE IN THE ERA OF NEW MEDIA

2.1 Lack of Publicity in Red Culture

At this stage, the promotion and display of red culture is too simple, lacking modernity and attractiveness. It is relying only on shop window or the promotion display. It cannot display the red culture vividly and interestingly, and it is difficult to display the true revolutionary story of red culture, so it is impossible to pass on the profound revolutionary spirit and thoughts. As a result, most young people have a certain deviation in their understanding of red culture. It is generally believed that red culture is an empty illusionary preaching, which is divorced from reality [1].

2.2 Poor Network Communication of Red Culture

The online dissemination of red culture mainly depends on mobile smart devices, including WeChat, Micro film, Weibo, and WeChat. It is a publicity method for all audiences. It displays red culture in a three-dimensional and multi-angle perspective [1]. By analyzing current status of network promotion of red culture, it can be found that some websites for promotion of red culture have been established, but they have certain problems, such as lack of aesthetics in web design, insufficient overall planning, and slow updates of website content. The existence of these problems makes rich spiritual quality and ideological connotation of red culture unable to be transmitted to the audience in a timely manner, and it is difficult to attract the attention of young people.

2.3 Lack of Cultivation Awareness of New Red Cultural Industry

China is rich in red cultural resources, but lacks the awareness of cultivating new red cultural formats, which leads to a small number of red cultural resources brands and weak strength nationwide. In addition, some of red cultural resources have not been deeply developed, coupled with backward infrastructure, and the revolutionary story contained in red culture is unable to be well publicized. It is mainly expressed in the way of macro narrative, and the communication mode is too unidirectional and centralized to explain the revolutionary story of "past and present". At the same time, red culture has not been publicized from the overall point of view, and there are phenomena of "single thinking", "ungrounded"," one spoon stew". Therefore, it is difficult for red culture to attract people's attention in the process of communication, and it is easy to make people feel alienated from red culture.

3. WAYS TO SPREAD RED CULTURE IN THE ERA OF NEW MEDIA

3.1 To Promote the Networking and Living Process of Spread of Red Culture

With the arrival of new media, we need to start from the perspective of social life, and integrate into social life in order to achieve the effective dissemination of red culture, so that people can perceive and understand red culture in practice. And the integration of red culture into social life can not be separated from two characteristics of life and network. Only ensuring the life and networking of communication content and discourse of red culture, can people understand red culture [2]. Therefore, we should constantly innovate the way of red culture communication, abandon the previous static way of communication, and make full use of new media platforms such as QQ, Weibo, and WeChat to carry out cultural communication, so that the communication of red culture can tell revolutionary stories from the perspective of life and network. In addition, we can spread red culture through micro video and micro film, so that red culture can be deeply rooted in people's hearts, and guide people to understand the spiritual qualities and ideological connotations. For example, during the Spring Festival of 2018, red culture micro videos such as *Answering Sheet* and *For the Mission of the Communist Party* were popular on Internet and achieved good publicity and education results. Through such micro communication mode of red culture, it is closer to people's life and effectively narrowed the distance between people and red culture. It arouses emotional resonance of people to a certain extent, and achieves a good effect of spread of red culture [2].

3.2 To Enhance Attraction and Recognition of Red Culture

New media technology integrates a variety of perception functions, including voice, image, text, video and animation, which provides a colorful, vivid and interesting way for the spread of red culture. In the era of new media, we should start from people's values and ideological characteristics to spread red culture, follow people's identity rules. Furthermore, we need to transform abstract red culture into a cognitive form that is easily accepted by adults through new media technology, and get close to people's cognition with living language, so as to stimulate people's emotional identity and further enhance their attraction and recognition of red culture. For example, on the 90th anniversary of the Army Day, the client of the People's Daily once launched the topic of *My Military Photo*, which quickly became popular in the WeChat and received a lot of praise, attention and forwarding, pushing the patriotic enthusiasm of all the people to the top.

3.3 To Improve the Network Topic Setting Capacity of Red Culture on New Media Platform

The so-called ability to set issues on Internet is an important way for new media to spread red culture. It can guide people to pay attention to red culture, allow them to discuss hot topics of red culture and understand inheritance of the spirit of red culture. With continuous development of new media, people's speed of receiving information is also accelerating, and the number of users who use Internet is also rising. Therefore, it is crucial to improve the ability to set network issue of spread of red culture [3]. Based on the needs of Internet users, we can accurately push red culture to users, so that they can participate in the discussion of red culture topics when using micro media, and understand and learn red culture imperceptibly.

3.4 To Promote the Spirit of Red Revolution

The spirit of red revolutionary is core content in red culture. For example, the Long March spirit, Jinggangshan spirit, and Yan'an spirit are the most representative of the spirit of red revolutionary. The spirit of red revolutionary is a powerful spiritual motive force supporting the development of the socialist cause. It is the product of the combination of Marxism and the practice of Chinese revolution. Under the current development of new media, multicultural exchanges and collisions have made red culture one of mainstream cultures, and red culture has carried the spirit of red revolution. Therefore, when spreading red cultural, we should pay attention to the dissemination of spirit of red revolutionary which is an important content of spread of red culture.

4. CONCLUSION

In summary, the spread of red culture is conducive to the construction of core values of socialism, and further promotes the great rejuvenation of Chinese nation. We should take new media as new situation of spread of red culture to constantly innovate spread channels and content of red culture, so that the distance between red culture and people is closer. At the same time, it effectively improves the appeal of red culture and strengthens audience's recognition of red culture.

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REFERENCES

[1]Zhang Haiyan, Shi Beilei. Strategy for Spread of Jiaodong Red Culture in the Era of New Media. Young Journalist, 2015 (20): 73-74.

[2]Tian Yi, Chen Jie. Strategy for Spread of Red Culture in the Era of New Media. People's Forum, 2018, 000 (011): 136-137.

[3]Wang Yulong. Analysis of Strategy for Spread of Red Culture in the Era of New Media. Media, 2019 (05).

Innovative Ideas of Talent Selection Models for Research Universities in the Wave of "Digital Infrastructure"

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Abstract: With the continuous development of human civilization, traditional infrastructure construction is gradually becoming mature, and “digital infrastructure” represented by information technology is setting off a new wave of infrastructure construction. Research universities are one of the important driving forces for the development of human civilization. Science and technology talents are the basic driving force to support their operation. How to do a good job of talent selection in the wave of "digital infrastructure" is a common problem faced by current research universities. This article introduces the background of "digital infrastructure" and its behavior model for research universities. On the basis of the impact, this paper analyzes the shortcomings of the current research university talent selection model, and proposes new ideas for research university talent selection to adapt to the "digital infrastructure" wave.
Keywords; digital infrastructure; research university; human resource management; talent recruitment

1. INTRODUCTION

With the development of economy and society, the level of global scientific and technological innovation continues to increase, and countries around the world have begun to pay attention to "digital infrastructure" which are kinds of new infrastructures that are different from traditional infrastructures such as railways, highways, and rail transit in the past. In the 2019-nCoV that broke out in early 2020, we personally felt the huge role of digital infrastructure in epidemic notification, material deployment, remote diagnosis and treatment. In fact, almost all industries are benefiting from the new generation of information technology. As a gathering place for the modern academic elite, research universities are the birthplace of cultivating and developing advanced and innovative cultures. Only by building a strong team of scientific researchers can advanced scientific research results continue to emerge. In the process of continuous advancement of information technology, how to do a good job of talent selection under the “digital infrastructure” wave are the common issues facing by all research universities.

2. DEFECTS IN THE CURRENT TALENT SELECTION MODEL OF RESEARCH UNIVERSITIES

2.1 Analysis of Positions Lacking the Use of Systematic Science

At present, the vast majority of institutions of higher learning, including research universities, still use traditional online recruitment. In the process of job presupposition, there is little application of data analysis. Talent development planning sometimes goes to hollow and formalistic, which resulting in unreasonable position setting, unclear job responsibilities and poor efficiency salary system. Before the job posting, the computer system is only used for data storage but not systematic analysis or effective use of data. Few universities realize that in the era of big data, there is a possibility behind the seemingly complicated and trivial data. Information resources converted into discipline strength. Some universities have applied big data in teaching and scientific research, but the application of big data in the field of talent recruitment is less. Lacking the use of big data will lead to the waste of data resource. This condition is not helpful for the long-term development of human resources.

2.2 The Cost of Time is Too High in the Recruiting Process

With the wide application of network recruitment, the number of job-seeking consultation and resume increases exponentially, forming a huge amount of information about job candidates. Traditional manual resume screening or simple keyword screening of third-party recruitment websites cannot be efficiently processed. This huge amount of data has caused problems such as low initial recruitment efficiency， severely delayed job applicant feedback, and inability to identify valid potential candidates. In addition, the research university requires a high level of professionalism, and the resume selection process is only the first step. After that, candidates will also accept the selection ring of academic achievement identification, peer expert evaluation, interview defense and so on. These links involve the examination and approval of various committees at all levels. It is common to take two or three months to get the final determination of the results. But for those eager to secure a job offer, the wait is long enough to find another employer, and the odds of quitting eventually increase dramatically.

2.3 Low Efficiency of Matching Talent Supply and Demand

In terms of matching talent supply and demand, most traditional research universities adopt methods such as expert assessment and comprehensive evaluation, while the use of information technology is mainly used to establish manual replacement of question banks and test papers，and is generally based on manual operations. It has a strong subjectivity and is prone to misunderstandings such as the causal effect and halo effect [1]. The technology assessed by experts has limitations in predicting the growth curve of employees and turnover intentions. At the same time, the traditional talent supply and demand matching is based on small data analysis which emphasizing random sampling. The quality model established is vague and general, and the evaluation tools and methods are relatively rough. It is difficult to evaluate whether the quality of talents is consistent with the position setting from a comprehensive perspective. In addition, along with the information on talent quality has become more diverse, the reference value and effectiveness of information about talent performance, behavior, competence and other aspects held by traditional matching analysis have begun to decrease. The above factors collectively lead to inefficient matching of talent supply and demand.

3. NEW IDEAS FOR TALENT SELECTION OF RESEARCH UNIVERSITIES TO ADAPT TO THE WAVE OF "DIGITAL INFRASTRUCTURE"

3.1 Building a Job Information System based on Big Data

Big data, as a product of a new round of information technology revolution，has triggered changes in our lifestyles. It has also become an important factor affecting the talent strategy of various institutions, and it has brought new challenges and requirements to the adjustment of human resource management methods. One of the important aspects is the recruitment and selection of talents. For research universities, the demand for talents is more purely directed to scientific research, but the diversity of disciplines determines the diversity of talents needs for research universities and different professional fields. The preferences of talents and research directions for different talents show different emphasis combinations under the characteristics of multi-dimensional positions, and this situation is suitable for the use of the technical advantages of big data. The core of this idea is to use a database to load various research teams in multiple disciplines. Set up standardized descriptions of positions, establish a database to summarize and summarize the characteristics of employees, the requirements of employees, the experience requirements, the occupation requirements, and the labor characteristics, etc [2]. At the same time, use big data to combine position analysis with qualitative description and quantitative analysis will help human resource managers save their time and energy which can be put into a more complex decision-making among the work.

3.2 Use 5g Technology to Improve Recruitment Time Efficiency

Digital infrastructure with 5G technology as the core will release huge potential for social and economic development and has become a global consensus. According to research by IHSMarkit, by 2035, the economic output created by 5G to the world will reach 12.3 trillion U.S. dollars, accounting for the actual world 4. 6% of the output. It is foreseeable that 5G will bring in depth impact to almost every industry. For talent selection of research universities, one application direction of 5G technology is to overcome the limitations of geographical space and achieve the real-time interactions by employers, candidates, review experts, and others from different locations. Taking 5G remote defense as an example, judging experts can interact, observe and comment at the remote end based on the characteristics of 5G, such as ultra-high bandwidth and ultra-low delay, which not only saves time and cost for many parties to go to the real defense scene, but also achieves the real-time, two-way, intelligent evaluation. As s result, avoids the shortage of traditional mode and greatly improves the time efficiency of talent recruitment [3].

3.3 Introduction of Artificial Intelligence Technology for Talent Supply and Demand Matching Analysis

According to research by Sage, artificial intelligence will bring an additional 14% increase in global GDP by 2030, which is equivalent to a growth of US $ 15.7 trillion. Artificial intelligence will affect and empower almost all industries. Using artificial intelligence can improve some immature places in the previous research university talent supply and demand matching algorithm, such as find the hidden information from large human resource databases, help decision makers find potential connections between data, and effectively perform talent supply and demand matching analysis with accuracy [4]. In addition, in the face of the pain point of candidate matching rate and multi-channel repetition rate, artificial intelligence simulation learning algorithms can integrate information from different channels to achieve high-precision resumes. The analysis allows different channels and resume formats to be viewed in a unified manner. At the same time, artificial intelligence can do many ground work such as resume pre-screening, blacklist filtering, automatic scoring and so on, to help recruiters save their time, thus greatly improve the work efficiency of talent selection, saving recruitment costs.

4. CONCLUSION

The new round of global competition is developing in the direction of intelligence and informatization. From a positive perspective, "digital infrastructure" has prompted us to change the original socio-economic development model and force various industries. Accelerate the transformation of development models, get rid of the original path dependence, and accelerate the application of next-generation information technology. Only in combination with "digital infrastructure" represented by big data, 5g, artificial intelligence, etc., can the future innovative development of research universities have a solid foundation. In the next step, research universities will inevitably increase investment in informatization and digitalization in the field of talent recruitment and then allow "digital infrastructure" to play a huge role in improving the comprehensive strength of universities.

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REFERENCES

[1]Isson, J.P., & Harriott, J.S. People analyticsin the era of big data: Changing the way you attract, acquire, develop, and retain talent. Hoboken, NJ: Wiley, 2016.

[2]Li Yuhui, Tang Ziyu, Jin Panting, Liang Xiao, Li Yuanda. Dead or Reborn? The Influences of Big Data on Personnel Measurement. Human Resources Development of China. 2019(8): 6-17.

[3]Lu Xiangqun, Sun Yu. Application of 5G Technology in Education Informatization. Strategic Study of CAE. 2019(06): 114-122

[4]Van den Heuvel, S., & Bondarouk, T. The rise of HR analytics: A study into the future application, value, structure, and system support. Journal of Organizational Effectiveness: People and Performance. 2017(4-2): 157-178.

Research on the Development of Blockchain Technology in China's Aviation Logistics Industry

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Abstract: As the underlying supporting technology of Bitcoin, blockchain has attracted wide attention in various fields due to its own decentralization, time stamping, and transparency. At the same time, China's aviation logistics industry has developed rapidly. There are problems such as higher costs. The integration of blockchain technology and aviation logistics will help solve many problems in its development process, improve the quality and efficiency of aviation logistics services, and even cause fundamental changes in the aviation logistics industry. Based on the basic concepts, principles, and characteristics of the blockchain, the domestic and foreign advanced blockchain application experience is summarized, combined with the development status of the aviation logistics industry in China, and the development prospects, advantages and disadvantages of the blockchain technology in China's aviation logistics industry are analyzed and pointed out. And put forward development countermeasures, with a view to improving the development quality of China's aviation logistics industry.
Keywords: Aviation logistics; Blockchain technology; Decentralization

1. INTRODUCTION

The term "block chain" corresponds to "Block Chain" in English, which literally means "Chain" for trading "Data Block", and "Data Block" passes through "Chain""Blocked according to certain rules to form a blockchain [1]. In a narrow sense, a blockchain is a method of combining data blocks into a specific data structure in a chain in a chronological order, and guaranteed by cryptography. The non-tamperable and non-forgeable decentralized shared ledger can safely store simple, sequential, and verifiable data in the system [2]. The broader blockchain technology uses the encrypted chain block structure. A new decentralized infrastructure and distributed computing paradigm to verify and store data, use distributed node consensus algorithms to generate and update data, and use smart contracts to program and manipulate data [3].

2. LITERATURE REVIEW OF BLOCKCHAIN RESEARCH

Although blockchain technology originated from digital currency management, its application has far exceeded the scope of digital currency management and has gradually developed into various types of transaction activities, such as supply chain, education, industry, intellectual property protection and other fields. Looking at the core essence, Wang Shuzheng believes that blockchain technology is a new type of decentralized infrastructure and distributed computing paradigm that gradually rises with the increasing popularity of digital cryptocurrencies such as Bitcoin. Blockchain technology can be independent of Third parties, but rely on their own distributed structure to achieve the unification of technical standards and meet the needs of various data entry.

From the perspective of the application of blockchain technology, although the development of blockchain technology is in the financial field, it is currently developing rapidly in traditional industries such as energy and public management. The unique centralization characteristics of these areas make their management inefficient, the decentralized characteristics of blockchain technology can precisely solve this problem, improve service levels, and improve customer experience. Zhang Yanbin believes that with the rapid development of encrypted digital currencies, the blockchain will cause problems due to its own characteristics. After the great attention of major consortia and government departments, and summarizing the advanced experience of applying blockchain technology at home and abroad, by introducing innovative ways of applying blockchain in e-commerce, they believe that e-commerce and blockchain are combined. It can solve many problems in the development of e-commerce, such as the authenticity of products, and even bring fundamental changes to e-commerce. Lu Furong et al. Started from the issue of agricultural product quality and safety and used blockchain technology as the basis for the construction of a safety traceability system, they proposed the organizational form of the alliance blockchain, which is different from the public blockchain, can make full use of the advantages of collective intelligence and polycentricity.

Bi Ruixiang believes that the current blockchain technology is gradually being used in public management fields such as e-government, because it can be widely monitored by the public. In addition, blockchain technology can ensure the transparency of information and ensure that society has a timely grasp of public information. And its information registration cannot be changed at will can ensure the effective implementation of the management system. Blockchain technology provides sufficient technical support for the construction of an intelligent logistics system, which can reduce the loss and the generation of error information during transportation. The effect of solving the problems facing the industry is very obvious. From the current situation, blockchain technology will not cause disruptive changes in the aviation logistics industry in the short term, but in the medium and long term, blockchain technology will definitely. The aviation logistics industry has brought about a huge change.

3. DEVELOPMENT STATUS OF CHINA'S AVIATION LOGISTICS INDUSTRY

3.1 The Total Volume of Aviation Logistics Continues to Grow

In recent years, China's air cargo and mail transportation volume has continued to increase (see Figure 1). According to authoritative statistics, in 2017 and 2018, China's air cargo and mail throughput were 7.06 million tons and 7.39 million tons, respectively, a year-on-year increase of 5.8% and 4.6%. Slightly lower than 2015 and 2016. As of August 2018, China has signed bilateral intergovernmental air transport agreements with 125 countries and regions, including 62 countries and regions along the "The Belt and Road Initiative" line, which not only promoted the aviation of countries along the line The facilitation of transportation has also consolidated the hardware foundation for in-depth cooperation with multiple regions and sustainable development in the "The Belt and Road Initiative" region.

3.2 Speeding up Infrastructure Construction

In recent years, the Civil Aviation Administration of China and local governments have actively promoted the construction of aviation logistics infrastructure. The number of airports in China has continued to increase, and the size of airports has continued to expand. As of 2018, the total number of airports in China is 235, of which airports with an annual cargo and mail throughput of 10,000 tons or more. There are 53 airports and 13 airports with a capacity of more than 300,000 tons. The hubs of the three major airports of Shanghai, Beijing, and Guangdong have become increasingly prominent. Among them, Shanghai Pudong International Airport has the third largest cargo throughput in the world. On February 23, 2017, the State Council, the Central Military Commission formally issued a letter agreeing to build Hubei Ezhou Civil Airport, China's first all-cargo airport. In addition, Beijing Daxing International Airport, the world's largest airport, was officially put into operation on September 25, 2019.

3.3 Insufficient Aviation Logistics Industry in My Country

The development of China's air logistics is still at a relatively low level, and the uneven development of the regional infrastructure system is still weak. From the perspective of the growth rate of air cargo and air passenger transportation, the development of air cargo and passenger transportation in China is not coordinated, and the growth rate of freight is generally lower than the growth rate of passenger transportation. From the perspective of distribution areas, the distribution of China's air cargo and mail regions is mainly concentrated in North China, East China and Central China, and the development of air logistics in other regions is still relatively backward. In 2018, the throughput of the three major airports in Shanghai, Beijing and Guangzhou in China was handled at national airports. The proportion accounted for 48.8%, which shows that the regional development of aviation logistics is uneven. In addition, the major aviation hub cities in China have accelerated the construction of aviation logistics parks and promoted the development of airport economy through policies. Insufficient hub construction has led to the role of the aviation logistics industry in driving and leading the way.

3.3.1 Application of blockchain technology in China's aviation logistics industry

(1) Building a Blockchain Aviation Logistics System

The traditional logistics system is simply to connect node enterprises together to form a chain-like whole. Blockchain technology can provide technical support for point-chain-network logistics system management, and avoid problems such as multiple transactions caused by incomplete information sharing. Blockchain technology transforms the serial relationship between node enterprises into a parallel relationship, reduces the opportunity cost due to the lack of trust, and improves the transaction efficiency between agents, and solves the problems of information sharing, collaboration, and profit distribution in the logistics system.

(2) Establish information sharing mechanism

Information flow occupies a leading role in China's modern aviation logistics system. The aviation logistics system has the characteristics of information level requirements and strong timeliness, and the application of blockchain technology to aviation logistics can also effectively improve the security of logistics information. The characteristics such as the transparency of the shared ledger and the immutability of information in the chain technology help to track the changes in the information in the aviation logistics system and improve the efficiency and accuracy of the logistics. At the same time, the time stamp feature can effectively resolve the participants in the logistics activities. Disputes, to achieve collaboration among various entities.

(3) Decentralization of transactions

The decentralization of logistics system management depends on the existence of a distributed trust system, and the essence of blockchain technology is to establish a trust mechanism for market entities to improve transaction quality. Blockchain technology helps consumers, sellers and customers the entities such as Sanfang Logistics Company fully understand and manage the information of the logistics system. The database update in the entire aviation logistics system is completed by the cooperation of various topics. Sellers, consumers, and third-party logistics agencies and other entities realize the transparency of the entire transaction process through information sharing. According to the idea of decentralization, all parties involved in the transaction exchange information and store equally. At the same time, according to the characteristics of the blockchain technology, data nodes are also authenticated by multiple nodes, which greatly guarantees the quality of information.

REFERENCES

[1]Wang Shuzheng. Review and Prospect of "Blockchain" Development Status. Commercial Circulation Economy, 2016, 12(34): 199.
[2]Zhang Yanbin. Blockchain leads new changes in e-commerce. Contemporary Economic Management. 2017, 23(12): 35.
[3]Bi Ruixiang. Research on e-government based on blockchain. China Management Informationization, 2016, 17(23): 148-151.

Research on the Main Body Responsible for Vaccination Infringement

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Abstract: In recent years, there are frequent cases of vaccination infringement. Besides investigating the criminal and administrative responsibility of the subject, who will make up for the loss of the victim has been widely concerned by the society. Vaccination is a multi-participation process, after the occurrence of vaccination infringement damage compensation must also have multiple subjects, each subject according to their own participation degree, different degrees of fault and bear different responsibilities. The types of vaccination are different, the types of infringement damage are different, and the degree of responsibility of the relevant subjects is necessarily different. In this paper, the main body of vaccination is divided into four categories: government, enterprise, inoculation unit and vaccinator Type A, according to type of vaccine and type of infringement.

Keywords: Compulsory vaccination; Abnormal response to vaccination; Vaccine quality infringement; Medical liability

1. INTRODUCTION

According to the regulations of our country's vaccine management, the vaccine in our country is divided into immunization planning vaccine and non-immunization planning vaccine. The inevitable damage to the vaccinator caused by the characteristics of the vaccine itself is called the tort damage of the abnormal reaction of vaccination; the avoidable damage to the vaccinator caused by the manufacture or transportation of the vaccine and the storage or the fault of vaccination is called the tort damage of the non-preventive abnormal reaction. In recent years, the problem of accountability of those responsible has been greatly affected People's concerns. Who should be the main responsibility in the event of vaccination infringement? This problem is not only the interest concern of the general public, but also the inevitable requirement of the theoretical research on vaccination infringement [1].

In the case of infringement damage of abnormal reaction of vaccination, all parties involved in vaccination have no fault, and the damage is caused by the inherent characteristics of the vaccine itself. According to the medical research report, the vaccine is to prevent the disease virus, after the medical technology is processed and then injected into the human body, and finally formed antibodies to prevent related diseases, we know that the vaccine itself is a "virus", it can not be 100% safe after entering the human body, there must be a danger to human safety, but this possibility is very low, we call this phenomenon" abnormal reaction ", so we know that each vaccine must be "abnormal reaction" There will be abnormal reactions, but it is difficult to determine which recipient will have abnormal reactions, according to the study of relevant scholars, Japan called this phenomenon "demon draw"

2. RESEARCH ON THE MAIN BODY RESPONSIBLE FOR THE TORT OF ABNORMAL REACTION OF VACCINATION

2.1 Study on the Subject of Tort Liability in Abnormal Response of Immunization Programme Vaccination

Immunization planning vaccines are planned by the national health and security authorities in accordance with the need for public safety and are provided free of charge by the Government to the public, requiring the general public to be vaccinated. Vaccination planning for immunization is highly compulsory by the Government, and recipients, after the existence of damage results, of course, want the Government to compensate. All vaccination related subjects involved in abnormal reaction infringement damage have no fault for the occurrence of the final damage result, the recipient vaccination is subject to the national immunization plan behavior, is a passive act under the compulsory action of the government, the recipient infringement damage can not be attributed to the inoculation parties, so this kind of epidemic. Seedling inoculation damage can only be attributed to the government compulsory inoculation behavior, the government should become the main responsibility for such inoculation damage, should bear the liability for compensation. Unusual response tort damage is the audience for public safety, response to the requirements of immunization planning, audience under the government mandatory requirements for the interests of more people to damage their legitimate rights and interests, the audience this behavior is noble, and the government compulsory vaccination is the only cause of the damage, so the government should be the subject of responsibility [2].

2.2 Subject Study on Tort Liability for Abnormal Response to Unimmunized Vaccination

Non-immunized vaccines are not included in the national immunization programme, and the national health sector does not force the general population to be vaccinated, and the cost of vaccination is not borne by the state sector, but people are voluntarily vaccinated according to their own needs and economic strength. The vaccination of this type of vaccine is not compulsory government action in the country, but voluntary vaccination by the population. To some extent, it can be said that the population voluntarily assumes the risk of an abnormal response to the vaccine at the same time as the voluntary vaccination of this type, since the vaccinator voluntarily assumes the risk. This paper holds that there is no main body of compensation for the infringement of abnormal reaction of non-immunoassay vaccine, but it can not completely exempt the government from the liability of compensation. Vaccine is prevention Vaccination is of great value to national health and public health safety for medical products where diseases occur. Although the infectious and incurable nature of the diseases prevented by the non-immunoassay vaccine is not as high as that of the first vaccine, of the second vaccine is also of great significance to the national health and public health safety. The occurrence of abnormal reactions is very helpful for the improvement and development of vaccine products, and the recipients of non-immunoassay vaccines use their own rights to contribute to medical development and social progress, so the state should provide appropriate assistance to such victims [3].

3. RESEARCH ON THE MAIN BODY RESPONSIBLE FOR NON-ABNORMAL REACTION TORT OF VACCINATION

In the abnormal reaction of vaccination infringement, the government identified as the main body of tort liability, but the type of liability is not the same. The above has explained that vaccination infringement is divided into abnormal reaction infringement and abnormal reaction infringement. After studying abnormal reaction infringement, we will continue to study the subject of liability for non abnormal reaction infringement. Non-exception should be tort refers to the tort caused by the fault of at least one party resulting in the result of damage. In such tort, the infringed party can claim tort liability like the infringer and claim compensation for the loss. Non-abnormal reaction infringement can be divided into vaccine quality infringement, vaccine wrong infringement and the vaccinator himself liability damage three categories [4].

3.1 Subject of Liability for Quality Infringement of Vaccine in Non-aversive Response Tort

For the vaccine quality infringement according to the reasons of the vaccine quality is not qualified, and the final responsibility of the main body is different, because the vaccine production is not qualified caused by tort damage consequences, should be borne by the vaccine production enterprises; because the vaccine transport storage is not qualified, transport enterprises or storage enterprises bear tort liability; in this case, the main responsibility of enterprises in different stages of the vaccine, we call it vaccine-related enterprises, so we can say that in non-exception reaction infringement of vaccine quality problems caused by the main responsibility of the enterprise. If Vaccination is planned for immunization, and because of the obvious role of the Government in the vaccination of such vaccines, the Government can assume appropriate supplementary responsibility according to the specific circumstances of the specific case after the enterprise assumes responsibility. In the case of a non-immuno-programmed vaccine, the Government is not the subject of responsibility and does not assume responsibility unless the Government does not fulfil the oversight responsibilities it must fulfil.

3.2 Subject of Responsibility for Inoculation Error in Non-exception Response Tort

In the non-abnormal reaction infringement there is also a type of wrong vaccination infringement, mainly due to the fault of the inoculation unit caused by the consequences of infringement damage. The vaccination unit should be a medical unit, because the vaccination operation of the vaccination unit has caused damage to the vaccinator, the main body responsible for such infringement cases should be the inoculation unit. Because the inoculation unit is a medical institution, at present the vaccine also belongs to the broad sense medicine, so this kind of infringement we can carry on the application according to the medical tort stipulation. The type of vaccine vaccinated by the vaccinator is different, and the size of government responsibility is the same as in the case of infringement of vaccine quality.

3.3 Risk to Vaccinators in Non-abnormal Response Violations

The last category of abnormal reaction infringement is the infringement caused by the vaccinator's own fault. The perpetrators of such violations are themselves, such as concealing the non-inoculated physical condition, the variation of the vaccine function caused by their own psychological factors, etc. If the vaccinated person is immune planned, the government is responsible for a small proportion of the damage not intentionally caused, such as accidental damage, psychogenic damage, etc., due to the obvious compulsory effect of the government in such vaccines; if the vaccine is not immune planned, the role of the government is no longer significantly stronger, coupled with such damage The harm is caused by the inoculation itself, the government is not the main responsibility, the vaccinator must bear the risk, in other words, the itself became the main responsibility.

To sum up, there are four types of responsibility in vaccination infringement: government, vaccine-related enterprises, vaccination units and vaccinators. Each type of responsibility is different according to the different types of infringement and the different types of vaccination.

REFERENCES

[1]Yifang Du. Reparation and compensation for "demon draw"---State liability in vaccination damage in Japan. Jurist, 2011(01): 162.
[2]Shuaijun Nie. A study on State liability for personal injury caused by vaccination. Medicine and Law, 2016(3): 19-23.
[3]So did Yuhek. State Compensation Act. Xiao Jun, translated. Beijing: China University of Political Science and Law Press, 2014: 5.
[4]Min Zhao, Yunlei Yue,Zilong Zhang. Considerations on the Type of Liability for Medical Damage for Type II Vaccines. Medicine and Philosophy, 2014(9): 70-73.

Three Dimensions of "People-Centered Development Thought"

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Abstract: The people-centered development thought explains the theoretical foundation of the thought on socialism with Chinese characteristics for a new era in three dimensions: value, theory and practice. It has systematically answered the three aspects of "what is serving the people", "why for the people" and "how to serve the people", thus providing a basis for upholding the principal position of the people, deepening the party's thought on development and governing philosophy, and establishing the starting point and foothold for the party to carry out all its work at a new historical starting point.
Keywords: New era; People-Centered Development Thought; Three dimensions

How to uphold the people's views in the new era? The people-centered development thought is precisely around the "serving the people", the ruling concept of the communist party of China (CPC), and gives the answer from the theoretical dimension, value dimension and practice dimension based on the basic principle of historical materialism, the ruling law of the CPC and the socialist construction law.

1. FROM THE PERSPECTIVE OF VALUE, THE PEOPLE-CENTERED DEVELOPMENT THOUGHT ANSWERS "WHAT IS SERVING THE PEOPLE"

Realize the free and comprehensive development of people is the deep purpose of Marxism, under the background of Sinicization of Marxism, the more the value of outstanding, 19 report made the judgment of the socialism with Chinese characteristics into a new era, in which the main contradiction, this paper fundamentally affirmation of the subject status of people, especially to the person's free and comprehensive development represents a new blueprint. To realize people's yearning for a better life and to realize people's free development is the inherent requirement of the people-centered development thought in the new era.

Realizing the people's yearning for a better life is the value orientation of the communist party of China in the new era. In the new era, the needs of the people are diversified, multi-level and multi-faceted, which puts forward new tests and requirements for the party and the country. In the face of these tests and requirements, the party needs to firmly grasp the people's need for a better life and come up with new ideas, new strategies and new measures. People's need for a better life is reflected in all aspects. How to meet these diverse needs? The CPC has clearly pointed out, "to ensure and improve people's wellbeing is a long-term task. There is no destination, only continuous new starting point. We need to realize a virtuous cycle of economic development and improvement of people's livelihood. "

The realization of all-round human development is not limited to the welfare of the people, but should be applied to all aspects of the party's governance and rejuvenation of the country. Looking back at the development of the communist party of China (CPC), it has always maintained close ties with the people, upheld the people's position and represented their interests, which have become the key to the success of the cause. To benefit the people means to give them a sense of gain, happiness and security. In the new era, along with the transformation of the main contradiction, people's livelihood work is facing more complex conditions, especially related to the national economy and people's livelihood, education, employment, medical care, school, housing and other hot issues of people's livelihood that have troubled some local governments. This requires not only that the party and government at all levels must respond to the concerns of the people, roll up their sleeves and work harder to maintain close ties between the party and the masses, but also that they must take the benefit of the people as their greatest political achievement and create real achievements that can stand the test of time and the test of the people.

2. FROM THE THEORETICAL PERSPECTIVE, THE PEOPLE-CENTERED DEVELOPMENT THOUGHT ANSWERS "WHY FOR THE PEOPLE"

The people are the creators of history, and the communist party of China always believes in the basic view of historical materialism. Marx pointed out in the German ideology that "the first premise of all history is that people must be able to live in order to 'create history'. [1]" This stipulates that in order to realize the principal position and role of the people, we must first firmly believe that the people are the creators of history, and then continue to realize, safeguard and develop the fundamental interests of the overwhelming majority of the people. 2

"History is written by the people, and all achievements are attributed to the people." It is the unchanging character and position of the party to distinguish itself from other political forces that the people make history. In the new era, The CPC has systematically summarized the realization of the great

1.

rejuvenation of the Chinese nation as the "Chinese dream" and pointed out that the Chinese dream is ultimately the dream of the people and must be realized by the people. This statement not only highlights the inheritance and adherence to the "people's principal status", but also creatively unites the people, the nation and the country into a trinity community of common destiny.

With the development of reform and opening up in the past 40 years, people's needs for life are no longer limited to material level, but more to the pursuit of spiritual civilization and personal value. Therefore, the CPC central committee with The CPC as the core in the new era has put forward the development thought with people as the center, and put forward a new goal for the party and the country. Under the guidance of this goal, we are moving forward towards common prosperity for all the people. Shared development is not only a concentrated manifestation of the people-centered development idea, as a new development concept, but also an inheritance and innovation of common prosperity in the new era. The Shared development not only enrich the connotation of common prosperity as well as the practice provides a new way for common prosperity, realize common prosperity is the basic requirement of socialism, also is the important mission of the communist party of China, adhere to the people as the center of the development of ideas, is to meet the needs of the people for a better life, constantly realize, safeguard and development good the masses of the people's fundamental interests, eventually realize the common prosperity of all our people. The fifth plenary session of the 18th central committee of the communist party of China (CPC) put forward the principle of "sharing by all, by all, by co-construction and by gradual sharing" to promote common prosperity to a new stage. 3

3. FROM THE PERSPECTIVE OF PRACTICE, THE PEOPLE-CENTERED DEVELOPMENT THOUGHT ANSWERS "HOW TO SERVE THE PEOPLE"

The CPC once mentioned in the enlightenment of constant dripping wears away the stone that "what we need is to do things with a long-term mind based on reality, and not to be unwilling to be lonely and ambitious" . Party members and cadres should carry forward the spirit of driving nails, oppose empty talk and advocate practical work. We must ensure that the fruits of development are Shared by the people. We must ensure that the people's wellbeing is ensured and improved through development, carry out the party's mass line in all its governance activities, and keep close ties between the party and the masses at a crucial stage of our decisive victory in building a moderately prosperous society in all respects.

The 19th national congress of the communist party of China (CPC) referred to the enhancement and improvement of people's wellbeing as the fundamental goal of development, and the enhancement of people's wellbeing as the starting point and goal of all the party's current work. Forty years of reform and opening up have brought about many changes in the lives of the people. In the face of the new requirements, the party and the state have clearly formulated a basic strategy for ensuring people's wellbeing through adherence to and development. On the basis of development, we need to do more practical things to benefit the people, solve more difficult problems for the people's wellbeing, ensure that people's wellbeing is well protected, and increase their sense of well-being and security [2].

How to serve the people? For this problem, it is necessary to combine the development of theory with specific practical requirements. And the close contact between the party and the people includes these two aspects. In theory, the relationship between the party and the people needs to be clarified. In practice, we must adhere to and implement the party's mass line. The CPC has pointed out that "the opposition of the people is vital to the survival of the party", especially when the party is in power for a long time and faces the greatest danger of being divorced from the people. Therefore, to maintain the flesh-and-blood relationship with the people, we must persevere. As we enter a new era and enter a crucial period for securing a decisive victory in building a moderately prosperous society in all respects, we must rely closely on the people, give full play to their enthusiasm, initiative and creativity, and unite them closely with good conduct. In the end, the mass line must be put into practice. Only on the premise of correctly understanding the relationship between the party and the people, and making it clear that the mass line should establish the working methods of "for the masses, relying on the masses" and "from the masses, to the masses", can the level of social governance be improved and social equity and justice be promoted.

REFERENCES

[1]Karl Marx, Frederick Engels; Karl Marx Frederick Engels Selected Works; People's Publishing House; BeiJing, China; 2012; P.158.

[2] We will carry out in-depth activities to educate and practice the mass line; People's Daily; People's Daily

Digital Transformation of the Home Appliance Retail Industry: Case Study of Suning

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Abstract: With the emergence of modern digital connectivity, more and more home appliance retailers realized the necessity to develop a holistic perspective of digital transformation. In this paper, we will illustrate and highlight the challenges faced by traditional appliance retailers during this period using Suning as an example, with the focus on its digital strategy and self-designed smart products.
Keywords: Suning; E-commerce; Home appliance retail industry; dDigital transformation

1. INTRODUCTION

Since 2010, traditional home appliance retailers have been challenged by e-commerce platforms such as ALIBABA and JD. With more firms accustomed to the revolutionary tide of digital transformation, it is urgent for traditional appliance retailers to frame a digital strategy to keep competitiveness in the market. Suning, as a sophisticated player in China's retail industry, has a promising prospect of driving further digital transformation in its business models. Thus, it is a suitable case for this research. On March 27, 2019, Suning released a series of self-designed intelligent appliances and named them as Suning Xiao Biu. Since then, Suning has been accommodated itself into the field of smart home appliances manufacturing, responding actively to the new era of Artificial Intelligence and conveying its confidence in leading a smarter appliance retail industry [1]. Suning has been experiencing a full-scale transformation from a traditional home appliance retailer to a versatile retail enterprise which also partakes in the field of Artificial Intelligence, IOT technology and cloud services. Meanwhile, Suning has successively acquired Wanda Department Store and Carrefour China to complete its well-designed blueprint [2].

In the context of the Internet Plus [3], by introducing its O2O development model, Suning has presented its holistic insights in the Internet-based retail market globally. By fully utilizing its e-commerce platform, cloud computing, big data and other technologies, Suning's competence builds on a concrete base that incorporated its "One Body, Two Wings, Three Clouds, Four Ends" sales model (From figure 1).

Figure 1 Suning's internet sales model
Source: Company profile from Suning's Homepage

2. SUNING'S TRADITIONAL VALUE CHAIN

In the late 1980s and early 1990s, the demand of home appliances exceeds the supply of them and there are often shortages. After the 1990s, the position of home appliance suppliers in the market changed. Due to political reform and governmental policies, many new companies entered, including multinational manufacturers. Consequently, the core of the value chain began to shift to side of the retailers. Fig 2. depicts the changing process from the "manufacturer-led" model to the "retailers-centric" model.

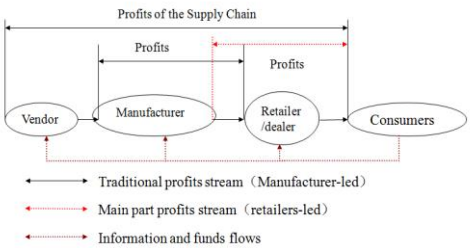

Figure 2 Traditional supply chain of home appliance industry

Chen Gang, the Deputy Secretary-General of China's Household Appliances, pointed out that from 2000 to 2007, the top five home appliance retail chains in China had achieved an average annual growth rate of 170%. Meanwhile, they have approximately 30% market share in 27 domestic first-tier cities including Beijing and Shanghai [4].

Since 2000, with the emergence of e-commerce platform such as JD Mall and Taobao, many online stores have sprung up. Compared with traditional stores, these online stores could adapt more quickly to customer needs with lower prices. This new supply chain model called "online retailer-led" model.

The traditional business mechanism of Suning was to merge physical stores with online stores, whereby has made Suning became the leader in China's home appliance retail. From Figure 3, Suning occupied almost a quarter of the home-appliance retail market while TMALL's and JD's market share had been 8.80% and 14.40% respectively.

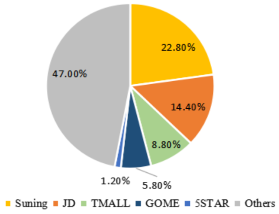

Figure 3 Share of overall market by channel, 2018-2019 (retail value)

Source: Annual Report of China's Home Appliance Industry 2019

Suning has chosen to diversify its products and cooperated with different suppliers which can expand its brand influence and generate more sales revenue. Its product diversity gave it a one-stop sales strategy, which means customers could buy all the products they need in one place. Even there are a large number of different types of products, because information cannot be shared, manufacturers cannot get in-use information in time for improving their products. Based on the above conditions, Suning needs a new way which is digital transformation to attract and retain customers.

3. PRACTICE OF DIGITAL FRAMEWORK IN SUNING'S DIGITAL STRATEGY

3.1 Introduction of Digital Strategy Model

Fig 4. demonstrates the framework of the model of digital strategy. The digital ecosystem can be analyzed from two aspects, the production ecosystem and the consumption ecosystem. The production ecosystem consists of interdependent activities, units and entities in the value chain [5]. For instance, the production ecosystem of home appliance retail industry is developed on the interdependencies between manufacturers and retailers, from the purchasing to sales and marketing. However, the consumption ecosystem consists of interdependencies happens after products or services are sold or offered (ibid.).

With the rise of technology and sensors, the two ecosystems are both undergoing evolution. For production ecosystem, technologies like IOT and AI enable suppliers from different tiers of traditional value chain to create new connectivity. For consumption ecosystem, it connects to new smart objects outside the value chain, such as smartphones, Amazon Echo and other home appliances. These new interdependencies add more values to both consumers and producers. (ibid.)

Digital customers in digital strategy are customers that provides in-use information and digital replicas are physical products or services carrying sensors that can collect and transmit such in-use information to other sides. Thus, the logic of constructing digital strategy is to firstly R&D and produce digital replica to collect in-use information provided by digital customer. Then the competencies from different interdependencies were used into respective ecosystem. Finally, the goal of establishing a digital ecosystem is achieved.

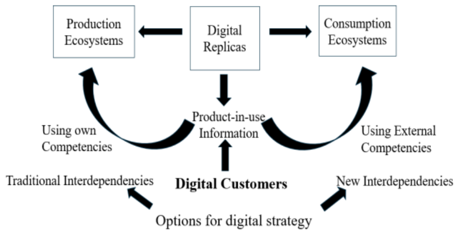

Figure 4. The model of Digital Strategy

3.2 Keystone of the Digital Strategy: Suning's B2C Digital Platform

Suning Tesco (www.suning.com) is a B2C e-commerce platform owned by Suning Commerce Group Co., Ltd. Its website was launched in December 2010. The proposal of Suning's "Cloud Business Model" in 2013, which was based on cloud technology, aimed to integrate its online and offline services, whereby Suning realized full-category expansion and gradual extension to financial services and convenient services. For instance, it has launched Yifu Bao, an online payment tool; a series of branded insurance products and online payment of phone bills and utilities on Suning Tesco's website [6]. In doing so, Suning was laying a foundation to develop a consumption ecosystem for its appliance retail business.

Based on its digital transformation strategy, Suning Tesco has shaped an O2O model that fully integrated with physical retail channels, providing better consumption experience for users. By 2020, Suning Tesco's sales volume is expected to reach 300 billion yuan, and its sales network will expand to Hong Kong, Japan and southeast Asia, making it one of the most prominent B2C platforms in China [6].

3.3 Suning's Production Ecosystem

The emergence of the digital platform has a great impact on the logistics, information flow and supply chain. Fig 5. shows the production ecosystem under Suning online retailer-led model.

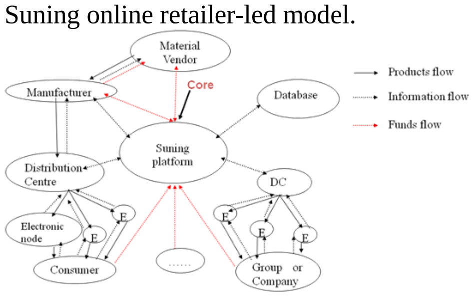

Figure 5. Production ecosystem under Suning online

retailer-led model

The product flow indicates only the storage and distribution center need to be built, which greatly reduces the product price. Information is mainly obtained from the online platform (Suning Tesco App), which is more accurate and efficient. The funds flow process from the retailer to the supplier reduces channel costs, improves operational efficiency, and shortens the billing period. Consumer-to-retailer funds become online bank payment, third-party payment, cash on delivery and other methods. These changes have improved the transparency of product flow, information flow and funds flow.

However, at the beginning, like most traditional e-commerce providers, Suning mainly uses in-use information for service optimization on its website and app. It applied customer profile helps to grasp the consumption hot spots which enables identifying the most popular and unsalable goods. Thus, the probability of products being sold increases and precision marketing is realized. Meanwhile, it also be applied on the reverse customization products. Through the analysis of such in-use information by cloud computing, Suning can explore the existing problems and deficiencies of products. This information is fed back to the manufactures which allows them to develop and improve products [7]. By this way, Suning can take the initiative to sell products that best meet the demand instead of passively receiving goods and clearing inventory.

3.4 Suning’s Consumption Ecosystem

Suning created its self-manufacture brand called Xiao Biu to obtain in-use information. When users use Xiao Biu appliances or other appliances that are connected to the Biu OS system, the real-time information of consumers will be fed back to the Suning system terminal. Besides, each consumer will form a unique customer profile which enables Suning to understand the preferences and needs of each consumer, so that it can improve existing products, personalize recommendations on the platform to users for potential products and services and launch new products.

On March 27, 2019, Suning established the Suning Eco-Chain Fund and Biu + Joint Laboratory to support intelligent hardware innovation enterprises and continue to optimize products, technologies and user experience [8]. On the Chinese Shopping Day in 2019, Suning Xiao Biu made the first victory and set a new record in sales. In addition, within dozens of days of the launch of the Suning Xiao Biu smart screen, the number of dual-line bookings for the smart screen in Suning Tesco's online mall and offline stores exceeded 80,000 units [9]. These data imply the success of Suning's role as a manufacturer and also indicates that Suning has a considerable advantage in the future digital transformation competition. In the consumption ecosystem, Suning adopted a spider web-like layout strategy [10], making full use of new interdependencies and generating a lot of new values for Suning and digital consumers.

Based on Suning's Internet technology, Suning creates hardware products and smart living solutions that serve families and individual consumers, for example, the release of Xiao Biu smart speaker in 2018. These solutions simulate the development of usage scenarios and realize the layout in six major scenarios of smart home appliance, smart homes, audio-visual displays, sports health, smart wearables and connected cars. Finally, a series of Suning Xiao Biu products were launched [11].

Suning is sharing information with its home appliance manufactures by opening OS systems. Through the systems, it has broken the barriers of interconnection between different brands and built a complete set of smart solutions for the whole house. BiuOS currently has access to products from more than 100 well-known brands including Gree, Midea, Hisense, Boss, TCL and Fangtai 9 [12].

Suning Xiao Biu is using APIs to obtain in-use information and gain competition. APIs is a technology that allows companies to interact and share information with other firms or to get in use information from consumers at an unprecedented scale, taking advantage of far reaching progress in digital ecosystem strategy and the rising influence of software in people day to day lives (Subramaniam, 2015). Taking Suning Xiao Biu Smart Speaker Alarm Clock as an example, we see how Suning use APIs to compete with competitors. This product was jointly launched by Suning Jiwu and Baidu. Suning integrates Baidu's DUEROS conversational artificial intelligence operating system, allowing customers to interact with 10 types of functions by voice such as voice entertainment, smart home, information query, etc. (Suning.com, 2019).

Taking good advantage of APIs, Suning can build enormous repositories of information on customers behavior and then exploit the repositories to predict consumers behaviors to increase service range or promote goods from bricks and mortars. Besides, it can also be used to expand the ecosystem and scope to other industry.

Owning the control of data means that Suning can not only improve its products, but also provide support for Suning's continuous digital transformation in the future. Suning's competitors have not followed the path of self-manufacture so far, so the dual digital strategy has given Suning more initiative in digital transformation and a more powerful advantage in the consumption ecosystem.

4. CONCLUSIONS

In conclusion, this paper takes Suning as an example to analyse how traditional home appliance retail industry can engage in digital transformation. Although Suning has successfully utilized effective supply chain management and sales skills in existed retail market, as a traditional giant retail firm, it also endeavours to build digital strategy for prompting production ecosystems by setting up its own B2C platform Suning Tesco. Moreover, in the evolution of digital competition, it is particularly critical to establish a digital platform to capture in-use information and takes advantage of the network effects created by users. Based on this, Suning established its self-manufactured brand of Suning Xiao Biu and thus expanded its business into the further consumption ecosystem. The case of Suning's digital transformation shows how exemplary legacy companies are already transforming themselves with the help of new digital technologies to gain competitive advantages in the business world.

REFERENCES

[1]Sun Yu. "Suning Has Released the Xiao Biu Series of Intelligent Products, Which Will Be Fully Distributed in the Electric Industry in 2019." YI OU Home page, March 27, 2019, China financial information network.

[2]"Suning's Retail Sales Volume Accounted for 22.4% of the First Semi-Annual Household Appliance Report Released by the Authority in 2019, Ranking First." XINHUA FINANCE. February 25, 2020.

[3]Zhao, Zhenglong. "Research on the Impact of 'Internet Plus' on CPI (Zhao Zhilong)." National Bureau of Statistics 10, no. 7 (May 16, 2017): 241–64.

[4]Wang Yajing, "Analysis on the Development of China's Home Appliance Retail Industry." Times Finance, 2014, 3(547): 173-176.

[5]Mohan Subramaniama, Bala Iyerb, Venkat Venkatramanc, "Competing in digital ecosystems", Business Horizons, 62(2019): 83-94.

[6]Ministry of Commerce of the PRC, 2014.

[7]Li, Huaiti. "A Brief Analysis of Retail Marketing Strategy Innovation from the Perspective of Big Data -- Taking Suning Appliance as an Example", Journal of Fuyang Institute of Technology, 2018, 29(03): 82-85.

[8]Li, Qin. "Suning Xiao Biu Released 12 New Smart Series Products", China Appliance, April 8, 2019, 81–81.

[9]CNR.CN, 2019 "Record Triple Jump! Suning Xiao Biu Released the Latest Battle Report, the Top Six Sales Models Lead the Industry", November 12, 2019, Wu, Junyu. "Suning Xiao Biu's Spider Web Strategy." June 10, 2019.

[10]"Suning's smart home ambitions," The Internet Economy, July 25, 2019, 60-60.

[11]Mohan Subramaniam. "Are You Using APIs to Gain Competitive Advantage?" 13 April 2015.

[12]"Xiao Biu Smart Alarm Clock Speaker Online Shoping." Xiao Biu smart alarm clock speaker. Accessed January 21, 2019.

A Study on Zhang Ailing's Translation of Jin Suoji from the Perspective of Domestication and Foreignization

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Abstract: Zhang Ailing has not been known as a distinguished bilingual writer and translator though she was a brilliant star in the literary history of China. Jin Suoji, her masterpiece, has once been translated by herself. In translation, there are two different translation strategies: domestication, which is target language culture-oriented, and foreignization, which is source language culture-oriented. This paper chiefly concerns the application of domestication and foreignization in Jin Suoji through a large number of examples.
Key Words: Jin Suoji; Domestication; Foreignization

1. INTRODUCTION

There have appeared many transcendent writers in the history of China and Zhang Ailing was one of them. With her unique writing style and profound thoughts, Zhang Ailing caused quite a stir in the literary circle. As a result, large bodies of critics have been captivated by her and an avalanche of studies conducted on her writing. However, few have realized that she was also an eminent translator. Jin Suoji, as a masterpiece, has gained great popularity the moment it was published. In its English version, translated by Zhang Ailing herself, foreignization and domestication are found to be widely employed and their natural use makes it almost impossible to take it as a translated version. In the following part, the author will analyze the foreignization and domestication applied in the translation of *Jin Suoji*.

2. DOMESTICATION AND FOREIGNIZATION

2.1 Definition of domestication and foreignization

Domestication and Foreignization, two translation strategies, are first introduced by Lawrence Venuti, a famous translator of America in his book *The Translator's Invisibility: A History of Translation* in 1995. According to Venuti, domestication is a strategy in which a transparent, fluent style is adopted in order to minimize the strangeness of the foreign text for target languages. Foreignization, however, is a strategy, in which a target text is produced which deliberately breaks target conventions by retaining something of the foreignness of the original. That is to say, domestication strives to convey the meaning of foreign text to the target readers in accordance with their reading habits and culture, whereas foreignization endeavors to retain the original work's flavor as much as possible at the price of target language regulations.

2.2 Advantages and limitations to domestication and foreignization

When domestication is mainly adopted in the process of translation, the translated versions tend to be accepted and comprehended by target language readers because of the naturalness and transparency. In addition, it can effectively evade some cultural conflicts which may cause various sorts of misunderstanding. However, domestication also has its limitations. For source language, domestication is detrimental to the diffusion of culture; while for target language readers, it prohibits them from obtaining splintered visions.

When foreignization is applied, many new words and some special expressions can be brought to the target language country, enriching their language and culture to great degree. Meanwhile, keeping the heterogeneous cultural features enables the target language readers to know different cultures to open their eyes and broaden their minds. Nevertheless, foreignization has a higher demand for readers' intelligence and imagination. What's worse, it may make the translated work unnatural and difficult to comprehend [1].

3. ZHANG AILING AND HER *JIN SUOJI*

Zhang Ailing, as a preeminent woman writer in China, was renowned for her Chinese works. However, she is, actually, an excellent bilingual writer and translator.

Zhang wrote a series of essays for the English magazine *The XXth Century*, whose chief editor, Klaus Mehnert, praised her as a "very promising genius" after she published *Chinese Life and Fashions*. In 1952, when Zhang went to Hong Kong again, she wrote two English novels—*Rice-Sprout Song* and *Naked Earth*, which won immediate success as soon as they were released in America.

Besides, Zhang Ailing also achieved a lot in translation. Zhang has translated heterogeneous English works including novels, proses, poems and screenplays. The first translation version of The Old Man and the Sea in Hong Kong came from her, achieving great success. Other translation works include The Selected Work of Emerson, The Legend of Sleepy Hollow by Washington Irving and so on. Most interestingly, Zhang also translated her own works. Altogether, she translated seven novels and stories, among which two were E-C translation—Rouge of North, Shame, Amah! and The Golden Cangue.

Jin Suoji is the representative work of Zhang Ailing. Fu Lei (1944), a renowned writer and critic, made such a comment: "No doubt, Jin Suoji is the finest work by Miss Zhang up to now, at least, it is one of the most beautiful results in our literary world." [2] Jin Suoji depicts the story of the miserable life of a woman who gradually becomes malevolent and mad by life-long sufferings.

4. DOMESTICATION AND FOREIGNIZATION IN ZHANG AILING'S SELF-TRANSLATION OF JIN SUOJI

4.1 Translation of Names

In the process of translation, names' translation is crucial as a personal name not only is a sign to distinguish one person from another, but also carries plenty of information about culture. However, it is always difficult for a translator to translate names in that personal names in English-speaking countries and China are based on two cultures which have little in common.

In Jin Suoji, there are many names, and here are how Zhang Ailing deals with them: Feng-hsiao, Lan-hsien, Tai-chen, Ts'ao Ch'i-chiao, Chiang Chi-tse.

Above examples show that most of the characters' names in Jin Suoji are translated by way of transliteration, which is to translate one language into another in accordance with the pronunciation of the source language. That is to say, foreignization is mainly applied in the translation of the characters' names.

4.2 Translation of Kinship Terms

Kinship terms are applied among people to show their kin relationship. As humans have something in common, one can find that some kinship terms in Chinese and English express completely the same meaning, such as "baba" and "father", "mama" and "mother". However, most kinship terms in Chinese don't necessarily have their counterparts in English.

Here are some examples about the translation of kinship terms in Jin Suoji: "Second Sister-in-law, Ku-yeh, Ku-nai-nai, nephew, husband's uncle.

From these examples, it can be seen that that most of kinship terms are translated by applying both domestication and foreignization. "zhi er" in the novel refers to Ch'i-chiao's elder brother's son; while its English version "nephew" contain four meanings: "zhi er", "zhi nv", "wai sheng", "wai sheng nv". Although these two words are not completely equivalent, Zhang Ailing didn't translate "zhi er" into "my elder brother's son", for according to the context, readers can get what nephew really means. That is to say, Zhang Ailing applies domestication to the translation of "zhi er". "gu nainai", "gu ye", for which Ch'i-chiao's elder brother calls her and her husband respectively, obviously, in English there aren't corresponding words, and therefore Zhang Ailing was courageous enough to translate it into "Ku-nai-nai" and "Ku-yeh", applying the method of transliteration. This translation may not convey the words' meaning, yet readers can guess its meaning according to the context. Therefore, Zhang Ailing's application of foreignization brings Chinese culture to her foreign readers, for she is quite sure they can understand the text. When it comes to the rest of kinship terms, they are translated by domestication. That is to say, domestication is mainly used in the translation of kinship.

4.3 Translation of Titles

Titles show people's position in a family as well as their social status to some extent. Therefore, it's indispensable to translate them properly so as to evade some confusion and misunderstanding. Now let's exam how Zhang Ailing translated these titles.

"Da nainai" (Eldest Mistress), "Yi nainai" (Concubine), "Lao taitai" (Old Mistress), "Da ye" (Eldest Master), "Er ye" (Second Master), "Jiu ye" (Master-in-law).

Since Chiang family is a big feudal family, a raft of titles are used to show the statuses of assorted family members in this book. From above examples, "lao" and "shao" are respectively translated into "old" and "young", which can be thought as an audacious attempt. Since in China someone is addressed with "lao" to show people's respect for him or her. However, in western countries, it is impolite to call someone with "old" directly as it gives the addressee a sense of being discriminated or overlooked. Therefore, Zhang Ailing's translation of "lao" is foreignization. Therefore, domestication is chiefly applied in the translation of titles, foreignization working as a supplement.

4.4 Translation of Color Words

The world we reside in is colorful. Accordingly, there are numerous color words in both Chinese and English. As man's social life has something in common, some Chinese color words can find their corresponding expression in English, such as "red" in "red flag" and "green" in "green leaf". However, many colors actually own metaphoric and associative meanings besides their conceptual meanings because different nations have homogeneous habits, customs, culture, histories, and environments. For instance, "hong cha" is translated into "black tea", instead of "red tea"; "zi tong" into "red copper" rather than "purple copper". Therefore, the translation of color words is a great challenge for a translator.

Zhang Ailing was excessively sensitive to colors, for she loved painting since her childhood. Hence, in *Jin Suoji*, many color words such as blue-white, dark violet, bright oil-green, crab-shell green, pitch-dark, green, yellow, red and so on can be found. Most of them are used to describe surroundings and clothes; a small portion of them are applied to depict the countenance, hand, and foot of characters [2].

Here are several examples containing color words depicting environment:

The sky was a cold bleak crab-shell blue. The houses were only a couple of stories high, pitch-dark under the sky, so it was possible to see far [1].

From above examples, no one can deny that Zhang Ailing is adept at describing environment. For “xie keqing” and “mei guizi”, color terms consisting of a basic color term and a modifier, they are respectively translated into “crab-shell blue” and “rosy-purple”. Here Zhang Ailing applies foreignization, conveying both meanings and images of these words. In English, it is not common to use such method to express color, but English readers can grasp what the author aims to convey with the help of their imagination, because they must have seen roses and crabs. “xie qiqi” is translated into “pitch-dark”, vividly and exactly conveying the meaning of the text to readers. Here Zhang applied domestication.

5. CONCLUSIONS

Through those specific analyses of the examples, the conclusion is drawn that Zhang Ailing is a deep lover of Chinese culture and much eager to spread it by mainly utilizing foreignization in the translation of *Jin Suoji*, but sometimes she has to think for English readers by using domestication when she feels the context is not clear enough for them to interpret her.

REFERENCES

[1]Chang E. Trans. The Golden Cangue in Hsia Chih-Tsing ed. Twentieth-century Chinese Stories. NY Columbia University Press, 1971.

[2]Fu, L. 1944. On Zhang Ailing’s Novel. Wan Xiang 3 (11).

A Brief Analysis of Intercultural Education in College English Education

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Abstract: In recent years, the relationship between language and culture has become an important topic in English teaching. More and more scholars have realized that language has its rich cultural connotation. English teaching is not only the teaching of language knowledge, but also the dissemination of cultural knowledge. This paper mainly expounds the problems and solutions of intercultural education in college English education.
Key words: Cultural differences; Communication barriers; Cross-cultural education

1. INTRODUCTION

As we all know, language is the carrier of culture and the main manifestation of culture. Human beings use language to create culture, which in turn promotes the development of human society and enriches the ways of language expression. Since ancient times, the accumulated cultural heritage of human society has left a deep imprint on language. Language is the language in the culture of human society and is closely related to the culture of human society. The language of a nation inevitably carries the culture and all the social life experience of the nation, and reflects the important characteristics of the national culture [1]. Different ethnic groups have different cultures, histories, customs and customs, and the culture and social customs of each ethnic group are expressed in the language of that ethnic group. Language cannot be separated from culture, culture depends on language, and English teaching is language teaching, of course, cannot be separated from cultural education.

2. THE CULTURAL DIFFERENCES BETWEEN DIFFERENT NATIONALITIES ARE THE BARRIERS TO CROSS-CULTURAL COMMUNICATION.

The process of modernization has accelerated the circulation of spiritual and material products, and brought all ethnic groups into a common "global village". Cross-cultural communication has become an indispensable part of every ethnic group's life. However, the cultural differences between different nations are the barriers to cross-cultural communication, and overcoming the communication barriers caused by cultural differences has become a common problem faced by the whole world [2]. Take an enterprise as an example. If an enterprise wants to sell its products in the international market, it not only needs superb economic and technical means, but also needs to have a deep understanding of the culture of the other country, so as to make the product meet the psychological needs of the people in the target country in terms of packaging design and practicability. A typical example is that in China, "dragon" is our spiritual totem, a symbol of auspiciousness and power. Chinese people are also proud to be the descendants of the dragon. However, in the eyes of westerners, "dragon" is a terrible monster with open teeth and claws. If an entrepreneur does not know much about this, will be printed on the "dragon" pattern of products to the international market, think about whether this product can create benefits for the enterprise? However, in English teaching, teachers often pay more attention to the grammatical structure of language, but ignore the social environment of language, that is, the cultural education in language, which makes it difficult for students to know what to say on what occasion [1].

3. IN THE PRACTICE OF ENGLISH TEACHING, THE CULTURAL DIFFERENCES BETWEEN CHINA AND THE WEST MAINLY BRING THE FOLLOWING INTERFERENCE TO STUDENTS:

(1) Say hello

Chinese people are accustomed to ask: have you eaten yet? Have you had your dinner? If you say that to people in English-speaking countries, they think you want to invite them to dinner. In English-speaking countries, greetings are usually about hobbies, such as weather, health, traffic, sports and so on.

(2) Salutation

For example, “comrade” is the comrade of a socialist country; in English-speaking countries it is common to address strangers by unknown names, Sir or Madam. If we match up with people in English-speaking countries, they will be at a loss.

(3) Thank you

Generally speaking, in China when someone asks if they would like something to eat or drink. We are used to answering politely no bother, etc. If you want something, you don't have to say yes, please. If you don't want something, just say “No, thanks”. It also fully reflects the different styles of Chinese people's reserve and English people's frankness.

(4) Praise

In China, when others praise us, we usually have to be modest. "Where, where." is our common answer. In English-speaking countries, the most common response to a compliment is "Thank you."

(5) Chinese people are concerned about age, marriage and income when they meet for the first time, while

English-speaking people are more annoyed about it, believing it is personal. For example, if you ask a British or American friend: How old are you? The answer is probably “Ah, it's a secret!” Why don't people in Britain and America tell their age? Because people in English-speaking countries like to appear energetic and youthful in each other's eyes and keep their actual age a secret, especially women. And if the Chinese are concerned where you are going and what you are doing. In English it has become an unwelcome interrogation to pry into the privacy of others and monitor what they say. [2]

4. THEN, HOW TO CONDUCT CULTURAL EDUCATION FOR STUDENTS IN SPECIFIC LANGUAGE EDUCATION PRACTICE?

With the deepening of reform and opening up, China's comprehensive national strength has grown and international exchanges have increased. This requires us to attach importance to cross-cultural education in English teaching in middle schools, raise it to its due level, and make students have the tolerance of multi-culture in actual communication [3]. In today's English teaching, people generally ignore the cross-cultural education. The reason is that many people think that cross-cultural education is too profound, complex and difficult to operate. In fact, this is not the case. As long as teachers adopt flexible methods to improve students' sensitivity to culture and cultivate cultural awareness, they can actively and consciously absorb and integrate into the new cultural environment.

(1) To strengthen the comparison of cultural differences between China and the west, and consciously and naturally infiltrate the differences between Chinese and western cultures in greeting, salutation, gratitude, praise, conversation topics and values into English teaching.

(2) In fact, English reading is also a kind of cross-cultural communication. The reader is presented with a reading in a foreign language that is closely related to a culture with which he is unfamiliar. To truly understand what you are reading, you must not only have enough knowledge of the language, but also the local conditions, history, geography, culture and religion of some English-speaking countries. Only in this way can we make full sense in reading.

(3) Cross-cultural education in oral training. Although the language form is relatively simple, there are many cross-cultural factors in daily oral communication. Cultural factors are not always in direct proportion to the degree of difficulty of language form. Simple language form does not mean that cultural factors can be neglected in use. For high school students, the real difficulty is not how to pronounce or spell correctly, but how to use it properly in practice. In the actual teaching, teachers should combine the simulation situation, introduce the cultural factors and put the language into the specific pragmatic background. Only in this way can the language be "alive", so that students can acquire real communicative competence and avoid pragmatic mistakes in communication.

(4) To strengthen cross-cultural education in vocabulary teaching. Vocabulary contains an extremely rich variety of cultural information. The generation, death and metabolism of vocabulary itself provide information about cultural development. At the same time, different cultural consciousness in the process of cultural development will affect the meaning of vocabulary. When people give various things different names, they choose symbols arbitrarily, but these symbols have different connotations in different languages due to people's living environment, customs, historical background, psychological characteristics and so on. For example, people in Europe and America are very fond of keeping dogs, believing that dogs are the most faithful friends of human beings and will not betray them. In this cultural context, the English word "dog" is used to refer to a loyal partner and has a positive meaning. Not so in China. Such words are everywhere, which can lead to some allusions. Teachers should make full use of abundant resources to carry out intercultural education consciously.

(5) Absorb and experience foreign cultures through multiple channels and means. We can collect some objects and pictures from English speaking countries to let students know about foreign art, history and local customs. To recommend to students the reading of simple books reflecting foreign culture to increase their understanding of English culture; Organize English corner, English evening party, etc., create a variety of language environment, deepen the practical application of cultural knowledge.

(6) Encourage students to watch original movies, so that students can feel the differences between Chinese and western cultures. In addition, most of the dialogues in the movies are idiomatic oral expressions used by English speakers in their daily life. Watching the original movies will not only make students feel the differences between Chinese and western cultures, but also improve their oral English.

In a word, we should realize that the cross-cultural education in English teaching is not vague, and it is necessary and feasible to implement the cross-cultural education. The social development will also make the communication between different cultures more frequently. The task of foreign language teaching is to cultivate high-quality foreign language talents with profound cultural accomplishment. In college English education, paying attention to cross-cultural education can enhance the identity and inclusiveness of different cultures, so as to better promote the development of languages and cultures, as well as the exchange and communication between different languages and cultures [3].

REFERENCES

[1]Hu Wenzhong, Introduction to Intercultural

Communication, Foreign Language Teaching and Research Press, 1999.
[2] Liu Fengxia, The Course of Intercultural Communication, Peking University Press, 2006.
[3]Yin Pi’an, Intercultural Communication: Theory and Practice, Northwestern Polytechnical University Press, 2007.

Exploration on the Reform of Teaching Contents and Models of Practice Week for Mechanical and Electrical Specialty Groups in Applied Undergraduate Colleges: Taking "Solidworks Software Application" Practice Week as an Example

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Abstract: Students' practical ability is the key manifestation of talent training in applied undergraduate colleges. Based on the specific situation of the Electrical and Mechanical Professional Practice Week of Guangdong University of Science and Technology, this article takes Solid works Software Application as an example. Zhou achieved the effect of "moving the whole body with one lesson". At the same time, it also explored and pondered the follow-up application of practical exercises in other courses of the professional group after the end of practical teaching week.
Keywords: Applied undergraduate colleges; Practical ability; Professional group, Practice week, Solidworks software application

1. INTRODUCTION

Local undergraduate colleges are an important part of higher education in China. With the development of local economic transformation and industrial upgrading, the application of talent training has become a demand for social and industrial development, and it has also become a new strategic choice for the transformation and development of local undergraduate colleges [1]. In this context, applied undergraduate colleges, especially mechanical engineering majors, have raised higher requirements for the cultivation of students' practical abilities. Zhang Yan [2], Lu Danju and others pointed out in the "Exploration and Practice of the Transformation and Development of Applied Undergraduates" that a multi-level practical teaching system including course internship should be established. Yu Fengyun [3], Tang Qingju, etc. mentioned in the "Practice Teaching Reform of Mechanical Majors Based on Results-oriented Education" that mechanical majors should build a practical teaching system including training items corresponding to the core courses of such majors. The practical content is closely combined with the teaching goals of various courses and has various forms. In the development of practice week of Guangdong University of Science and Technology, combining the problems existing in itself, it is suggested that in the practice teaching, the professional group should be used as a unit to focus on the design of the practice week teaching content and mode, so that the practice week reaches Class and move the whole body "effect. This article uses Guangdong University of Science and Technology's Electromechanical Professional Practice Week course "Solidworks Software Application" as an example to reform and explore the content of the practice teaching week and the subsequent expansion and application of the practice project in other courses of the professional group after the practice week.

2. MAIN PROBLEMS

(1) Insufficient understanding of practice week teaching, teaching content is similar

The purpose of practical teaching is to improve students' ability to "learn what they have learned", that is, to combine the majors they have learned with the theory they have learned to solve problems in practice-to understand the "tacit knowledge" produced in life and practice. The purpose of "Solidworks Software Application" practice week is to train students to use SolidWorks software to design parts of general complexity. At present, some teachers do not understand the true meaning of practical teaching, or the discrepancy in understanding, which has led to the selection of teaching content of SolidWorks Software Application Practice Week for different majors. They are too similar and single. The practical application of software has not received enough attention and guidance.

(2) Inappropriate application of teaching method in practice week and single evaluation method

In the actual practice process, there are cases where the teacher demonstrates one step from the podium out of a serious and responsible attitude. The students follow the operation step below, and each step is performed under the guidance of the teacher. Similar teaching modes, without stimulating students' creative and independent thinking ability, can only make the classroom boring. Teachers are exhausted, students' learning mood is low, and there is no improvement in comprehensive ability. In terms of evaluation methods, some students still have the mentality of taking exams, thinking that as long as the final big assignment is completed, the assessment method does not have enough monitoring and assessment of the student's learning process.

(3) Practice week teaching is not long, and there is not enough ductile practice

At present, the practice week of "Solidworks Software Application" is specialized in organic design, electromechanical, and robotics (Materials is opened in the form of professional optional courses). The duration of the 4th semester is 2 weeks. Considering that students must also take into account the study of public compulsory courses such as meditation in the practice process, the actual practice time of the practice week is less than 2 weeks. There are major restrictions on the choice of course content based on the different training goals of each specialty. Many exercises are put on the sketches and basic command exercises, and the practice cases corresponding to the majors do not have enough time to develop. The frequency of active exercises and use outside the classroom is not high enough, and the extended exercises outside the classroom are insufficient.

3. REFORM AND EXPLORATION

(1) Centralized management by professional groups, sorting out and designing teaching content and teaching methods

(i) The establishment of a professional group research group.

For all majors offering courses in "Solidworks Software Applications", a multi-disciplinary task force is established. Through the selection of the team leader, the daily teaching management plan of the team is gradually formulated.

(ii) The operation of the professional group research group. Deeply understand the connotation of practical teaching, and pay attention to the levels and differences of practical content.

Teachers of the research group deepen their ideological understanding of the meaning of practical teaching by systematically studying the theory of practical week teaching and by visiting a better laboratory on the practice week in a similar institution. The choice of practical content is divided into two parts: basic command operation exercises and professional related case exercises. Each part of the exercises is divided into general exercises and improvement exercises, as shown in Figure 1. The basic command operation practice part is mainly for the practice of sketching and basic feature commands, including extruding, cutting, rotating, and scanning. General exercises are mainly aimed at all students in the class. There are not too many restrictions on the choice of exercise items. Each major can choose the same item or choose different items independently. Enhancement exercises are mainly aimed at students who have mastered software operation skills quickly and cannot meet their needs in general practice. According to the characteristics of the specialty, they can choose relevant exercises of moderate complexity, such as those in mechanical engineering and mechanical and electrical majors. Select appropriate engineering drawings from the typical parts, as the project source of improvement exercises; for robotics, you can choose the appropriate practice items from the assembly parts. Major-related case practice part. This part of the practice, combined with the training goals and professional directions of various majors, selects the exercises and major assignments in a targeted manner. For example, for mechanical engineering and electromechanical majors, you can choose from individual mechanical parts to assembly practice projects. You can refer to the surveying and mapping projects of the 3rd semester "Parts Surveying and Mapping" Practice Week, or the work of the second semester metalworking practice Wait; for robotics, you can practice more on curves and surfaces, and you can choose 1-2 robot model shells as project exercises and so on.

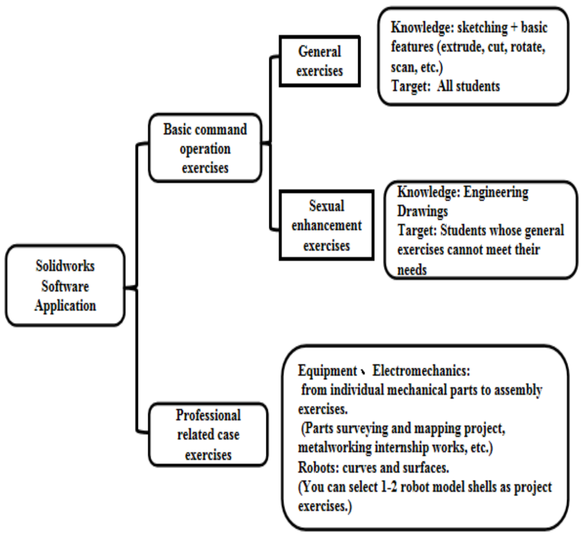

Figure 1 levels and differences of practical content.

(iii) A variety of teaching methods and evaluation methods are combined, and students practice independently.

The selection of teaching methods is eclectic, whether it is flipping classrooms, blended learning, split classrooms, project teaching, etc., as long as it is conducive to the mastery of students' software use skills, as long as they can truly learn the Improve hands-on ability, can be used. At the same time, it can also provide students with a variety of learning channels, such as using the WeChat public account

"Solidworks Study Club" to provide students with more practice references. But pay attention to a general principle, which is also a factor that cannot be ignored in the process of mastering the skills-the total time for students to practice independently must be guaranteed.

As for the evaluation method, in addition to the usual attendance scores, classroom performance scores, and final homework scores, you can also refer to the assessment method of group members scoring members through group learning in order to monitor and learn more students Assessment. At the same time, it can also combine modern information technology and use a variety of management tools, including Jiandao Cloud and Rain Class, to achieve effective supervision of classroom learning effects.

(IV) Pay attention to combining with the knowledge of other courses in the professional group.

"Solidworks Software Application" was originally an exercise in design software operation skills, the most important practical ability goal is reflected in the process of practical application. Through the selection of the content of the course, it is necessary to consolidate or verify the courses that have been taken by each major to provide technical support for subsequent courses. For example, in the major of mechanical design and mechanical and electrical engineering, in the course of the core course of Mechanical Engineering (Basic Mechanical Design) in the follow-up specialty of the fifth semester, using SW in addition to the output of 3D part design, assembly design and 2D engineering drawings It can also check the assembly results, such as collision test, dynamic clearance, and volume interference inspection, etc. In turn, the rationality of the design is tested and verified. In the course of the 6th semester follow-up professional group course "Modern Design Method", the SW 3D part design and simulation function will also be used. For the major of robotics engineering, in the course of learning the core course of Industrial Robotics, a follow-up specialty of the 5th semester, for the mechanical basics, the complex sketching, modeling and simulation functions of SW software can be used to simplify complex problems and reduce Difficulty of learning [4].

(2) Ductility of extracurricular exercises

The length of the practice week should be systematically combed and designed according to the talent training programs of various majors. In the current teaching process plan, it is difficult to change the length of the practice week. However, students can extend the application of SW technology by designing their own interests and participating in professional-related competitions. For example, some students use SW to draw objects, parts, models, etc. that they are interested in, and send them to the WeChat circle of friends. They have not only gained more recognition, but also greatly trained their drawing skills. You can also participate in mechanical computer drawing competitions, 3D printing measurement and other competitions. Through the contact training before the competition and the review and summary after the competition, the software application ability is further improved. For students who have internships or job opportunities, they can also combine the needs of actual projects in their work to improve their application and design capabilities of SW software.

4. CONCLUDING REMARKS

Students' practical ability is the key manifestation of application-oriented talent training, and the quality of application-oriented talent training is the embodiment of the school's core competitiveness. For applied undergraduate colleges and universities, in the design and implementation of the practice week of mechanical and electrical majors, it is necessary to combine the talent training goals of their respective majors and related majors, and carry out teaching at different levels from the perspective of the professional group. At the same time, we should also pay attention to guiding students to combine the other courses in the major and extend the skills learning outside the major, so as to achieve the goal of cultivating students' practical ability from multiple angles.

REFERENCES

[1]Wu Jiaqing. Construction of Quality Standards for Applied Undergraduate Talent Training Program. Journal of Qiqihar University (Philosophy and Social Science Edition), 2019 (03): 159-161.

[2]Zhang Yan, Lu Danju, Di Guangzhi, Xu Quanyuan. Exploration and Practice of the Transformation and Development of Applied Undergraduates. Educational Forum, 2019 (38): 144-145.

[3]Yu Fengyun, Tang Qingju, Liu Yuanlin, Zhang Wensheng, Lu Yumei. Practical Teaching Reform of Mechanical Majors Based on Results-oriented Education. Educational Forum, 2019 (44): 122-123.

[4]Guo Fulong. Application of SolidWorks in Basic Teaching of Industrial Robots. Science & Technology and Innovation, 2017 (22): 154-155.

SWOT Analysis of New Retail Formats

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Abstract: In order to find new breakthroughs in the retail industry, online and offline brands have tested new retail. Through the SWOT analysis under the typical Amway of "Super Species", found that the new retail format as a useful supplement to the traditional retail format, so that enterprises can make full use of the advantages of the Internet, improve their own construction, and build new business ecosystem.
Keywords: New retail; SWOT; Super species

1. DEVELOPMENT BACKGROUND OF NEW RETAIL FORMATS

The concept of "new retail" was first proposed by Ma Yun, the former chairman of Alibaba's board of directors, in a speech at the Hangzhou Yunqi Conference on October 13, 2016. He pointed out that "new retail" as a new format of the retail industry, the purpose hoped to dig deeply from consumption and make full use of the data so that consumers can get more experience and get better products and services.

1.1 The Impact of Internet Technology Development

With the rapid development of Internet and mobile Internet, as well as the progress of big data, cloud computing, artificial intelligence and other advanced technical means, the traditional retail industry has been impacted by the Internet [1-3]. In 2018, China's mobile shopping market grew by 23.9% year-on-year. This data shows that while the online shopping market is booming, it also shows that China's traditional retail industry has been impacted by the online market, and its market share is declining.

1.2 Transformation of Consumption Patterns

With the continuous development of China's national economy and the continuous improvement of productivity, the income of residents will increase accordingly. In 2018, China's online retail sales exceeded the threshold of 8 trillion yuan, and the consumption capacity of residents increased substantially. The consumption structure has been constantly optimized, the consumption patterns are diverse, the consumption quality has been significantly improved, and interaction and experience are emphasized in the consumption process. Therefore, the retail format needs to be changed.

1.3 Traditional Retail cannot be Replaced

Due to the inaccessibility and lack of intuitive sense, online shopping makes consumers lack of experience. Even though some e-commerce enterprises are equipped with service tools such as VR, they cannot completely replace the service functions given to consumers by traditional retail enterprises. There are also many obstacles for older consumers to use online shopping, which are the reasons why traditional retail cannot be replaced. Therefore, the retail industry needs to change and explore new ways and breakthroughs.

2. SWOT ANALYSIS OF NEW RETAIL

This article takes the super species of Yonghui Supermarket as the research object and analyzes its SWOT status.

On January 1, 2017, Yonghui's new masterpiece "super species" officially landed in Fuzhou. As the end of 2019, 88 super species have been opened. Super Species is a new retail format of fresh food and high-end supermarket launched by Yonghui. In terms of product categories, it is mainly engaged in self-made brand products. At the same time, the catering service area is divided into different regions, and many fresh food products can be processed on site. At present, it has collected Eight species, including “Bolong Workshop”, which provides seafood processing and catering services, “Heniu Workshop”, which provides beef processing and food catering services, and “Salmon Workshop”, which provides high-quality Japanese food ingredients based on salmon.

2.1 Advantage Analysis

(1) Deep integration of online and offline

Super Species uses a variety of technical methods to optimize the product layout of offline stores. Different from traditional supermarkets, Super Species are divided into retail areas and catering areas. Consumers can purchase goods directly in the retail area of the store, or purchase the products that can be processed in the store in the catering area such as in the "Polong Workshop", "Heniu Workshop", "Salmon Workshop" and other workshops, and can be taken out or enjoyed delicious food in time in a good dining environment. In order to make better use of Internet technology, Super Species takes Yonghui Life APP as the main body, combines electronic tags, electronic callers, automatic cash register systems, etc., and simultaneously synchronizes multiple payment methods such as WeChat applet and scan code payment to enhance consumers experience and consumption efficiency.

(2) Modernization of management system

As early as December 2012, Yonghui took the lead in the pilot store partnership system in Fujian, and this mechanism was also introduced in the super species. The partnership system implements the mechanism of "resumption+horse racing" to stimulate internal innovation and also adds the elimination mechanism. The resumption mechanism is to organize partners to

review each month, formulate different sequences of horse racing programs, implement the mechanism of "high standards, high incentives, and high elimination" to achieve independent accounting, independent management, independent management, and independent decision-making. The adoption of the partner ship system has greatly mobilized the enthusiasm of employees and also increased efficiency.
(3) Fully integrate the supply chain
Super Species relies on the upstream resource network of the supply chain constructed by Yonghui Supermarket's national unified procurement, agricultural super docking, direct source procurement, and cross-regional procurement. It takes advantage of scale advantages, reduces acquisition costs and improves product quality. In addition, Yonghui Supermarket also pays great attention to building its own planting industrial park, and establishes a processing site for related agricultural products, which can be directly processed after picking.
2.2 Disadvantage Analysis
(1) The excessively rapid expansion of Super Species has leaded to higher operating costs
In 2017, there were 26 stores of super species, 46 stores in 2018, and only 16 stores in 2019. The data shows that excessive expansion leads to the increase of enterprise risk, input costs, and long recovery cycle. Although revenue keeps increasing with the opening speed, the cash flow and profits are declining.
Super Species not only failed to achieve the target of opening stores, but Yunchuang sector which it belongs, the loss range has increased year by year. In the first three quarters of 2019, the loss reached 617 million Yuan. It also dragged Yonghui Supermarket's net profit for the first time in seven years. Yonghui Supermarket has developed a new retail system from scratch, and its huge investment in Super Species has not received significant online share growth. According to data from Yonghui Supermarket, until March 2019, online trading volume of super species still only accounted for 27.4%.
(2) Lack of design and implementation of online marketing strategies
Super Species is a new format business derived from Yonghui Supermarket. Although different settings from traditional stores are made in terms of shopping efficiency, shopping experience, product mix, store environment, etc., it inevitably has the weakness of traditional retail enterprises, that is, the design and implementation of online marketing strategies are relatively weak. Even in the rapid period of development in 2017-2018, Super Species are more hoping to enhance consumers' consumption experience of physical stores, and have not paid attention to the investment and design of online related software and marketing strategies, such as promotion, the Super Species use offline stores to promote the Yonghui Life APP, and use coupons to attract more consumers. They do not use the Internet and new media to improve the efficiency and effectiveness of publicity.
2.3 Opportunity Analysis
(1) National policy support
In November 2016, the State Council promulgated the "Opinions on Promoting the Innovation and Transformation of Physical Retail", which provided guiding opinions on the development of new retail. On March 13, 2020, the National Development and Reform Commission, together with 23 departments such as the Central Propaganda Department, the Ministry of Finance, and the People's Bank, jointly issued the "Implementation Opinions on Promoting Consumption Expansion, Quality Improvement and Accelerating the Formation of a Strong Domestic Market", encouraging the development of new consumption models such as online and offline integration, encouraging qualified cities and enterprises to build a batch of new consumer experience centers that integrate online and offline, and promoting the popularization of new consumption formats, new models, and new scenarios. This series of national measures has played a great role in encouraging companies that are innovating retail models.
(2) The rapid development of science and technology
For new retail enterprises, the current main force of consumption is a new generation of consumers mainly based on "80s" and "90s". They are familiar with the Internet and have a high degree of acceptance of new things. The IOT, big data, artificial intelligence and other technologies have promoted the intelligent upgrade of various electronic products, which has greatly benefited the retail industry. For example, the rapid development and widespread use of technologies such as mobile payment technology, applets, and mobile application software have changed the traditional shopping methods of consumers, improved their shopping desire, and simplified the payment process. The rapid development of technology has provided tremendous help for new retail enterprises to integrate online and offline.
2.4 Threat Analysis
(1) Fierce competition in the industry
After the concept of new retail was put forward, many traditional retail companies have actively explored new retail, such as Tianhong sp@ce, Xinhuadu Haiwuhui, RT-Mart Youxian, and Century Lianhua Whale Selection. In addition, companies derived from Internet brands have also expanded new retail channels, such as Alibaba's “Hema Xiansheng”, the Original offline flagship store, and Meituan's "Palm Fish Fresh", etc. have also expanded rapidly. The flowers are in full bloom and competition is fierce.
(2) Increasing in customer acquisition costs

After 15 years of rapid development in online retailing, the e-commerce dividend is gradually approaching the ceiling. According to the data of the "2019 China E-commerce Semi-Annual Report", in the first half of 2019, China's total online retail sales increased by 17.8% year-on-year, lower than 20% for the first time. And for the first time below the global average. At the same time, the cost of acquiring customers from e-commerce companies is also increasing. In Q1 2019, the cost of acquiring customers from JD.com, Alibaba, and Pinduoduo were 757.77, 536.06, and 197.15 Yuan / person respectively. As the online traffic growth bonus disappears, large-scale e-commerce platforms must find new breakthroughs, and physical stores with wide coverage and local life services have become an indisputable place, which has prompted offline companies to increase subsidies for customers, which also increases the customer acquisition cost of enterprises.

With the accelerated development of Internet technology, traditional retail enterprises can make full use of the advantages of the Internet, adopt the "new retail" model, strengthen the analysis of consumers, and improve the shopping experience of consumers; and integrate the supply chain to achieve enrichment of products and services; make full use of national policy support, use Internet technology, mobile Internet technology, strengthen the integration of online and offline platforms, and use new media means to improve marketing efficiency. Based on these aspects, "new retail" improves its own construction and builds a new business ecosystem.

REFERENCES

[1]Justin Paul, Mark Rosenbaum. Retailing and consumer services at a tipping point: New conceptual frameworks and theoretical models. Journal of Retailing and Consumer Services, 2020, 54.

[2]Cheng Chun. Experience Marketing Strategies of Fresh Food E-commerce Enterprises under the Background of New Retail-Taking Hema Fresh Food as an Example. Journal of Changchun University, 2020, 30(03): 1-6.

[3]Zhou Rongrong. Research on the Dynamic Mechanism and Upgrade of New Retail Business Model in China. Management Modernization, 2020, 40(02): 52-55.

The Essence of Online Teaching and Interactive Teaching Suggestions

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Abstract: Online teaching is subordinate to distance education, and the process of online learning is a process of resource integration centered on students. So that students beside computers or mobile phones are less willing to participate in online classroom, in order to better achieve the expected teaching objectives and achieve certain teaching objectives. The compulsory popularization of online teaching promotes the continuous improvement of online teaching platform functions and lays a good foundation for online teaching. However, online teaching without close language and eye contact between teachers and students, can not let teachers grasp students' psychological activities at any time, lack of real-time interaction, is a headache for many teachers, even at a loss. The author tries to start from the essence of online teaching, respectively, from how to carry out online interactive teaching before, during and after class, and puts forward operational online teaching interactive suggestions, so that students can participate in online classroom to a large extent, which has certain practical significance.

Keywords: Online teaching; Essence; Interactive teaching

1. INTRODUCTION

A sudden epidemic has brought about the compulsory popularization of online teaching, and promoted the continuous improvement of online teaching platform functions. Teachers are also actively exploring online learning teaching skills, striving to catch up with offline classroom teaching [1]. However, online teaching without close language and eye contact between teachers and students, can not let teachers grasp students' psychological activities at any time, lack of real-time interaction, is a headache for many teachers, even at a loss. The author tries to start from the essence of online teaching, and puts forward some practical suggestions for online teaching interaction, so that students can participate in online classroom in a large extent, which has certain practical significance.

2. THE ESSENCE OF ONLINE TEACHING

Some teachers focus on how to restore the function of offline classroom online. In fact, there are some misunderstandings about the essence of online teaching. Copying traditional classroom teaching will even harm online teaching. Unlike the face-to-face teaching of traditional teaching, online teaching can capture the learning effect and feedback of students in many aspects. If there is no effective interactive feedback in online teaching, teachers can not get the feedback of students after sending out teaching information, teachers will broadcast information with great blindness, lack of pertinence, and can not achieve the expected effect.

The farther the distance between teachers' experience field and students' experience field, the worse the effectiveness of communication. The author believes that we should understand the essence of online teaching fundamentally and follow the teaching principles of online teaching in order to achieve effective online teaching.

In a narrow sense, teaching refers to school teaching, which is a unified activity of teaching and learning in which teachers guide students. The school teaching is mainly based on the class teaching system, mainly including teacher explanation, student question and answer, teaching activities and all teaching aids used in the teaching process. Online teaching is to let students learn online through computer network. The former is a dual subject: teachers and students, and the latter has only one subject: students. Online teaching belongs to distance education, and the process of online learning is a process of resource integration centered on students. The subjective initiative of students is stronger [2]. Teachers need to re-examine online teaching, so that students beside computers or mobile phones are willing to participate in online classroom, in order to better achieve the expected teaching objectives and achieve certain teaching objectives.

3. ONLINE INTERACTIVE TEACHING SUGGESTIONS

Online teaching interaction is an issue of special concern to everyone, and also directly affects the quality of online teaching. Students' online teaching is more difficult to concentrate than traditional classroom teaching. How can online teaching interaction be more effective? How to make students more willing to participate in online classroom? Based on the essence of online teaching, we should realize that online teaching interaction is not only limited to online classroom interaction, but also student-centered, including teacher-student interaction, peer interaction, student multimedia interaction and so on. At present, the online teaching platform is rich and diverse, with powerful functions and various forms of interaction, laying a good foundation for online interactive teaching. The author will give specific instructions on how to interact online teaching before, during and after class.

3.1 Pre Class Interaction

Virtual classroom allows students to have no sense of belonging, build Wechat group and QQ group in advance, guide students to generate expectations for the course, introduce the course, let students understand the objectives and tasks in advance, make clear the course plan, course meaning, online live class rules and assessment system, etc., and make use of class interaction to shorten the distance with students, such as remembering some students' names and sincere conversation with students, affirm students, stimulate their inner desire for learning, encourage and guide students to carry out independent and in-depth learning. It is an effective premise for online interactive teaching to form such a learning class group community with goals, atmosphere, discussion, question answering and good interaction, and to build mutual trust and sense of purpose and ceremony for students to learn this course.

At the same time, it provides rich audio and video resources and learning materials related to the course content, provides the latest resource link learning guidance, and arranges the learning tasks that students can do before class, so students will naturally carry out certain offline learning training in a certain direction. These interactions between teachers and students, peers, students and learning resources, and multimedia are all necessary pre class interactions.

3.2 Interaction in Class

Make sure the teaching design is reasonable and the teaching goal is core before class. The classroom with core and focus can let students participate in the classroom more. At the same time, teachers should establish their own image. Teachers' aura, self-confidence, humor, and infectious voice, these image students can feel and be infected. In the process of interaction with students, teachers should encourage more students to participate, give support and positive feedback, and make students more willing to participate in your classroom with appropriate humor.

(1) Introduction of the atmosphere to mobilize interaction: ice breaking activities, can be some small games, review type introduction and so on. If you can combine what you have learned, choose several students to share and communicate with your classmates in turn

(2) Improving the quality of dialogue and questions. In online teaching, dialogue almost becomes simple text and language communication. Students learn in a relatively loose state, and dialogue is easy to be generalized. Therefore, the quality of dialogue and questions should be improved. In practice, teachers can encourage dialogue by setting open questions or giving students open evaluation. The dialogue and question answering between teachers and students are not only for the purpose of transferring knowledge, but also for arousing more thinking and reconstruction of students. It is necessary for teachers to improve their ability to initiate and maintain dialogue, enrich their interactive strategies and constantly test and improve them in practice.

(3) Choosing appropriate teaching props for interaction. Now the online platform has powerful functions, which can basically meet the interaction requirements of teachers. Teachers should make full use of these tools, properly insert interactive links in the classroom, increase the interest of learning, and improve the participation of learners. Choose appropriate platform interaction according to the learning content, such as PPT, whiteboard, tag, physical display, screen sharing, video, online questions, random roll call, emergency response, voting, testing, short answer, topic discussion, etc. For example, the discussion area is a good interactive tool. There are discussion areas on many online platforms. Compared with the classroom, students are more willing to answer and interact in the discussion area. You can use the answer interaction in the discussion area as an important assessment reference for formative evaluation, and encourage students to participate in so that teachers can better understand students' mastery.

(4) Letting students lead properly. Encourage students to say their names when answering questions or asking questions, ask different students to answer questions, and summarize their statements. Timely test the learning effect of students to ensure high-level and large-scale participation,

(5) Checking the learning effect regularly. Use voting and testing tools to understand each student's learning situation. Every class has a certain amount of practice to test the learning effect

3.3 Interaction after Class

After class, we should help students to classify, summarize and sort out the knowledge they have learned, guide them to build the internal connection of knowledge in the review after class, learn to absorb and use it, improve their ability of independent review and accommodation, and encourage them to make full use of the convenient advantages of the network to study independently and actively. Make full use of the interactive function of online teaching topics to collect students' doubts and difficulties after class.

Consolidate interaction: for key and difficult points, teachers can record and broadcast for students to learn repeatedly.

Homework interaction: Students' homework can be evaluated by heart, either by voice, or by using the platform graffiti function to grade, count scores or evaluate words on the homework pictures. Homework is also a way of communication and interaction; excellent homework will be published and bad homework will be redone.

Unit interaction: after learning each topic, arrange group discussion, complete the task together, and display the students' learning achievements through PPT, audio, video, pictures and other ways. We will display online learning achievements, excellent assignments and works among students, and give full play to the interactive learning function of students.

In addition, the school also needs to establish the necessary interaction with students. Students' online learning is unidirectional and may not get help from all aspects in time. It is necessary for the school to provide support for students. Based on the online teaching effect centered on students' learning experience, the school can set up a special auxiliary organization to pay attention to students' professional growth and learning stage, and provide students with academic and non academic support from the content. Provide students with comprehensive, continuous and personalized learning support services.

REFERENCES

[1]Jiang Guozhen. Effective distance teaching communication: process, mode and principle. China's audio visual education, March 2007.

[2]Dick, W., Carey, L., & Carey, J.O. The systematic design of instruction. Upper Saddle River, N.J.: Merrill/Pearson, 2009.

The Study on the Influencing Factors of Foreign Trade Correspondence Writing and the Application of 7C Principle

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Abstract: Foreign trade correspondence is one of the important ways of communication in foreign trade activities, and plays an extremely important role in foreign trade. This paper analyzes the impact of cross-cultural awareness of foreign trade salesmen on foreign trade correspondence writing from the perspective of thinking differences between the East and the West, and then explores the effective ways to improve foreign trade clerks' foreign trade correspondence writing ability under the application of 7C principle, in order to provide a reference for enterprises to train foreign trade clerks.
Keywords: Foreign trade correspondence; Differences in thinking; Cross-cultural awareness; 7C principle

1. INTRODUCTION

Foreign trade correspondence is a general term for all kinds of business correspondence and electronic data exchange in foreign business activities. Foreign trade correspondence is an indispensable tool in business communication, and also an important carrier to convey business information [1]. Mastering the writing skills of foreign trade correspondence has become one of the basic requirements for foreign trade clerks. Due to the differences of politics, economic environments and traditional customs in different countries, the views of economy and consumption, business management habits and even customs are quite different. If the cultural factors of the other party are not fully considered, it is difficult to understand the real attitude and cooperation desire of the other party. Therefore, foreign trade correspondence is not only a professional work of foreign language translation, but also requires the writers master the communication skills, especially in the face of transnational cultural trades [2]. From the perspective of thinking differences between the East and the West, this paper analyzes the influence of cross-cultural awareness of foreign trade salesmen on foreign trade correspondence writing, and then explores the effective ways to improve foreign trade clerks' foreign trade correspondence writing ability under the application of 7C principle, that is, correctness, concreteness, clearness, courtesy, completeness, consideration, conciseness [3], in order to provide reference for enterprises to better train foreign trade clerks.

2. FACTORS INFLUENCING FOREIGN TRADE CORRESPONDENCE WRITING

Thinking and language are unique phenomena of human culture, and they are basic tools for human beings to communicate with themselves, others and the outside world. The two are closely connected and complemented each other. Language is not only the carrier of thinking, but also the main form of thinking. The way of thinking restricts the language structure, the choice of words and sentences, and the text structure. Foreign trade correspondence is the joint function of language and thinking activities. The writer's way of thinking affects the structure of the text and the expression of meaning. Therefore, if foreign trade clerks use Chinese thinking method to express English, it will be hard to achieve the purpose of communication. The difference of thinking methods between the East and the West is an important factor influencing the writing of foreign trade English correspondence. As a foreign trade salesman, it's necessary to understand the western thinking methods, to cultivate cross-cultural awareness and improve cross-cultural communication ability [4].

2.1 Differences between Linear and Spiral Thinking Methods

The western linear thinking method is characterized by straightforward expression, putting important information at the beginning of a sentence, and the central argument of the article is pointed out at the beginning of a paragraph, the last paragraph is repeated, and the middle paragraphs are divided into different topic sentences, and the main idea is unified and clear. Chinese spiral thinking shows that it explains the theme from the side first, and points out the theme at last. The article is intended to present the subject comments in the back. Finally, it points out the theme. In the foreign trade English correspondence writing, the Chinese spiral thinking method will make the foreign trade clerk focus on the objective statement, such as the background statement, the reasons list, etc., which deviates from the real writing purpose and intention.

2.2 Differences between Hypotaxis and Parataxis

In English, conjunctions are used to express the sentence meaning in explicit form, that is, hypotaxis. In Chinese, the combination of sentence components mostly depends on the connection of semantics and uses fewer conjunctions, which is parataxis. If foreign trade practitioners use Chinese parataxis thinking to organize English sentences and articles, it is easy to lead to confused expression, loose structure, and the communication function of foreign trade correspondence will be influenced.

2.3 Differences between Object and Subject

The subject refers to the person who is engaged in practical activities, and the object refers to the sum of the subject's active objects. The objective thinking in the West emphasizes the effect of objective things on human beings, while the subjective thinking in the East focuses on human beings and places the object in a subordinate position. Different subject and object thinking methods between the East and the West is manifested in the differences between subject and voice. In Chinese, the sender, or the subject, is often used as a reference point, and the active voice is often used. In English, the receiver, or the object, is often used as the reference point, and the passive voice is often used. In foreign trade English correspondence writing, subject thinking method will reduce the objectivity of language expression and is not easy to be accepted by the other side.

2.4 Differences between Logical Thinking Methods and Emotional Thinking Methods

The logical thinking of western people makes them communicate and exchange information in a rational and calm way. However, the Chinese emotional thinking methods will make people appeal to human feelings for the judgment of things, mingle personal feelings in language expression, and the writing seems too subjective and lack of justice.

3. 7C PRINCIPLE

The principle of foreign trade correspondence writing is the guideline to be followed when writing foreign trade correspondence. These principles are English words starting with the letter "C", also known as the "C" principles. These principles are also improving gradually. Wei Zhou pointed out that the 3C principle, that is, clarity, conciseness and courtesy, was the first guiding principle in Business English correspondence writing. After that, the principle of 4C was put forward, that is, courtesy, accuracy, conciseness and active use of words. 7C principle is based on 6C principle, which is clarity, conciseness, correctness, courtesy, completeness and conversational tone. So far, 7C principle is considered as a comprehensive principle of foreign trade correspondence writing.

3.1 Correctness

Business letters must be written correctly. As the evidence of business and trade documents with legal effect, its content involves the rights and obligations of both sides of trade. A standard and correct business letter is manifested in the following aspects: proper use of grammar, correct punctuation and spelling of words and sentences, correct information, facts and figures provided by the letter, correct description, standard writing format, proper application of writing technology and accurate business terms.

3.2 Concreteness

A formal and effective business letter must be specific, vivid and clear. When describing a large number of transaction terms, be sure to describe them carefully and concretely, and try to avoid using uncertain, approximate, vague and abstract words and sentences. In the process of writing, it will be welcomed to use real and specific figures and facts, and use appropriate adjectives to make both sides fully understand the trading content. For example, in the final sales confirmation, detailed and specific list of product specifications, quantity, unit price, packaging, insurance and other transaction terms will make this letter more vivid, clear, and persuasive, which will help the counter party fully understand the product information and accelerate the transaction process.

3.3 Clarity

Clarity means that the receiver can read clearly at a glance, and try to avoid using words that are hard to understand or easy to misunderstand. The writer shall, after making clear the contents to be expressed, use words that are brief, colloquial and clear, instead of obscure and ambiguous words. More often, product manuals, illustrations, examples and other visual aids can be provided to help understand. A clear and definite business letter not only embodies the writer's specialty, but also saves the receiver's time and improves the work efficiency.

3.4 Courtesy

A polite business letter can express rich connotation of both parties, and promote the opportunity to make new business partners on the basis of consolidating the trade relationship with customers. In the process of writing business letters, timeliness is an important embodiment of politeness. As for the content of the letter, it’s better to stand in the other side's position and weigh the background and purpose of the business partner, and try to avoid using harsh words or tone that may hurt or provoke the other side. Use more suggestion words, and give the others room to discuss and try to establish a more friendly cooperation atmosphere.

3.5 Completeness

The business letter is extremely strict with the completeness, including the contact information of both sides of the trade, the information about the products purchased and sold, as well as all the questions and requirements asked by the writer. It’s necessary to state all the situations and make sure that the other party has a complete understanding of his/her transaction wishes and purposes. A clear and complete business letter will not only bring expected trade results, but also may establish better business relations and create more business opportunities.

3.6 Consideration

Fully consideration enables the sender to better communicate with the receiver. Both parties should try their best to consider the issues from the other side's position, and provide the information they need on the premise of analyzing and studying how the other party will understand the information. In terms of intonation, it's better to use a positive rather than a negative attitude. And try to use less negative words like claim/unacceptable and more positive words like apply/reasonable to make the other party be more confident and reassured.

3.7 Conciseness

A professional business letter should be concise and comprehensive without destroying the politeness and integrity of the letter. In the process of writing, try not to use old and outdated business terms, remove unnecessary words and long sentences to avoid unnecessary repetition, especially the modifiers with repeated meanings, and keep true, effective, concise and clear facts, which are enough to transfer the most important information to the other party [3-5].

4. CONCLUSION

Under the environment of market economy, the economic relations between countries are increasingly close, foreign trade communication is more and more frequent, and foreign trade letters has run through all links of trade communication, so that it's necessary to understand the factors that affect the writing of foreign trade letters, be familiar with the thinking differences between the East and the west, enhance the cross-cultural awareness of foreign trade operators, master the 7C principle skillfully, and improve the professional knowledge level of trade practitioners. A win-win situation can be achieved through professional foreign trade letters with effective communication to promote mutual understanding and long-term cooperation between the two sides of the trade.

REFERENCES

[1]Lihong Qiu. Principles of Business English Correspondence Writing in the Era of Trade Facilitation, Journal of Changsha University, 2011 (6): 104-106.

[2]Xi Li. Language Features and Writing Principles of Foreign Trade Correspondence, International Business Accounting, 2012 (11): 87-88.

[3]Mingyuan Yang. Application of 7C principle in Business English Correspondence Teaching, Overseas English, 2016.

[4]Xiaoxiao Lan. Research on the Cultivation of English Correspondence Writing Ability of Foreign Trade Practitioners, Technology and Economic Guide, 2018 (33): 162.

[5]Wei Zhou. Recognition of the Principle of "C" in Foreign Trade Correspondence Writing, Journal of Jilin Economic Management College, 2016.

Research on Innovative Creative Thinking based on Garment Design

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Abstract: This article explains the connection and difference between ready-to-wear and innovative creative clothing. When studying the creative design of ready-made garments, it is not just imagination out of thin air. It can draw on innovative and creative elements from innovative and creative clothing, historical and ethnic costumes, and other works of art，innovative design of details or overall shape of ready-made garments，you can also creatively design new garments from the perspective of new materials. No matter what kind of innovative creative thinking needs to be based on the characteristics of garment production and consumption，Innovative and creative design based on ready-made garments.

Keywords: Ready-to-wear, Innovative creativity, Thinking

1. THE RELATIONSHIP BETWEEN READY-TO-WEAR AND INNOVATIVE AND CREATIVE CLOTHING

Garments refers to the finished clothes mass-produced according to a certain series of specifications and size standards. It is a concept that appears relative to tailor-made clothes and home-made clothes.

Garments as industrial products, in line with the economic principle of mass production, production mechanization, product scale serialization, quality standardization, packaging unification, and with brand, fabric components, size, washing and maintenance instructions and other signs.

Creative clothing refers to creative ideas in clothing composition or design. Its design should be aimed at "newness", which is to create "meaningful forms" through art design and produce a unique artistic conception [1].

It can be seen that the creative clothing is exaggerated and fresh. Some of the creative clothing even adopts non-clothing materials, which are just pure artistic ideas, creative expressions and reactions of spiritual and subjective feelings. Each style is unique, which is in contradiction with the standardization of clothing and the maximization of large-scale production economy.

However, with the development of the trend of the times, consumers are increasingly pursuing differentiation and personalization. The demand for new and distinctive clothing products has become the driving force of the market. The innovative creative design of ready-made clothing has become the source of creating commercial value. Clothing design is also developing towards creativity, individuality and humanity. Without innovative clothing design will be eliminated by the market, so innovation is the key factor for the continued survival and development of clothing design.

2. INNOVATIVE CREATIVE THINKING IN READY-TO-WEAR DESIGN

Innovative products for ready-to-wear are still the mainstream of the market. It is particularly important for designers to have innovative thinking. When designing, ready-to-wear designers can learn from the following four creative elements and creatively redesign products.

Creative redesign, drawing on the design elements of a certain aspect or some aspects of innovative and creative clothing, according to the production, manufacturing and consumption characteristics of clothing, creative application to clothing fabric, style, modeling or detail design, so that clothing design can not only reflect different and can reflect certain comfort and practicality.

Of course, creative redesign has higher requirements for designers. Designers need to have certain cultural and artistic accomplishments, aesthetic abilities, imagination and creativity. They also need to understand the practical characteristics of ready-to-wear design. Collect and borrow creative fashion elements, and then creatively apply to your product design, and quickly market.

2.1 Drawing on the Creative Design Elements of Ready-to-wear from the Innovative Clothing of other Clothing Designers

Every year, a group of talented clothing designers will emerge to make everyone unforgettable with unique and innovative works, but many works are purely artistic expressions, or exaggerated shapes, or use non-woven materials, or structural craft Complex, in short, it is not suitable for people to wear daily, and it cannot be standardized and serialized production.

Let the exaggeration be moderate, let these extremely novel and attractive elements be brought to more consumers at zero distance, shorten the gap between the T stage and the reality, and make the new elements widely popular in different grades of clothing. This is also a test of ready-to-wear designers standards for capturing creative elements and unleashing the ability to transform popular trends [2].

Apparel design can use reduction method, simplify exaggeration, retain the characteristic style, or use conversion method, replace wearing fabrics with non-wearing fabrics, choose a novel and unique method that is easy to produce, and then use different methods of transformation application to meet the production needs of different garments [3].

Drawing on innovative elements from innovative clothing for garment design can be divided into direct reference and indirect reference. The so-called direct reference refers to direct transfer of other people's innovation to garment design or direct application after reduction and simplification. The indirect method is the process of selecting one or some parts from others' innovative clothing and recreating them by disassembling, combining and partially improving.

Borrowing creative design elements from other designers' innovative and creative clothing requires designers to have certain fashion sensitivity and conversion ability. Even if it is a direct reference method, what elements are used for reference? Designers can only choose a part of so many creative clothes, which part can be accepted and liked by consumers. It requires the designer to have fashion sensitivity, and how to transfer it to ready-made clothes, the designed ready-to-wear style can become a popular style. Embodiment of the designer's comprehensive ability.

2.2 Innovative and Creative Design of Ready-to-wear from the Elements of Historical and National Costumes

Fashion is a reincarnation, and pointy shoes in the European Gothic period will also become one of the modern popular elements. You can see men and women wearing pointy shoes everywhere on the streets of the 21st world; China’s traditional clothing culture has also been deeply influenced by many clothing designers. Dig and design ready-to-wear garments with traditional Chinese cultural charm in the apparel market.

Ready-to-wear designers can draw inspiration from the historical development of apparel and use creative elements to innovate and creatively design apparel.

2.2.1 Directly extract the elements of history and national costumes

This way of thinking is to extract one or more elements from historical costumes or national costumes and apply them directly to modern ready-to-wear designs, such as cheongsam elements, cheongsam stand collars, piping and slit elements. In the design of ready-to-wear, figure 1 is the Chinese jacket in the Prada 2017 spring and summer series, directly selecting the stand collar element, the placket element, and the slit element of the cheongsam to directly apply to the product series; figure 2 is Keita Maruyama 2016 series of clothing, using Chinese stand collar, Chinese buttons and dragon elements directly into 2016 products.

Direct reference, without changing the basic characteristics of the original elements, directly transferred to the garment design. Although it is directly embezzled, it still has to reflect the characteristics of modern ready-made clothing as a whole, combining traditional elements with modern fashion. This element of clothing that directly reflects the history and ethnicity has become a way for many designers and apparel brands to adopt innovative thinking. On modern ready-made clothing, the appropriate historical ethnic elements are selected without changing their characteristics and fully considering ethnic consumers. The preferences and historical heritage are naturally welcomed by consumers.

Figure 1 Prada Spring/Summer 2017 Chinese style

Figure 2 Keita Maruyama 2016

2.2.2 Redesign the artistic methods of deconstructing historical and national costume elements

The so-called deconstruction art technique is the way to reconstruct after dismantling. Some designers select elements from historical costumes or national costumes, not directly apply them, but split them, combine their own style, color or pattern characteristics, and reconstruct the selected elements for redesign. For example, the products launched by versace brand in 2015 -- clothing, accessories, furniture, etc., use muffle design. The main feature of ruiping is repetition and circulation. China expresses the meaning of "wealth and prosperity" (figure 3 song dynasty ruiping pottery bowl), while Greece expresses the pattern of continuous growth (figure 4 ruiping on Greek artwork). When using palettes for modern clothing design, versace brand products should be disassembled and designed again (figure 5 palettes used by versace brand).

Figure 3 Song Dynasty fret Ceramic Bowl

Figure 4 Fretwork on Greek art

Figure 5 Versace brand using patterned clothing

Deconstructing artistic techniques requires redesigning the elements of historical national costumes for reference, affected by them, but not restricted by them, reflecting the designer's outstanding comprehensive ability.

Either way to draw inspiration from historical costumes and national costumes, it needs to be combined with modern fashion, in line with modern people's fashion consumption habits. Because this way not only reflects the inheritance of costumes to the historical culture, but also reflects the characteristics of the nation, many costume designers are happy, and they continue to find inspiration from historical costumes and national costumes, and carry out innovative designs for modern clothing, and also get better commercial value.

2.3 Drawing on the Creative and Creative Thinking of other Works of Art for Garment Design

The art design is all connected, and the creative and creative design of ready-to-wear can be applied to the design of ready-to-wear from drawing, sculpture, architecture and other works of art. Many artistic creations in the field of art are full of innovative and creative thinking, and they are already popular artworks. Clothing designers can learn from their innovative and creative thinking for clothing design. The most prestigious of these is the French designer Yves Sanit Laurent (Yves Sanit Laurent), who used the painting art of the painting artist Mondrian to apply to the design of ready-to-wear in 1965.The designed "Mondrian skirt" triggered a fashion frenzy (Picture 6 Eve Saint Laurent designed the "Mondrian Skirt"), followed by many fashion designers who took artistic inspiration from other art fields to create innovative and innovative clothing, such as British designer Alexander McQueen in spring 2008. The design of the Sydney Opera House is used for creative and creative clothing design (Figure7 Alexander McQueen took inspiration from the Sydney Opera House for clothing design), and the French fashion designer Pierre Balmain (Pierre Balmain)And Italian designer Gianfranco Ferré (Gianfranco Ferré himself is a professional in architecture and turned back to clothing design. His clothing works are full of architectural space.

Figure 6 Eve Saint Laurent design "Mondrian skirt"

Right picture

Figure 7 Alexander McQueen's clothing design based on the Sydney Opera House

Design is ubiquitous. Design elements are extracted from the colors, patterns, lines, and shapes of other arts, and creatively applied to ready-to-wear designs, so that clothing can not only reflect its artistic innovation and creative characteristics, but also meet the characteristics of ready-to-wear.

2.4 Innovative Creative Thinking Design from Innovative Clothing Materials

With the development of technology, more and more functional and environmentally friendly materials have been developed. Designers can also carry out innovative and creative thinking design from the use of materials. For example, people pursue the concept of environmental protection and nature, and use degradable or less polluting materials. Clothing materials are designed; people pursue a comfortable and outdoor sports life, and develop and use clothing materials that can prevent radiation, wind and breathe warmth.

CONCLUISON

Garment design requires innovative and creative thinking. When carrying out innovative ideas, we must also fully consider the standardized serial production characteristics of ready-to-wear and the degree of consumer acceptance and liking. Innovative and creative design made under the condition of ready-made clothing.

REFERENCES

[1]Liang Hui'e, Li Hui, etc. The application of artistic dyeing and finishing modeling features in creative clothing design. Journal of Donghua University, 2010 (6): 96.

[2]Yu Fang. Transformation of ready-to-wear design of creative clothing. Journal of Textiles, 2015 (11): 109.

[3]Li Yang. Viewing the relationship between creative clothing and ready-to-wear design from the perspective of art and design. Beauty and Times, 2018 (09): 98.

Research on the Countermeasures of College Students' Ideological and Political Education from the Perspective of Internet Public Opinion Ecology

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Abstract: Today is an era of the Internet. In most areas of the country, the Internet has been popularized in almost every household. Especially in recent years, the birth of new media has shortened the distance between the Internet and the public, brought people a different way of life, and changed the forms of people in life and work and social aspects. And online public opinion has a great impact on people's minds and hearts. In particular, the mixed opinions on the Internet can easily mislead people. College students are still lacking in social experience, and their outlook on life, world, and values have not been fully formed. They are more likely to be misled by some negative and untrue public opinion information on the Internet. Therefore, from the perspective of online public opinion ecology, it is very important to strengthen ideological and political education for college students. This requires us to first conduct a corresponding investigation on the current network of public opinion ecology and the ideological dynamics of the college student community.
Keywords: Internet public opinion ecology; Horizon; Ideological and political education of college students; Countermeasures; Research

1. INTRODUCTION

With the development of globalization and informatization, humanity has entered an era of highly digital survival and development [1].Therefore, the Internet has become an indispensable part of people's lives. College students are one of the most used computer networks. The public opinion ecology of the computer network also has inexhaustible influence on people's minds. Compared with the public opinion of traditional media, online public opinion has the characteristics of fast spread, wide audience, and large amount of information. College students are in an age group in which their ideas and concepts are still plastic, and they often have limited discriminatory power. Although the country has already promulgated various laws and regulations on network supervision, it will still produce some "missing fish" such as pornographic information, information promoting negative values, or online rumors. It is poisonous to college students, so it is necessary to strengthen the ideological and political education of college students.

2. WHAT IS “INTERNET PUBLIC OPINION”

Regarding "network public opinion", it is divided into narrow sense and broad sense. In a narrow sense, network public opinion refers to all aspects of public opinion spread by network users on the Internet. While the broad sense refers to both the original mass communication patterns (for example each news media released through the Internet platform, let the audience by browsing the various aspects of news), including later again through the various aspects of the birth of communication tools and social media platforms (such as qq, WeChat, weibo, BBS, etc.) by the spread of information on various aspects.

The "network public opinion" mentioned in this article refers to the network public opinion in a broad sense, it covers all traditional and modern public opinion platforms and means of communication, and produces all aspects of network public opinion. These online public opinions have not only brought about the freedom of communication channels and methods of communication, but also brought about the problem of information security to a great extent. Because those harmful information can easily disturb the public's sight and poison people's thoughts, it is not conducive to the improvement of the ideological and moral quality of the whole society.In particular, we should note that college students are one of the people who use all kinds of communication software and new media social platforms the most, so they are exposed to a variety of network public opinion is the easiest. In addition, college students are not deeply involved in the world. Therefore, college students are more susceptible to the influence of online public opinion.

3. THE NEGATIVE IMPACT OF THE BAD NETWORK PUBLIC OPINION ECOLOGY ON COLLEGE STUDENTS

The Internet is instantaneous. It compresses time and space, and any information can be instantaneously propagated from the place of occurrence to Internet terminal devices around the world[2].This will inevitably produce some bad online public opinion. This has been explained in the previous article. So, what are the negative effects of bad online public opinion ecology on college students?

(1)Yellow Gambling Information

Judging from the age group of college students, although they have grown up in age, their self-control is still limited. Harmful information such as pornography and gambling can easily withstand the temptation once contacted by college students. Eventually, it is not only likely to abandon their studies, but also easily poison their own mind and body, and even fall into the mire of illegal crimes. Eventually it has brought tragedy to themselves and their families, and such cases have been rare.

For example, according to relevant survey statistics, the proportion of AIDS among college students is rising. And AIDS is known as "super cancer", once suffering from very difficult to cure. And the reason that produces this kind of condition is that many college students appeared before marriage sexual behavior even promiscuous sex. Although such a phenomenon has occurred in the past, it obviously has to be much more serious today. The reason is that an important source lies in the temptation and misleading of some gambling information on the Internet to college students.

(2)Various bad thoughts and online rumors

Due to the freedom of the online platform in the way of communication, it is impossible to propagate public opinion completely in accordance with the mainstream values of the society like traditional media. It will inevitably produce some "negative energy" things, mixed with some bad thoughts and online rumors. For example, some conferences have questioned the sovereignty of the socialist system, questioned the ruling system of the communist party of China, questioned the existence of the main body of public ownership or questioned the reform and opening up. Some will promote the selfish and self-interested, "life is short, live in time" bad values. Some will deliberately exaggerate or render some social unhealthy phenomena or dark side, people have doubts about the social system, and even begin to deny the current social system of our country. Especially college students due to their age characteristics, they are easily misled in this regard. This is quite unfavorable for the formation of their outlook on life, world outlook and values. In particular, it is easy to cause deviations in the direction of running socialism in higher education institutions in China. So this is an aspect that deserves our attention.

(3)Some negative or even extreme values

In order to gain the audience's attention, some online media often deliberately sensationalize and attract the attention of the audience through some negative or even extreme values. For example, some people will spread some vulgar "ugly trial" values, to make people's right and wrong concept be adversely affected. Some even encourage self-harm and suicide. Especially some college students have inherently insufficient mental capacity，once living, studying, or interpersonal, once there is a frustration, plus being misled by these negative and even extreme values,it is easy to produce bad tendencies such as self-mutilation and suicide. The negative impact of bad online public opinion ecology on college students is shown in table 1.

Table 1 Negative impact of bad online public opinion ecology on college students

species	Yellow Gambling Information	Bad thoughts and online rumors	Negative and even extreme values
influences	Poisoning college students	Distorting the judgment of college students	Distorted people's attitude towards life
harm	Decadence, AIDS, etc	Produces "negative energy"	Cause suicide, etc.

4. THE COUNTERMEASURES FOR IDEOLOGICAL AND POLITICAL EDUCATION OF COLLEGE STUDENTS FROM THE PERSPECTIVE OF THE NETWORK PUBLIC OPINION ECOLOGY

Earlier, we analyzed the adverse effects of bad public opinion on college students. Below we analyze the effective countermeasures for undergraduate ideological and political education from the perspective of online public opinion ecology.

(1)Colleges and universities should strengthen the guidance of online public opinion

Colleges and universities should be fully based on the social situation in the new period, especially on the basis of conducting a thorough investigation of the current online public opinion, and in accordance with the specific situation and needs to strengthen the guidance of online public opinion. First of all, every effort should be made to create good conditions for ideological and political educators，encourage them to actively participate in online ideological and political education. At the same time, we must continue to organize school leaders and teachers engaged in ideological and political education to regularly participate in training, learning, etc, constantly improve the level of knowledge, consolidate the theoretical basis; and establish and improve the teacher performance evaluation mechanism, and form ideological and political education workers to actively participate in network work Good situation.

(2)Create an effective network platform to guide students' thoughts

Under the premise that the Internet, especially new media, is popular with college students and widely used among college students, we must also pay full attention to and play the educating role of the Internet, especially the new media platform. For this reason, in ideological and political education, We must give full play to the role of the Internet, based on the original content of ideological and political education， constructing an online platform for ideological and political education，to make the Internet the "main position" for ideological and political education of college students today, it is also necessary to add some special columns on Marxist theory, "red genes", current affairs hot spots on their official websites.

(3)Continuously improve the management and control of campus network

On the one hand, "universities need to strengthen the supervision mechanism，establish a set of strict information review and release procedures， concurrent monitoring，strengthen the supervision and control of network sources and channels，prevent bad information from eroding college students”. On the other hand, it is necessary to make effective feedback on various problems reflected by students on the network in time. For some unreasonable needs or problems that are difficult to solve, we should explain and explain in advance, and at the same time, we should strengthen the moral and legal education of the network.

5. CONCLUSION

College students are groups that use the Internet, especially self-media platforms, more frequently. And some uneven information on the Internet will inevitably mislead college students. This is detrimental to the healthy growth of college students and to the realization of college training goals. Therefore, we should strengthen the ideological and political education of college students from the perspective of online public opinion ecology.

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REFERENCES

[1]Hu Xiujin. Analysis of the Dilemma and Path of Ideological and Political Education of College Students from the Perspective of Network Public Opinion Ecology. The Times of Think Tanks, 2020, 3 (9): 89-90

[2]Pan Haining. Research on the Path of Ideological and Political Education of College Students from the Perspective of Internet Public Opinion Ecology. Guangxi Normal University, 2016, 6 (1): 101-102.

On the Deficiency and Perfection of the NPC System

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Abstract: This paper analyzes the problems in the NPC system from the perspective of the election of deputies to the NPC, the system of inquiry and the performance of their duties, and explores the method of perfecting the system for the problems thereof, so that our country's political system develops in a more perfect and scientific direction.
Keywords: NPC; Political system; Democracy

1. INTRODUCTION

The system of people's congress is the fundamental political system of our country. It is a form of state power organization with the people's congress as its core and main content. The content of this system is mainly two aspects: first, a series of provisions on the emergence, organization, function and procedure of the people's congress itself, and second, the relationship between the people's congress and the people, the relationship between the people's congress and the administrative organs, judicial organs, PR curatorial organs, military organs, and the relationship between the central and local power. The core of this system is to ensure that all the power of the state belongs to the people, who participate in the management of state affairs through the organization of the People's Congress and exercise the right to be masters of their own affairs. The system of our NPC was established at the first plenary meeting of the Chinese National People's Political Consultative Conference held in September 1949. The Common Programmed adopted at this meeting clearly stipulates that the highest organ of power of the People's Republic of China shall be the NPC. The first plenary session of the First NPC was held based on universal suffrage in September 1954, marking the beginning of the construction of socialist democracy in China. After the adoption of the Resolution on Amending Certain Provisions of the Constitution of the People's Republic of China at the Second Session of the Fifth NPC in 1979, the new Constitution was amended and adopted at the Fifth Session of the NPC in December 1982.

2. PROBLEMS IN THE CURRENT SYSTEM OF THE NPC

2.1. The right of the floating population to vote and to be elected is not guaranteed

At present, China's mobile population is huge, according to the latest statistics of the National Bureau of Statistics, in China, one in six people have a mobile population. Against this background, the right to vote and to stand for election is difficult to realize because of the economic conditions, work reasons and restrictions on the distance from their places of origin.

2.2. Too few grass-roots workers and farmers are represented, and officials are overrepresented

In the 2003 election of deputies to the local People's Congress, a western province arranged all county (city, district) party secretary and county (city, district) chief as deputies to the provincial People's Congress, resulting in the province's current deputies to the NPC cadres representative separate as high as 80%. This phenomenon is also common among the representatives of the municipal and county-level people's congresses in the district. For example, in the 1998 election of deputies to the NPC of a city in Guangdong Province, the number of elected county, township (town) and village leading cadres totaled 252, accounting for 78.5% of the total number of delegates, while in a city in Hebei Province, the proportion was as high as 85.6% [1].In the 11th NPC, officials and public officials represented a total of 2,496 people, accounting for 85.3% of the total number of deputies [2]. The large number of official representatives and the increasing number of representatives will inevitably crowd out the number of ordinary representatives, in particular, will crowd out the number of representatives of the production line of the NPC, resulting in a serious imbalance in the structure of representatives of officials and people in the NPC. To some extent, the People's Congress has become an "official's meeting", the representative of the NPC representatives greatly reduced, it is difficult to hear the voice of the grass-roots level, the People's Congress has become a government work briefing. The performance of deputies to the NPC is almost virtually voided, and the busy work of officials makes it difficult to conduct in-depth investigation and research by the masses. There is also the issue of officials themselves supervising themselves: an important function of the Npc is to consider the work report of one government, one committee and two houses, but most of the NPC deputies come from one government, one committee and two houses, resulting in their own supervision of their own situation, supervision and review of the effect is also greatly reduced.

2.3. Voters' anorexia

From the current situation, our citizens' attention to the election and active participation is low, there has been a "tired election" phenomenon, which has become a major problem facing the current election. According to the survey from the Chinese University and the Zhejiang People's Congress, on the one hand, under the "mobilization" of political power and leadership, voter turnout in various constituencies is getting higher and higher, and many constituencies have even reached 100%, on the other hand, contrary to the "positive" election situation, more and more voters show boredom and indifference to the election. "Voter turnout is high, but the indifference is obvious: either with a coping attitude, voting as he pleases, or with a game or even a prank, or with a lot of traffic, some are willing to accept others' offer to replace it, or turn a blind eye to illegality such as bribery [3]."The root cause of this situation is the disconnect between elections and interests. On the one hand, there is no solid interest relationship between the voters and the representatives, although the Constitution and the law stipulate that representatives are elected by the voters, must be accountable to the voters, subject to the supervision of the voters, reflecting the interests and demands of the people, but there is no set of closely integrated procedures designed to make it an effective mechanism. On the other hand, because the decision-making of the People's Congress is not big enough, they cannot dominate the interests of the electorate.

2.4. Nomination, identification and presentation of candidates

In the election process, the recommendation process lacks the institutional norms, there are election organizers to exploit loopholes, in order to give the candidate seeking an unequal advantage. Due to the lack of face-to-face communication and understanding channels between voters and candidates, it is difficult for voters to truly understand the candidates, resulting in the election is more arbitrary, the phenomenon of humanization is serious. The communication mechanism between candidates and voters is not perfect: according to the current electoral law, the election committee or the presidium of the People's Congress shall brief the voters or representatives on the candidates for representation. Political parties, people's groups and voters who recommend candidates may present the recommended candidates at a meeting of the constituency or representative group. The Election Committee shall, at the request of the voters, organize meetings with voters on behalf of the candidates, who shall introduce themselves to the candidates and answer the voters' questions. In practice, however, the requirement to meet with voters and answer voters' questions on behalf of candidates has not been fully implemented. As a result, there is often a problem of poor communication and little communication between voters and candidates. Poor communication between voters and candidates makes underground propaganda, secret canvassing and other acts. At present, the election model of deputies to the NPC is basically by the organization to recommend candidates, and then by administrative means to encourage voters to participate and by voters to confirm the final generation of representatives, lack of corresponding competition, there is no public campaign channels. "Democracy needs competition, and democracy without competition is inactive, even formal democracy. Democracy not only needs to be competitive, but it also includes competition"[4].

2.5. Problems with the Electoral Commission system

First, the Election Committee is a provisional organization, the election staff lack of experience, for a longer period to investigate and collect evidence of electoral disputes, failed to fully collect evidence. Secondly, the Electoral Commission, which itself presides over the Assembly, determines the results of the general assembly elections on its own, with out of oversight. Finally, there is a possibility of a dual identity of the representative candidate and the electoral staff, and inevitably electoral injustice.

2.6. There is a problem with the inquiry system

The procedure of the inquiry system of the people's congress of our country is not clear enough, the whole system content is too principled and the effectiveness is too bad. The subjects of the question were answered orally, and none of them were answered in writing in accordance with the law. Moreover, some challenges are biased by human factors because they are not subject to standardized procedural constraints. For example, in 2009, 10 representatives of the Shenzhen delegation raised the question during the Guangdong Provincial People's Congress, but the Provincial People's Congress thought the way of inquiry was more appropriate, and finally after consultation, the question was changed to inquiry [5].At present, many countries in the world have more flexible forms of inquiry, mainly oral inquiries, but also written inquiries, the purpose of which is to enable Members to exercise their supervisory power by means of full use of the means of inquiry. The current law of our country only allows written inquiry, which reduces the flexibility of the inquiry, and will certainly hinder the role of the inquiry. Since the agenda and duration of the NPC are generally determined by vote in the run-up to the session, its statutory nature somewhat excludes the possibility of adding other agendas. According to the regulations, the establishment of the inquiry case should not only be determined by the Bureau, the Bureau should also listen to the report of the question; If the representative is not satisfied with the reply to the question, the questioned organ shall reply again, and these procedures shall also be decided by the Bureau. If there is a question-and-answer session of the General Assembly, not only will the agenda and duration of the General Assembly be changed, but the meetings of the Bureau will be increased once or more as a result. In the past NPC, there were also motions for questioning, but they were recommended by the Secretariat of the General Assembly as "pre-case communication" to be resolved. The conditions for the filing of a case in china's NPC are too high, which hinders the filing of the inquiry case. The existing law does not provide for the legal consequences of the reply of the questioned organ.

2.7. There are drawbacks to the part-time work of deputies to the NPC

China's NPC representatives from all walks of life, usually busy with their own work, only during the General Assembly to attend the performance of their duties, in the form of part-time representatives of the NPC. As a qualified npc representative, it takes a certain amount of energy and time to face the job, but the NPC representative system is a part-time system, representatives in their posts have assumed a lot of their own work, it is difficult to have a lot of energy and time to fulfill the duties of deputies to the NPC. Even if you want to do it, you can only do it amateurly. As it is part-time, the resources available to delegates are very limited, less energy is invested, less time is invested, less contact with voters is low, and people's feelings are limited. Due to insufficient energy and time to investigate and study, representatives of the NPC to adopt laws and regulations, the work reports to be considered often in the absence of understanding of the draft, it is difficult to put forward constructive and creative views when they need to express insights, neither serious review, no expression of their true views. This makes the function of deputies to the NPC not fully played.

3. EXPLORING THE SYSTEM OF PERFECTING THE PEOPLE'S CONGRESS

First, we can use modern information and technology to break down time and space constraints and facilitate the exercise of the right to vote by foreign voters. Live broadcast at the election conference to inform voters abroad about the candidates and the status of the election, while using technology to enable them to vote online, so that people are not on the scene but can participate in the election. This will save time and economic costs, but also ensure that more people exercise their right to vote and stand for election, so that democracy benefits every Chinese citizen.

Second, the structural problems of deputies to the NPC should be formulated from the perspective of perfect legal procedures, the allocation of the number of deputies to the NPC to various industries and organizations, limit the number of representatives of officials, scientific provisions of the number of deputies to each industry and groups, so that the representation of deputies to the NPC is given full play, can represent the fundamental interests of the vast majority of the people, give full play to the superiority of China's political system, so that people's democracy is more fully implemented.

Third, for the voters tired of the election situation, first of all, we should gradually improve the scope of direct elections, in some cities with higher quality voters, the economy is more developed to try to elect all the deputies to the NPC by direct election, from which to accumulate experience, and gradually realize the full direct election. Secondly, improve laws and regulations, so that voters and representatives to form a solid interest relationship, the people's representatives are elected by the voters, must be responsible to the voters, under the supervision of the voters, reflecting the interests and requirements of the people, after the NPC meeting, the NPC representatives must report on the work of the voters, accept the voters' questions and supervision.

Fourthly, the transparency of the election should be improved in terms of the nomination of candidates, the identification and presentation of candidates. Sunlight is the best preservative, openly is the star of corruption."The introduction of candidates should be more liberal, candidates can promote themselves, through the voters to give speeches, answer questions, proactive reporting and other ways, so that voters fully understand their ability and comprehensive literacy, so that voters on the basis of understanding to make a choice in line with their own interests, so as to avoid the covert operation, so that the fairness of the election is guaranteed.

Fifthly, with regard to the improvement of the system of the Electoral Commission, a special Electoral Commission body should be established to professionalize the staff of the Electoral Commission, and provisions should be made that the candidates for representative elections shall not hold positions in the Election Committee and that the results of each General Assembly election should be reviewed, determined and published by the Committee on the Qualification of Representatives.

Sixth, for the problems existing in the questioning system, first of all, it is necessary to give full play to the role of the inquiry system and make up for the shortcomings in the system from the legislation: it is necessary to amend the Constitution to limit the scope of inquiry to administrative organs, effectively safeguard the independence of the judiciary, and link the provisions of the inquiry system between the Constitution and the relevant laws. To the NPC delegations or NPC representatives of the object of inquiry, as well as local NPC delegations or representatives of the subject of a unified provision; The timing of the reply, the application review procedure for disagreeing with the Bureau's decision not to file a case, and the provisions on the validity of the urgent inquiry, the validity of the inquiry and the legal consequences of the inquiry.

Seventh, for the NPC deputies part-time of the disadvantages, combined with the actual situation of our country, the current reform of the NPC deputy's system, must be carried out step by step, starting from the NPC representative part full-time. The implementation of the NPC representative part full-time, that is, the NPC representative composition is part-time, part-time. Part-time representatives are also held by leading officials, while full-time representatives are composed of experts in various industries and representatives of grass-roots people such as workers and farmers, who specialize in the work of the NPC. Officials and representatives are familiar with the country's macro-policy, can play a macro-guidance role in the work of the NPC, to ensure that the work of the NPC always maintain the same direction as the national policy. And full-time representatives can also have ample time through long-term grass-roots research, play its professional knowledge, put forward professional, targeted, feasible proposals. Thus, the two complement each other, not only to ensure that the work of the NPC in the right direction, but also to achieve the effectiveness of the work of the NPC, to give full play to the political function of the NPC. However, the part-time work of the NPC representative is also a very large and need to be long-term exploration of the project. First of all, from the legal point of view to determine the legal status of this part of the Npc, we must supplement the relevant laws or formulate special laws and regulations on the full-time representation, give delegates legal power and status, clarify the duties and obligations of representatives, regulate the acts of representatives from the law, ensure that they seriously and responsibly complete the work of the NPC, to ensure the function of the NPC. Secondly, it is necessary to clarify the composition of the deputies to the NPC under the part of the full-time system, and to ensure that the full-time representatives of this part of the NPC have broad representation and can effectively serve the people's welfare. Must include: leading cadres, grass-roots representatives, experts and scholars in various fields. A full-time representative composed of these people can go deep into his field and use his ability to safeguard the interests of most of the people. Finally, the treatment of full-time representatives should be addressed. In order to maintain their political independence and the integrity of their official activities, full-time representatives at all levels of state finance shall be paid according to the standards of civil servants at the same level, and housing, office space, medical pension insurance and so on should be provided in other areas of treatment. In addition, the NPC deputies have a different characteristic than ordinary public officials, deputies to the NPC have a certain term of office. Although the NPC deputies are full-time but not life-long, so for the NPC deputies, especially full-time representatives, more important is the issue of retirement security. If only the full-time system of deputies to the NPC is set up without the establishment of a security system for resignation, then the NPC deputies will inevitably be unable to focus on their work because of fear of the way out in the future, and may also create a reluctance to run for deputies to the NPC. In order to make the full-time NPC representatives have no worries and can be assured of bold service to the people, we must ensure that they are treated well.

4. CONCLUSIONS

The people's congress system is the fundamental political system of our country, is an important support for our system self-confidence, but there are still many places that need to develop and perfect, we need to start from laws and regulations, fully implement the policy of ruling the country according to law, the NPC system has not yet clear the place to clear, by-rules, procedural, let people's system of the implementation of law can be based on. At the same time, we should strengthen patriotism education, enhance the people's institutional self-confidence and cultural self-confidence, improve the quality of the people, improve the ideological awareness of deputies to the NPC, start from their own, consciously perform their duties. The imperfection of the NPC system is an objective factor that leads to the NPC deputies' inability to perform their duties better, but the NPC deputies should also take the initiative to shoulder their responsibilities subjectively, bearing in mind that the right is entrusted to the people, the feelings of the people, the interests of the people, and live up to the trust of each and every one of his people.

REFERENCES

[1]Kong Fanjun. Representative de-officialization: the internal requirement of the power restriction mechanism of the NPC system. NPC Research,2018(8):14-27.

[2]Yi Sai key, Guo Caixia, Sun Ying, Liu Zhifeng. One of the observations: using the rule of law to solve the imbalance in the proportion of representatives of the government and the people.

People’s Politics, 2013(1):6-9.
[3]Wei Wei. An analysis of the phenomenon of voters’ "tired election" in the grass-roots election. Professional circle,2007-12-23.
[4]XieQingkui. Democracy needs competition, Transcript for 2003 Shenzhen Election Campaign. Northwestern University Press, 2003:299.
[5]Tong Haibao. The result of the inquiry system should make up for the seven major defects. Construction of the NPC, 2006-05-01.

The Approaches to Improve Physical Constitution of College Students Based on the Current Situation

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Abstract: The constitution of young generation is of great significance and can always show the tendency of the prospective development of a country. However, it is recognized that our college students' constitution still stays in a low level and the measures to improve it are not specific and effective. Here, we try to investigate the current situation about the college students' exercise and constitution by questionnaire and interview, on the basis of which we put forward the specific approaches to improving their body condition. The data we got reveals that the college student have realized the importance of exercise but fail to take action. So, we suggest that specific approaches can be implemented by three subjects to improve the college students' constitution.
Keywords: College students; Physical constitution; Approaches.

1. THECURRENT SITUATIONOF THE COLLEGIATE CONSTITUTION

China Education News published a report on the results of students' physical monitoring and research, which was released to the public a few days ago. Happily, the physical quality of primary and middle school students keep continuously rising. Worryingly, the physical quality of college students is unsatisfactory and in a low level. The survey shows that college students do not have enough exercise time and are obviously less than primary and middle school students. It is reported that, sudden death occurs all the time in the process of college students' exercise.

2. THE PURPOSES AND METHODS TO PROCEED THE RESEARCH

In order to know the current situation about the exercise of contemporary college students and conclude the approaches to improving the college students' constitution, the author make this survey. In our research, we combined the online interview with the questionnaire.

3. THE DATA ANALYSIS BASED ON THE RESULTS OF THE SURVEY

We investigated about 60 students. The following is the data analysis based on the results of the survey.

3.1 Collegian's Motivation to Take Physical Exercise

First of all, as shown in Fig. 1, we found that the motivation of college students to physical exercise shows diversity, mainly to strengthen physical fitness. Sixty percent of college students are motivated by physical fitness, indicating that a large number of students have realized the importance of physical fitness and intend to improve their physical fitness through physical exercise 0. In addition, the interest, the friendship, the entertainment and so on also affect the college students to take part in the physical exercise. It shows that under the influence of physical education, social propaganda and other factors, college students have a good understanding of the function of physical exercise, which is of great significance to the development of lifelong physical education 0.

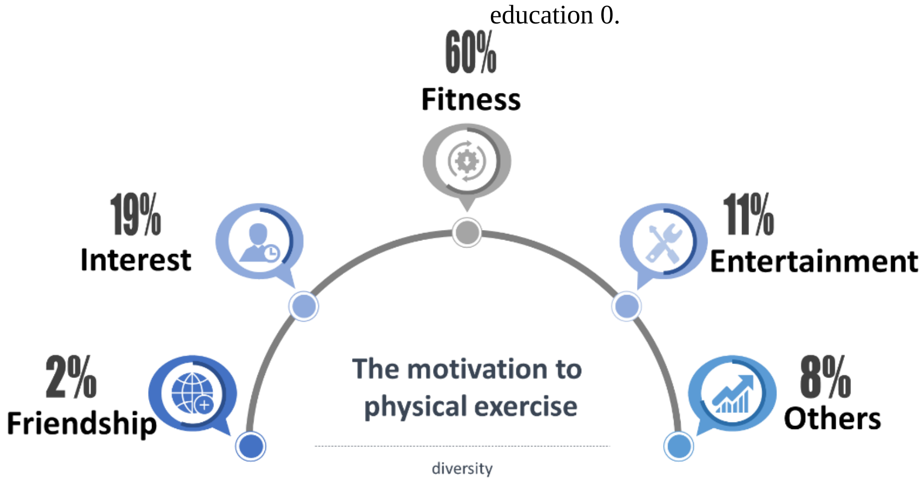

Figure 1 The motivation of collegian to physical exercise

3.2 The Time Collegian Spend on Physical Exercise

Secondly, by further investigation, about 60 percent of the students have no more than three hours of physical exercise per week, and only 13 percent have more than five hours of physical exercise per week as shown in Fig. 2. Therefore, the majority of college students have participated in bodybuilding activities on the basis of realizing the importance of exercise, but the total time is still low and needs to be improved.

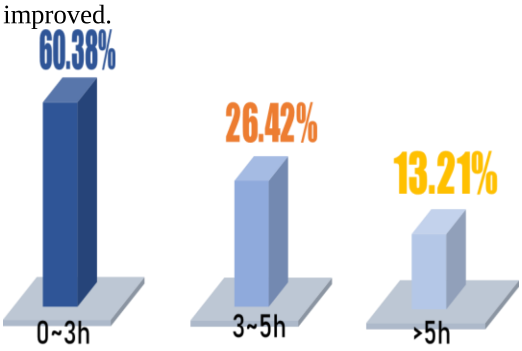

Figure 2 College students' exercise time

3.3 Collegian's Attitude to PE Class and Morning Exercise

Then, on the question of how to treat PE class and morning exercise, as shown in Fig. 3, about 70 percent of the students is different to their class, and more than half of the students take a neutral or negative attitude towards morning exercise. But when we ask them "Do you think the P.E. class and morning exercise can help strengthen your constitution?", seventy-seven-point four percent students say "yes". It shows that almost all the students undoubtedly believe that exercise is beneficial to their health. However, they fail to take positive attitude and action to treat access to exercise which can help them have a healthy body.

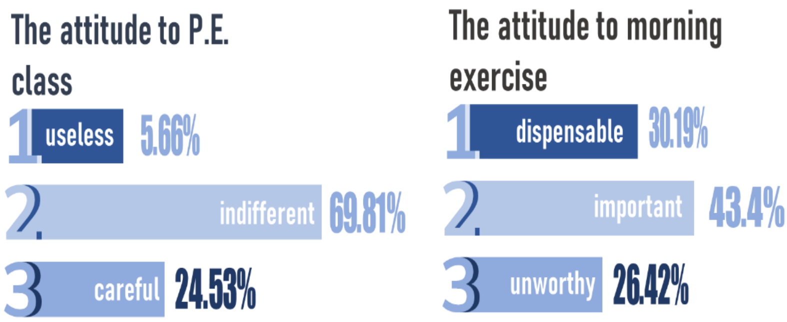

Figure 3 Collegiate attitude to P.E. class and morning exercise

3.4 What Plays an Critical Role in Improving Collegiate Physique

Another question is "Who do you think plays an critical role in improving your personal physique", as shown in Fig. 4, ninety-two percent of the students thought that themselves played a key role in improving their physique. But school and schoolmates are also helpful in improving their physical fitness. More than half of the students said they would be more than willing to take part in large-scale activities at school.

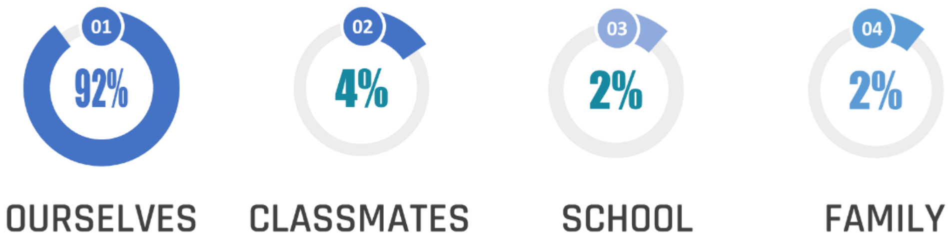

Figure 4 What plays an important role in improving students' personal physique

4. THE CONCLUSIONS OF THE INVESTIGATION

As a result, we can draw the following conclusions:

(1) The majority of students can realize the significance of physical exercise and take the initiative to take part in physical exercise, but their physical exercise time is still short and cannot achieve good results.

(2) Extracurricular physical activity has fewer forms, the organization way is not perfect, causes the extracurricular sports activity to be inefficient, and easy to turn to the form.

(3) The minority students still do not realize the importance of physical exercise and lack the relevant physical knowledge.

5. THE APPROACHES TO IMPROVE COLLEGIATE CONSTITUTION

Based on the results we have got; we try to find the approaches to improving the constitution of college students. There are three subjects should contribute to the improvement.

5.1 Collegian Themselves are the Most Important Subject to Take Action

First is the student, Students are supposed to realize that physical exercise is helpful to improve their physical fitness deeply and then participate physical activity. Developing good self-exercise habits will lay a solid physical foundation for life and benefit students all through their lives. Thecollege students are suggested to make full use of our P.E. and morning exercise to strengthen our physical quality, make long-term and short-term plans to boost our physique. Mentally, they could find a correct motivation to your exercise, such as losing weight 0 and strengthening physical immune 0. Meantime, finding a partner encouraging each other is a effective way to avoid quitting.

5.2 School is a Helpful Guider to Improve Collegian's Constitution

As for school, schools should vigorously strengthen students' education and propaganda of physical exercise to guide students to establish a correct concept of physical exercise. The school can hold more sports meets and appeal to more students to participate in various sporting events. To provide students with a better exercise place and stimulate their desire to take physical exercise, schools should increase their investment in physical exercise facilities to create good conditions for students' physical exercise. A positive atmosphere can also affect collegian's attitude to physical activity 0, schools can organize more outdoor aerobic exercises such as hiking, cycling，mountain climbing and so on.

5.3 The Society will Affect Collegian by Osmosis

Finally, is the society, the society should create a national fitness atmosphere, like the Beijing Olympic Games in the time of the national sports craze, and the advent of the Winter Olympic Games, some primary and secondary schools have specially added skiing courses for this purpose. These good social atmospheres should be more noticed and then be more influential. The society can enrich the form of national activity and hold more games like Shanghai International Marathon. According to the figures, a lot of students take part in the competition, to some extent strengthen their physique.

REFERENCES

[1]Fuzhong Li, Lijuan Mao, Peijie Chen. Physical activity and prevention of chronic disease in Chinese youth: A public health approach. Journal of Sport and Health Science, 2019, 6: 512-519.

[2]Ayman Guemri, Nejah Kacem, Chokri Naffeti, Liwa Masmoudi. Effect of Student Teaching of Physical Education and Sports on the Sense of Competence "Develop and Innovate". Advances in Physical Education, 2016, 10: 117-124.

[3]Petri Wiklund. The role of physical activity and exercise in obesity and weight management: Time for critical appraisal. Journal of Sport and Health Science, 2016, 2: 151-154.

[4]Patrick Z. Liu, Robin Nusslock. Exercise and hippocampal neurogenesis: a dogma re-examined and lessons learned. Neural Regeneration Research, 2018, 8: 1354-1355.

[5]Barbara E. Ainsworth, Caroline A. Macera. Promoting physical activity in a public health context. Journal of Sport and Health Science, 2018, 1:126.

Research on the Characteristics and Teaching Methods of Practical Courses Online Teaching

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Abstract: In order to prevent the epidemic from spreading on campus, the Ministry of Education issued relevant guidance, It is required to adopt a government-led, university-based, and socially-participated approach to jointly implement and guarantee online teaching in universities during epidemic prevention and control, so as to achieve "no suspension of classes, no suspension of classes". As a practical lesson to highlight students' skills training in colleges and universities, they are also moving from offline LABS to online classrooms, how to carry out effective classroom teaching according to its characteristics is one of the topics that many college teachers are discussing.
Keywords: Practical courses; Online teaching; Teaching methods

1. INTRODUCTION

In 2020, a pneumonia outbreak caused by a sudden new coronavirus infection disrupted the pace of people's life, study and work. In order to prevent the spread of the epidemic on campus and implement the decision-making arrangement of the Party Central Committee to resolutely win the epidemic prevention,the time of control and blockade is on February 4, 2020,the ministry of education issued the guidance on the organization and management of online teaching in institutions of higher learning during the period of epidemic prevention and control (hereinafter referred to as the guidance)[1]. Requires government-led,university-based, and social participation, ensuring online teaching of colleges and universities during epidemic prevention and control, achieve "no suspension of teaching, no suspension of classes". As a result, schools and colleges across the country have started online teaching. While actively exploring the characteristics of various online teaching platforms, teachers are also constantly researching teaching methods suitable for online teaching.With the development of the epidemic and the uncertainty of the school start time, colleges and universities began to gradually open a variety of practical courses, gradually began to teach online, practical courses with high requirements for practical environment and practice, how to conduct online teaching, and what kind of teaching methods are more effective for practical teachers in colleges and universities is a topic worth discussing[2].

2. FEATURES OF ONLINE TEACHING

In recent years, China has attached great importance to the construction of educational informatization, and in the years of hard work and exploration, a path of education informatization with Chinese characteristics has been formed, this provides a strong and powerful foundation for "stopping classes without stopping" during epidemic prevention and control. Although many online excellent teaching resources have been opened, there is no guarantee of high-quality and effective classroom teaching[3].In order to ensure high-quality classroom results, in addition to the protection of online platforms and online resources, at the same time, teachers need to be based on the characteristics of online teaching, adopt teaching methods that are consistent with the characteristics of the course and students' academic conditions. Compared with traditional teaching, online teaching mainly has the following four characteristics:

2.1 Networking of Teaching Environment

Unlike traditional classroom teaching, online teaching mainly relies on cyberspace for teaching, rather than face-to-face interpersonal interactions, which leads to a change in the way students drive learning, without the teacher’s face-to-face supervision and guidance, and the lack of mutual interaction for reference, let students learn more freely. To achieve good classroom teaching effect. Teachers need to design the structure and methods of the classroom according to the characteristics of the online teaching environment to generate the driving force for students to learn consciously.

2.2 Digitalization and Diversification of Teaching Resources

The teaching resources of traditional teaching are more concentrated on teaching materials, teacher's courseware lesson plans and other online resources. But in the actual classroom or more to the paper version of teaching materials, students can well rely on the teaching materials and the teacher's courseware to complete the understanding and learning of the key points in the classroom; on the other hand, online teaching relies on a large amount of data information, which can be video teaching resources, text or pictures, etc[4].Various teaching resources provide teachers with rich curriculum teaching resources; symbols for students full screen, On the one hand, it helps them to understand the main knowledge points of the course well, on the other hand, it takes more time to sort and digest.

2.3 Time and Space Flexibility

The most obvious feature of online teaching is the separation of time and space, this poses challenges for teachers to organize teaching, it also provides an opportunity for teaching innovation. You can initially refactor the logic, split tasks flexibly, resource-based teaching, Highlight the combination of time and space such as curriculum design, resource creation, resource push, process support, detection feedback, etc; on the other hand, the process can be reconstructed, and the focus of teaching can be changed[5].For example, designing discussion-style teaching, teachers can explain the video or PPT, and focus on class time to arrange problem discussion and solve doubts.

2.4 Emphasize Students' Autonomy in Learning

Since online teaching is conducted in a network environment, there is no face-to-face supervision and control. The whole process is stronger to students' autonomy in learning. Only students who are autonomous or cooperate well with teachers can achieve better classroom results and achieve a higher level of teaching quality. Today, mobile Internet technology is very developed, students without teacher supervision, students are prone to self-control and management difficulties, therefore, online teaching requires the teacher to do a good job of the designer of the course, design task-driven, and drive and supervise the student's learning in a task-based manner.

3. FEATURES AND REQUIREMENTS OF ONLINE COURSES FOR PRACTICAL COURSES

Practical courses mainly refer to the training rules and goals of talents under the control of the school, teaching process of training students' vocational and technical application ability. This kind of course is mainly based on actual project combat, focusing on learners' hands-on operation ability, and focusing on improving the practical ability of the project. It is different from the teaching characteristics and teaching requirements of theoretical courses.

3.1 Features

3.1.1 Highlight skill development and exercise

Practice courses are different from theory courses, pay more attention to the improvement of students' practical ability and practical skills, to realize the improvement of students ’employment competitiveness.

3.1.2 Concentrated teaching time

Practical courses are usually offered in the middle of each semester, its time is 1-2 weeks mostly, its class hours are between 20-40 lessons. During the course, students will pause other specialized courses and then focus on practical courses.

3.1.3 Emphasize students' subjective status

The main purpose of this course is to cultivate students' professional skills, which lays the dominant position of middle school students in the class, because only by giving full play to the dominant role of students can the cultivation of skills and the improvement of practical ability be well realized.

3.2 Teaching Requirements

Integrating the characteristics of online teaching and practical courses, the online teaching of practical courses must have a good classroom effect, which has certain requirements for teachers and students. Its requirements for teachers are mainly reflected in the following three aspects:

3.2.1 The requirements for classroom settings are higher

It is different from the theory class, the practice class focuses on the cultivation of students' skills or practical ability, How to return the classroom to students, and let students in the classroom to get full exercise, which requires the teacher to fully consider all aspects of factors before class to set up the classroom, especially in the network environment students lack of supervision, in fact, increases the difficulty of classroom learning management. Therefore, when teachers set up classrooms, in addition to considering the characteristics of knowledge and students' academic conditions, they also need to consider the networked teaching environment, and comprehensive consideration is required to make effective classroom settings.

3.2.2 Teachers have higher requirements for the ability to use network resources

In the network environment, all kinds of teaching resources are very rich, which can well assist teachers in preparing lessons. However, these resources can also be obtained by students through the Internet. If they are not sorted out, they will be pushed to students. On the one hand, it will increase students' learning burden, on the other hand, it will also stimulate students' aversion.

3.2.3 Higher requirements for teacher teaching methods

How to train students and improve their skills in a network environment that lacks supervision through effective methods. For teachers, in addition to testing their teaching level and knowledge reserves, they also emphasize the use of teacher teaching methods, good teaching methods let the teacher achieve more with less in the classroom, and inappropriate teaching methods will often get less with less.

4. SUGGESTIONS FOR IMPROVING THE IMPROVING THE ONLINE TEACHING EFFECT OF PRACTICAL COURSES

Combining the characteristics of online teaching of practical courses and the learning characteristics of students, three suggestions for improving the effectiveness of practical courses are proposed. The specific conditions are as follows:

4.1 Focus on Task-Driven Design and Supervision

The online teaching of practical courses should be driven by tasks and problems, and the interaction of students and resources should be the main line. The primary task of curriculum design is to design learning tasks. The learning task design should meet the requirements of 8 dimensions: it can carry the course objectives, conform to the value ethics, be challenging, be optional, be connected with life, have certain experience support (accord with the zone of proximal development), be able to decompose, be able to operate, be able to detect, have internal consistency. By designing practical and operable tasks to stick with students, on this basis, students' motivation to learn and their skills will be stimulated.

4.2 Pay Attention to the Optimized Combination of Skill Modules

The presentation method of online course resources should be modular. Teachers should help students to select resource modules based on the online learning guidelines of the special courses. Each link and knowledge point can recommend 3 to 5 resources, which should be as concise as possible while taking care of individuality demand. The form of resource modules, including explanation videos, demonstration experiments, practical operations, etc., determine the duration of each resource module according to the physical and mental characteristics of students. For breakthroughs in major and difficult points, it is necessary to provide support resources, which is also the difficulty in the construction of teaching professional resources. It also often requires teachers to create their own.

4.3 Innovative Team Learning

In recent years, the emerging Team Learning in the world can connect people from all over the world, fully integrate the background resources of various regions, and implement innovative learning. Online teaching of practical courses needs to make full use of this method and related tools. The main points of operation in this way include: goal control, division and cooperation, smart crowdfunding, online discussion, and sharing integration. This can not only develop communication and collaboration skills, but also strengthen the participants' cognitive responsibilities and stimulate the deep motivation of each student. It is an effective community learning method; the main tools are online documents, various instant messaging software, etc.

4.4 Focus on Instant Feedback in the Classroom

The key to online teaching is whether it can stick to the students and go deeper step by step. The key is immediate feedback, especially for the online teaching of practical classes. Effective online teaching, including live classes, the focus of teachers ’work should be shifted to interactive feedback instead of teaching against PPT. Online teaching feedback points include status icon lighting, data analysis reading, process record labeling, interactive question and answer responses, homework submission browsing, learning goal detection, etc. Especially for each student’s homework submission and sharing, teachers should give analytical feedback, it not only realizes the purpose of achievement sharing and collaborative construction, but also guides students to deep learning and cognitive input, and at the same time plays the role of organizing teaching.

REFERENCES

[1]Huang Yong. "Closing without stopping school"-thinking and implementation of online teaching during epidemic situation. Chongqing dingyun culture communication co. LTD. Proceedings of the 2020 Academic Forum on Educational Informatization and Educational Technology Innovation (Chongqing venue). Chongqing Dingyun Cultural Communication Co, Ltd: Chongqing Dingyun Cultural Communication Co, Ltd., 2020: 3-8.

[2]Wang Qing, Guo Yingshou. "Feynman Physics II" and "Electrodynamics" mixed online teaching practice [J/OL].Physics and Engineering: 1-8 [2020-04-07].http:/kns.cnki.net/kcms/detail/11.4483.O3.20200402.1557.006.html.

[3]Meng Xianling. Philosophical thinking and practice of "online teaching". Liaoning Education, 2020 (08): 25-26.

[4]Li Weiying. Exploration of methods and strategies for effective online teaching. Fujian Computer, 2020, 36 (03): 27-30.

[5]Guo Yingjian. How to guarantee the quality of online teaching during the epidemic situation. China Science Journal, 2020-03-24 (007).

Reconsideration of Music Applied in Second Language Teaching based on Suggestopedia

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Abstract: Music is used successfully as a magic tonic by many language teachers. Besides Krashen's second language hypotheses, Lozanov's suggestopedia also supports the point that using music in second language class can enhance the effect of learning. Apart from the advantages, the precautions of using music to assist suggestopedia teaching are worth exploring.
Keywords: Language teaching; Music; Teaching method; Suggestopedia

1. INTRODUCTION

Music is frequently used by teachers to help learners acquire a second language [1]. It has been reported to help second language learners acquire vocabulary and grammar, improve spelling and develop the linguistic skills of reading, writing, speaking and listening [2-4]. Suggestopedia is a teaching method based on a modern understanding of how the human brain works and how people learn most effectively. One of the keys in suggestopedia class is using background music to assist learning. Although the application of music in second language teaching is not a fresh topic, some details are still worth to being discussed with suggestopedia.

2. THEORETICAL SUPPORT

Krashen said the input should be comprehensible one in his second language hypotheses [5]. Meaning can be conveyed by providing extra linguistic support such as illustrations, actions, photos, and realia as well as story songs. And story songs, that is, stories which have been set to music, it is possible to similarly acquire vocabulary. In this case, Krashen's input hypothesis supports music to be used in language class.

Krashen's affective filter hypothesis is also tied to the point. The primary definition of the hypothesis is negative emotions, functioning much like a filter, can prevent the learner from making total use of the linguistic input from his environment. If learner is anxious, unmotivated, or simply lacks confidence, language acquisition will be limited. It is a pleasurable experience for learners listening to instrumental music, or singing in the target language. Music is used to evoke positive emotions which can lower the "affective filter" and bring about language acquisition.

Another theoretical supporting for using music in language class is Lozanov's suggestopedia. In the late 70s, Lozanov developed a language teaching method that focused on "desuggestion" of the limitations learners think they have, and providing the sort of relaxed state of mind that would facilitate the retention of material to its maximum potential. This method became known as suggestopedia. One of the most unique characteristics of such teaching method was the use of soft baroque music during the learning process. Baroque music has a specific rhythm and a pattern of 60 beats per minute, it can help learner increase alpha brain waves and decrease blood pressure and heart rate. Lozanov believed that it can create a level of relaxing concentration so that facilitated the intake and retention of huge quantities of material [6]. Students can absorb information "effortlessly" when learning accompany with music.

3. RESEARCH SUPPORT

An investigation of Medina' study [7] found the combination of music and illustrations resulted in the largest vocabulary acquisition. It is believed that second language vocabulary can be acquired through music. Music and its sub-component, rhythm, have been shown to benefit the rote memorization process. When various types of verbal information were presented simultaneously with music, memorization was enhanced [8]. However, Medina [1] used illustration with music and the effect of using illustration can interfere the findings in the effect of using music to a certain degree, and this would result in an inaccurate research.

3.1 The Advantages

However, no matter whether those researches support for the use of music in second language class or not, music is advantageous for many reasons can be seen in daily teaching [1]. Singing songs and listening to music are enjoyable experiences; learners are relaxed and more attentive and receptive to learn; their inhibitions about acquiring a second language are lessened. And as students repeatedly sing songs, their confidence levels will rise; even in order to splurge that they can sing foreign songs they would be more willing to learn; songs are not only easily being sung in anywhere at anytime, but also not easily be forgotten; once students can sing a song, they would never forget the content in it. All of these positive effects can prove that music works well on enhancing second language acquisition.

3.2 Using Music in Language Classroom

Some of the key elements of suggestopedia include a rich sensory learning environment, a positive expectation of success and the use of a varied range of methods. In order to find out the effectiveness of using music in language class with suggestopedia, the researcher and teacher conducted a small survey in a kindergarten's English class. She found that kids were especially motivated whenever she took the music player to the classroom; even the music was played only a few minutes in the whole class. The tolling bell was not need to announce the beginning of her class any more. Sometimes kids would start singing the latest song she taught. The advantage was more visible especially in the afternoon while many kids felt sleepy, after they sang a song, spirit instantly rushed to their somber faces. A similar survey was conducted in an adult's English class later. Although the adults did not act as excited as the kids when they heard music or songs in class, they did performance better in the follow-up sessions. For example, while asked them questions about grammatical or lexical items in the song, there was always a scramble to answer. And the classroom atmosphere was also much more lively than usual.

In a suggestopedia class, music can be used as a warm-up activity at the beginning of the class, while background music can be used during the class to create a relaxed atmosphere; to help students concentrate while reading a text; to mark a brief pause in the lesson before moving to another activity; or to break silence at the beginning of oral work done in pairs and groups. Learning accompany with background music would make students feel more relaxing and fun. Also, learning would become more effortless. Using songs at the end of a unit or a lesson can steady students' learning to a certain degree. Once while students were memorizing new words, the researcher played baroque music as the background music, adding pictures as assistant, such as slides, flash card, photographs, magazine pictures, and reproductions of painted portraits, to create a suggestopedia atmosphere, then the students' posttest shows that the effect of cognitive could come to maximum.

3.3 The Suggestions

Medina [1] proposed two principles on using music with second language learners. First, educators need to make certain that the meaning of target vocabulary is clearly being conveyed. Second, even when music is being used, teachers still need to be mindful of the important role played by sound pedagogical practices. That is, they need to fuse sound instructional strategies. Both principles remind teachers that music should be used in appropriate strategies. After all, the purpose of using music is to encourage students to participate in the class and learn more comfortably and effectively.

Plus, the selection of songs is the key in preparing lessons. What kind of music can be used? There is various music that can attract students' interest and evoke students' passion. Teachers should well prepare before starting any music activity. They need to select music that fits the activity, particularly the one that students can associate with certain cultures. Teachers may need to listen to many selections before finding the best one for an activity [9]. And what kind of song can be used? It is suggested that teachers should choose shorter pieces and excerpts rather than longer ones. Also, songs should relate to texts. The more related between songs and texts, the more helpful for students to review the lesson. Mostly, songs can be found in nursery rhyme. As many rhymes are written for the language beginners. In another words, there are fewer new words and less difficult grammatical issues in songs to review. Take the famous English nursery rhymes Ten Little Indians as an example, it makes up of three words (little, Indian, boy) and ten numbers (1-10) through the whole songs: "One little, two little, three little Indians…ten little Indian boys." As it is very easy in both grammar and vocabulary, the same sentence pattern repeat in every number as well, and most numbers that had learned in the text, so students can lip sync soon.

Also, classroom techniques should be paid attention. Sometimes music would make students too relaxed, and then they may start fidgeting and talking with each other. So teachers should be good at time control of using music as well as classroom management. Overused music would make students distract from their learning. Teachers can set a goal before playing the song. For example, ask students to listen to a song with some questions such as what you learn from the song? What is the title of the song? And so on. Also, while playing the music, teachers should stay still so as not to distract students. Students will need moments of silence after listening, especially when they are writing comments about the music. When teachers use background music, they need to check whether it is too loud or directed to only one part of the room.

4. CONCLUSION

Playing soft music to make students relax, decorating the classroom with peripheral aids to learning, making classrooms comfortable, having them assume new target language identities. A good teacher can find out thousands of methods to create a better studying atmosphere. Using music with suggestopedia is one of the most popular and effective ways. Both theory and research support the points that it can enhance the effect of teaching. Although many positive effects are seen in class, the appropriate teaching techniques should not be ignored at the same time. Teachers should use music properly with suggestopedia as good aid in order to get twice the result with half the effort in language teaching.

REFERENCES

[1]Medina, S. (2002). Using Music to Enhance Second Language Acquisition: From Theory to Practice. Language, Literacy, and Academic

Development for English Language Learners. Pearson Educational Publishing.
[2]Jalongo, M & Bromley, K. (1984). Developing linguistic competence through song. Reading teacher, 37(9), 840-845.
[3]Martin, M. (1983). Success! Teaching Spelling with Music. Academic Therapy, 18(4), 505-506.
[4]Jolly, Y. (1975). The Use of Songs in Teaching Foreign Languages. Modern Language Journal, 59(1), 11-14.
[5]Krashen, S. (1983). Principles and practices in second language acquisition. Oxford, England: Pergamon Press.
[6]Lozanov, G. (1978). Outlines of suggestology and suggestopedy. London: Gordon and Breach.
[7]Medina, S. (1993). The Effect of Music on Second Language Vocabulary Acquisition. FEES News (National Network for Early Language Learning, 6(3), 1-8.
[8]Gfeller, K. (1983). Musical mnemonics as an aid to retention with normal and learning disabled students. Journal of Music Therapy, 20(4), 179-189.
[9]Jedynak, M. (2000). Classroom Techniques: Using Music in the Classroom. English Teaching Forum. 38(4), 30.

Reflection on Practice of Aesthetic Infiltration in Aerobics Teaching

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Abstract: As one of the college sports activities, aerobics can promote students' overall development. However, in practical teaching, the teaching quality is not ideal due to the problems of single teaching mode and limited teaching resources. Thus, in order to further improve the teaching quality of aerobics in colleges and universities and students' aesthetic ability, teachers need to constantly add teaching color, innovate teaching mode and build a good teaching environment. Based on the analysis of the present situation of aerobics teaching and the significance of aesthetic infiltration in aerobics teaching, this paper discusses the practice of aesthetic infiltration in aerobics teaching, hoping to provide some references for relevant educators.

Keywords: Aerobics Teaching; Aesthetic Infiltration; Significance; Practice

1. INTRODUCTION

Aerobics can effectively improve students' physical quality, aesthetic ability and physical coordination ability, and help to cultivate students' good sports hobbies, and also have a positive impact on students' future development. But in aerobics teaching in colleges and universities, due to limited teaching resources, improper teaching methods, simple teaching content etc., not only the effect of aerobics teaching is not ideal, but students' learning enthusiasm is also relatively poor. The aesthetic infiltration in aerobics teaching can fully show the beauty of movement, body and performance of aerobics, stimulate students' interest in learning, which contribute to the smooth development of teaching activities. Therefore, this paper explores and expounds the practice of aesthetic infiltration in aerobics teaching.

2. CURRENT SITUATION OF AEROBICS TEACHING

2.1 Single teaching mode

When carrying out calisthenics teaching, teachers usually adopt the imitative teaching method. The teaching process is mainly to let students carry out independent exercises through teaching video. However, in the process of learning, students may lose interest in learning because of repetitive movement exercises, and students cannot feel the beauty of aerobics from a single movement exercise, which is not conducive to the smooth development of aerobics teaching.

2.2 Limited teaching resources

After the educational reform, the sports facilities in colleges and universities in China have been gradually improved, such as the construction of basketball courts, football fields and swimming pools. Therefore, students' enthusiasm for sports has been effectively mobilized. But compared with other sports, aerobics equipment construction is relatively backward, which is difficult to meet students' learning needs.

3. THE SIGNIFICANCE OF AESTHETIC INFILTRATION IN AEROBICS TEACHING

In college sports, aerobics has a strong sense of rhythm, energetic dance movements, can bring good visual enjoyment for people. However, in the process of aerobics teaching in colleges and universities, teachers only let students imitate the movements of aerobics, and students can't fully feel the beauty of the movement and performance of aerobics, and it is easy for students to lose interest in learning. In addition, the aesthetics infiltration in aerobics teaching can also improve students' aesthetic ability and enhance their happiness of life. In the process of learning aerobics, students can effectively exercise their bodies, develop their potential athletic talent, improve their physical coordination, enrich their daily life and play a positive role in their future development. The aesthetics infiltration in aerobics can ensure the smooth development of aerobics teaching and give full play to its own value.

4. THE PRACTICE OF AESTHETIC INFILTRATION IN AEROBICS TEACHING

4.1 Make teaching colorful

Aerobics can stimulate students' artistic cells, cultivate their sports hobbies and improve their physical quality. However, in the process of calisthenics teaching in colleges and universities in our country, the content of calisthenics teaching is too single, which causes the students' interest in learning is not high, so that calisthenics cannot give full play to its teaching value. In view of this teaching situation, teachers can permeate aesthetics into aerobics teaching content, so that students can learn to appreciate the beauty of movement, body, arrangement and performance of aerobics, so as to improve students' learning enthusiasm.

Before teaching, teachers can watch aerobics performance through mobile phones, computers and other tools, and dig into the beauty of performance and movement in aerobics, so as to clearly explain the aesthetic elements contained in aerobics to students, stimulate their interest in learning, and promote the smooth development of aerobics teaching activities [1]. In addition, the teacher can also recommend to the students the related aerobics excellent works, which students can watch and learn. In the process of teaching, teachers should extend the beauty of aerobics when teaching the steps of aerobics to students, and lead students to appreciate the beauty of aerobics range and body, so that students can fully feel the beauty of aerobics. When students learn aerobics, teachers can make students imagine the movement, verve and emotion of aerobics, which helps students to deeply feel the verve and arrangement of aerobics. Through the experience of the beauty of aerobics, students can fully stimulate their learning enthusiasm, and help improve their aesthetic ability. After teaching the aerobics movement, the teacher can play relevant film and television materials to the students, and make the students feel the beauty of the aerobics performance through the beautiful aerobics performance, which can effectively improve the students' interest in learning, enrich the students' visual feelings, and stimulate the students' enthusiasm for learning aerobics [2]. In addition, the teacher may form special professional aerobics performance group to take part in the performances during festivals, to exhibit the beauty of aerobics for all the teachers and students.

For example: after students complete learning aerobics, the teacher may invite top students to perform, which can not only bring spiritual joy and visual aesthetic feeling to students but also is helpful to stimulate students to perform and be progressive, and which also has a positive impact on aerobics teaching.

4.2 Innovative teaching mode

The purpose of aerobics teaching is not to let students master aerobics movements, but to cultivate students' sports interests, artistic elegance and taste. Therefore, teachers should change the traditional indoctrination teaching mode and integrate the aesthetic thought into the aerobics teaching so as to realize the original intention of calisthenics teaching.

In the process of aerobics teaching, the teacher infiltrates the aesthetic idea deeply, in order to increase teaching interest, promote the smooth development of teaching. In addition, in the process of teaching, teachers should take the differences of each student's aesthetic standards and learning progress into account, and carry out corresponding teaching plans according to different situations of students to ensure the quality of teaching. First of all, teachers should consider the psychological characteristics of students and combine their aesthetic standards to adopt corresponding teaching models to fully meet the psychological needs of students [3]. Nowadays, college students have more active ideas and stronger personal consciousness. Therefore, teachers should fully display the personality of college students in the process of aerobics teaching, so that students can express their views on aerobics. Secondly, teachers should frequently communicate with students to understand their aesthetic standards. In the process of aerobics teaching, teachers can ask students to do group work. Students can learn excellent performance methods and experience of other students through practicing with other members of the group, which is conducive to improving their performance ability. In addition, teachers can also use multimedia to present aerobics video for students, so that students can directly feel the beauty of aerobics performance. Finally, teachers should be aware of the status of students, and their suggestions to make corresponding teaching adjustments when teaching aerobics.

For example, in the process of aerobics teaching, the teacher can play the national aerobics competition video to the students and analyze the skills of each aerobics movement for the students. In the meantime, the teacher can ask the students to share their views on the aerobics performance. After that, the teacher combined the students' viewpoints and explained the beauty of aerobics movement, charm and performance, so that the students could deeply feel its aesthetics.

4.3 Create a good teaching environment

Environment also has a great influence on people. When aesthetics is permeated into aerobics teaching, teachers may ignore the environment. The elegant environment brings the most direct and rapid aesthetic feeling to the students, and enables them to quickly integrate into the class activities with aerobics. Therefore, the penetration of aesthetics in aerobics teaching can start from the construction of a good teaching environment, so that students can experience the artistic beauty of aerobics through a beautiful teaching environment [4].

5. CONCLUSION

In a word, the penetration of aesthetics in aerobics teaching can make students fully feel the beauty of aerobics, enhance students' aesthetic consciousness, and promote their overall development. Therefore, it is feasible to practice aesthetic infiltration in aerobics teaching.

REFERENCES

[1] Yue Juan. Study on the characteristics, functions and methods of aesthetic infiltration in aerobics teaching [J]. Contemporary sports science and technology, 2016,6(34):60-61.

[2] Chen Rong. Exploration and thinking on aesthetic infiltration in aerobics teaching [J]. Contemporary physical education technology, 2016,6(12):88-89.

[3] Qixiang. Research on the significance and path of aesthetic infiltration in aerobics teaching [J]. Journal of Lanzhou university of arts and sciences: natural science edition, 2016, 30(4):121-124.

[4] Ge Zhibin. Exploration and reflection on aesthetic

infiltration in aerobics teaching in colleges and universities [J]. Contemporary sports science and technology, 2017, 7(8):135.

The Current Macro System and Micro Willingness to Pay of the Basic Endowment Insurance: Evidence from China’s Migrant Population

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Abstract: China’s largest migrant population flow in the world history makes it a persistent theme to focus on the status quo and payment willingness of the basic endowment insurance of this special group. From the macro perspective, China's basic endowment insurance system has gradually improved since 2009, and starting from 2010 the participation number in it increased rapidly in the first two years, and then increased steadily. Geographically, the coverage rate of the insurance is highest in central regions, while lowest in northeast regions. Demographically, the aging tendency of migrant population aggravates the burden of the endowment. From the statistical perspective, using the database from Rural-urban Migration survey in China (RUMiC) in 2017, we conclude that the paying proportion of enterprises in employees’ insurances is not optimistic, the migrant population’s payment willingness is not so high because of their low institutional cognition. Therefore, policy proposals on improving the average coverage rate of migrant population’s urban basic endowment insurance, alleviating the aggravating burden of endowment caused by the aging tendency, and alleviating the problem of their low payment willingness in urban basic endowment insurance are advisable.
Keywords: the basic endowment insurance; migrant population; status quo; payment willingness.

1. INTRODUCTION

Since the implementation of the Reform and Opening-up policy, China’s society and economy have been progressing rapidly. As a factor of production, migrant population has a positive effect on social and economic development. Especially since the 1990s, the restriction of the household registration system has been gradually easen, and China’s population has entered a period of rapid migration [1]. With the rapid industrialization and urbanization, China has the largest migrant population flow in the world history. According to the 2018 report on the monitoring and investigation of migrant workers (The 2018 report on the monitoring and investigation of migrant workers is based on China Migrants Dynamic Survey (CMDS)), the scale of migrant population has changed from the previous continuous rise to a slow decline since 2015, declining for three consecutive years. That is to say, the total migrant population in China was 247 million in 2015, down by about 6 million compared with 2014. In 2016, the migrant population of China was 1.71 million less than that of 2015, and in 2017, it continued to decline by 820 thousand. By 2018, China’s migrant population has dropped to 241 million, but the scale is still high. China’s urban-rural dual system makes this group unique. Because China’s urban-rural dual system has been closed for long, the social development gap between urban and rural areas has been expanding, and most of the migrant population’s household registration (hereafter referred to as Hukou) and work place are separated. Further restricted by the social security system and obstructed by employed enterprises, it is difficult for migrants to enjoy the same welfare benefits as urban residents. Therefore, restricted by Hukou, social security and other macro institutional factors, the migrant population is faced with the embarrassing situation of "semi-urbanization" [2]. It is precisely because of this reason that our study of their social security problem, insurance, makes sense.

Since 2009, the social security system for the migrant population has been gradually improved. At the macro institutional level, the government has basically solved the problem that the social security of migrant population is optional and transferable, and also narrowed the gap between the migrant population and the local population in the level of social security [3]. The current basic endowment insurance system in China includes three aspects: the endowment insurance for urban workers, the endowment insurance for urban residents and the new rural endowment insurance. The latter two systems were merged into the endowment insurance for urban and rural residents in 2014 [4]. By 2018, the number of people participating in China’s basic endowment insurance system has reached 942.93 million, an increase of 3% over the previous year. Among them, 419.02 million people have participated in the basic endowment insurance for urban workers and 523.92 million people have participated in the basic endowment insurance for urban and rural residents (Data are from the 2018 statistical bulletin on the development of human resources and social security undertakings). For the migrant population, their Hukou are in the countryside but they work in the city, and their trend of settling in the city is increasingly obvious. The implementation of the one-child policy, and the aging tendency of population in China have led to a reduction in the traditional family pension supply [4]. In this situation, the need for social endowment insurance to defuse the risk of aging is extremely urgent.

What's more, what is the China's status quo of the migrant population's payment willingness to participate in social basic endowment insurance in urban areas?

Vast literature and researches suggest that whether migrant workers participate in the basic endowment insurance in urban areas mainly depends on five aspects: individual characteristics, work and enterprise characteristics, family factors, institutional satisfaction and cognition, and citizenization tendency. For instance, Guo [6] believes that individual characteristics have a more prominent influence on the willingness to participate in endowment insurance, while the actual enrollment is more influenced by the enterprise characteristics. Dai and Lu [7] believe that payment willingness in endowment insurance is influenced by enterprise characteristics and institutional cognition. Hu and Li [8] believe that age, education level, and working years have significant positive correlation with insurance participation intention. The institutional satisfaction and cognition, and citizenization tendency have direct positive influence on the willingness of migrant workers to participate in endowment insurance. Working status has positive indirect effect on the payment willingness in insurance, but family support has negative indirect effect. Wang and Wei [9] suggest that age, working hours per year on average, whether the enterprise is insured for employees and whether a family member insures four factors significantly influence on migrant population's payment willingness. And age, education, occupation, the number of sons, whether the enterprise is insured for employees, as well as institutional satisfaction have a great effect on the types of social endowment insurance. Therefore, the analysis of migrant population's willingness to pay for urban endowment insurance is worth discussing.

Our research aims to: firstly, from the macro perspective, we introduce the development of China's basic endowment insurance system, and the status quo of insurance participation, such as the number of insurance participants, coverage by region, and aging migrant population's insurance status. Secondly, from the statistical perspective, we introduce the willingness of the migrant population to pay the basic endowment insurance in urban areas, compared with the basic endowment insurance in rural areas. Using the highly representative database of rural-urban migrants in China (RUMiC) in 2017, we analyze the status and causes of their willingness to pay for basic urban endowment insurance. These two aspects jointly test prevailing notion that the endowment insurance problem of the migrant population has been concerned about, so as to put forward valuable countermeasures and suggestions for improving the social insurance situation of them.

2. DATA AND METHODS

Our data comes from the survey of Rural-urban Migration in China (RUMiC), which has been carried out by Jinan University until 2018 to estimate the characteristics of China's migrant population from rural to urban areas. Nine issues of the survey have been conducted so far, and we use the latest public data from 2017. The RUMiC survey covered 15 large and medium-sized cities in China (Shanghai, Nanjing, Wuxi, Hangzhou, Ningbo, Hefei, Bengbu, Zhengzhou, Luoyang, Wuhan, Guangzhou, Shenzhen, Dongguan, Chongqing and Chengdu), which came from nine provinces and municipalities with frequent migrant population flow. Geographically, these 15 cities cover the eastern, central and western parts of China. In terms of city scale, it covers large and medium-sized cities. Because China' s urban-rural dual structure has long been closed and the gap between urban and rural social development has been expanding, most of the migrant population' s Hukou and workplace are separated [2]. Because large numbers of migrants live in factory dormitories and construction sites, traditional surveys ignore this part of the migrant population. To make up for this deficiency, RUMiC survey creatively uses the workplace address instead of the residential address as sampling unit, so it can make a representative and accurate analysis of the migrant population in China.

The questionnaire mainly includes two parts. One is the basic information of the respondents, such as gender, age, education level, marital status, occupation, migrant time and monthly income level. The other is the basic situation of social insurance in urban and rural areas, including the participation rate, payment willingness and recognition degree of endowment insurance. We exclude the samples of other family members and keep only the samples of household heads and their spouses to form the couple-based sample groups, leaving us with 6,844 samples out of 10,426 from the full sample.

3. DEVELOPMENT OF ENDOWMENT INSURANCE SYSTEM AND THE STATUS QUO

3.1 Development of Endowment Insurance System

Since 2009, the social security system related to the migrant population has been improved gradually [3]. In 2009, China started the pilot program of new rural insurance and established a moderately inclusive basic pension, which was partly funded by government financial subsidies. This institutional arrangement improved the security level, the fairness of pension and the degree of inclusive benefit [10]. In

2009, the promulgation of the interim measures for the transfer and continuation of basic endowment insurance for urban enterprise employees basically solved the three problems of portability loss, narrow coverage and fragmentation of the system, which is a landmark event of deepening the system reform [11]. The implementation of "urban - urban" and "urban - rural" endowment insurance transfer and succession systems satisfies the realistic demand of urban-rural development. It not only solves the problem of portability of social security benefits for the migrant population, but also effectively solves the problem of retirement insurance for migrant workers, reduces the gap of endowment security between urban and rural areas caused by the household registration system, and meets the practical needs of urban-rural pooling [12]. Yang et al. [13] believe that the interim measures for the transfer and continuation of basic endowment insurance for urban enterprise employees, and the interim measures for linking urban and rural endowment insurance systems integrate the three major social endowment insurance relationships and standardize the transfer and continuation procedures. With the promotion of the system, the migrant population can choose the insurance system suitable according to their occupation, residence place, household registration and other conditions. In 2014, the implementation of the basic endowment insurance system for urban and rural residents further improved the payment level of the endowment insurance fund, which was conducive to the establishment of a fair social security system [14].

Table 1. Relevant laws, regulations and systems concerning the endowment insurance of migrant population in China since 2009

Time	The enacting authority & the number of the document	Content
September, 2009	Issued by the state council, No. 32	Guidelines of the state council on carrying out the pilot project of new rural social endowment insurance
December, 2009	Issued by the office of the state council, No. 66	Interim measures for the transfer and continuation of basic endowment insurance for urban enterprise employees
2010	Order of the President of the People's Republic of China, No. 35	Social security law of the People's Republic of China
2014	Issued by ministry of human resources and social security, No. 17	Interim measures for linking urban and rural endowment insurance systems

3.2 Status Quo of Basic Endowment Insurance

In 2018, the total revenue of the national basic pension fund was 5.51 trillion yuan, and the total expenditure of the national basic pension fund was 4.76 trillion yuan, leaving a total balance of 58.15 trillion yuan in China.

Time perspective analysis: In order to observe the participation of basic endowment insurance in time scale, we collected data from 2010 to 2018 for comparative analysis, as shown in Figure 1. Because in 2010, China not only conducted the sixth census of population, but also formally implemented the relative endowment insurance policy, we chose it as the starting point.

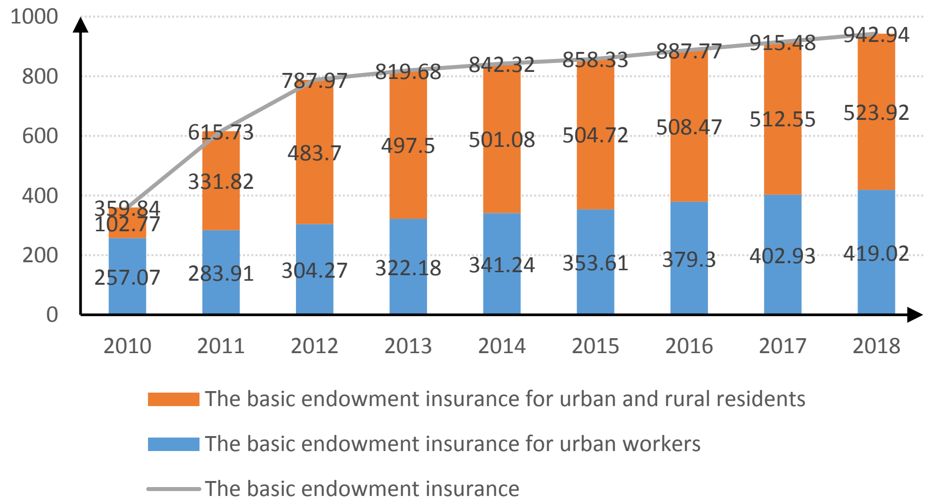

Figure 1. The participation number of the basic endowment insurance for urban workers vs. for urban and rural residents from 2010 to 2018 (million)

Note. The number of people participating in the basic endowment insurance from 2010 to 2018 are from the 2019 China statistical yearbook.

From Figure 1, we concluded that, starting from 2010, the number of people participating in the basic endowment insurance increased rapidly in the first two years, and then increased steadily. In detail, by the end of the year of 2018, 942.9 million people have participated in the basic endowment insurance, an increase of 27.5 million over the previous year. On the one hand, 419.0 million people have participated in the basic endowment insurance for urban workers, an increase of 16.1 million over the previous year. Among them, the number of insured workers was 301.0 million, an increase of 8.4 million over the previous year. On the other hand, 523.9 million people have participated in the basic endowment insurance for urban and rural residents, an increase of 11.4 million over the previous year. Among them, 159.0 million people actually received benefits (The data are from the 2018 human resources and social security development statistical bulletin).

Regional analysis: According to the data from 2019 China statistical yearbook, we collected the number of participating in the basic endowment insurance and the number of population at the end of year of 2018 in various regions of China, and calculated the coverage rate of the basic endowment insurance in each region as shown in Table 2. By 2018, the number of people participating in the basic endowment insurance in China has reached 942.9 million and the total population has reached 1395.4 million. Therefore, national coverage rate of the basic endowment insurance is nearly 67.6 percent.

Table 2. The basic endowment insurance coverage rate in different regions

Eastern Regions	Coverage Rate	Central Regions	Coverage Rate	Western Regions	Coverage Rate	Northeastern Regions	Coverage Rate
Beijing	87.97	Shanxi	65.01	Inner Mongolia	58.54	Liaoning	69.64
Tianjin	54.13	Anhui	73.21	Guangxi	55.13	Jilin	57.20
Hebei	67.47	Jiangxi	63.19	Chongqing	69.98	Heilongjiang	58.45
Shanghai	68.16	Henan	73.81	Sichuan	69.13		
Jiangsu	68.95	Hubei	65.65	Guizhou	67.85		
Zhejiang	71.14	Hunan	69.68	Yunnan	61.64		
Fujian	65.97			Xizang	61.66		
Shandong	72.80			Shaanxi	70.75		
Guangdong	66.81			Gansu	67.19		
Hainan	59.55			Qinghai	64.79		
				Ningxia	57.78		
				Xinjiang	57.35		
Average coverage rate	68.29		68.42		63.48		61.76

Note. The number of people participating in the basic endowment insurance and the total population number at the end of the year of 2018 in each region are from the 2019 China statistical yearbook.

Table 2 shows that the average coverage rate of the basic endowment insurance in central regions of China is the highest, while that in northeast regions of China is the lowest. The average coverage rates of basic endowment insurance in the eastern and central regions exceede 68%, significantly higher than that in the western and northeastern regions. For instance, the provinces of Beijing (up to 88%), Shandong, Zhejiang, Anhui, Henan and Shaanxi that are mostly belonging to the eastern and central regions have very high insurance coverage. Therefore, it is advisable to learn from the mature development experience of these provinces.

Demographic analysis: Migrant population is facing the problem of population aging. According to the 2018 report on the development of China's migrant population, the size of the elderly migrant population has continued to increase and has grown rapidly since 2000, from 5.03 million in 2000 to 13.04 million in 2015, with an average annual growth rate of 6.6 percent. The proportion of middle-aged and elderly migrant population increased slightly between 2000 and 2015, reaching 4.9% in 2000 and 5.3% in 2015. It can be seen that the increasing number of elderly migrant population makes the pension problem worthy of attention. According to the 2016 national assessment report on China's aging and health, addressing the health and social security needs of the elderly among the migrant population faces four challenges: affordable services, equitable distribution of service resources, efficient and quality services, and adequate reimbursement rates. The aging of the population continued to deepen, the expenditure of urban pension funds continued to increased, and the source of income from pension insurance for urban workers continued to decreased [15].

4. PAYMENT WILLINGNESS FOR URBAN BASIC ENDOWMENT INSURANCE

First of all, we learn whether migrant population is involved in urban basic endowment insurance through question 1, and whether those who are not involved in urban basic endowment insurance are willing to pay through question 2. The results are shown in Table 3.

Table 3. Participation in urban basic endowment insurance and willingness to pay

Questions	Answer	Percent
Q1:Do you have urban basic endowment insurance at present?	Yes. The employer bears the insurance.	1.87
	Yes. The respondent bears the insurance.	9.70
	Yes. The employer and respondent bear the insurance together.	23.37
	Yes. But it is not clear who bears the insurance.	0.20
	No.	64.03
	Don't know.	0.63
	Others.	0.20
Q2:Do you plan to participate in the 2017 urban basic endowment insurance？	Yes.	15.76
	No.	81.98
	Others.	2.26

The results showed that 36% respondents participated in urban endowment insurance, in which 23% of insurances were paid by enterprise and oneself, 9.7% paid by oneself, and only a very small part (less than 2%) undertaked medical insurance completely by the enterprise.

Whereas 64% did not participate in the urban endowment insurance. For those who did not, 82% were not willing to participate.

Then, through question 3, we conducted an in-depth investigation on the reasons for not participating and not willing to pay for the urban basic endowment insurance. The results were shown in table 4.

For those who were not willing to participate, about 23% were not willing to pay because they did not know about endowment insurance, while most (77%) knowed about endowment insurance but were not willing to pay for various reasons. Reason analysis were as follows. 33.7% couldn't afford to pay for it, and 15.4% didn't think it necessary to participate in endowment insurance because they didn't pay enough attention to it. 5.5% believed the endowment insurance in rural areas enough.

Finally, through question 4, we investigated the monthly price that the non-participating groups were willing to pay for the urban basic endowment insurance, and measured their willingness to pay for the insurance indirectly, as shown in table 5.

For those who did not participate, most (54.5%) were willing to spend less than 300 yuan to buy urban endowment insurance at most every month, which also indicated that migrant population had little willingness to pay urban endowment insurance.

Table 4. Reasons for not participate in and no willingness to pay the urban basic endowment insurance

Question 3	Answer	Percent
Why don't you have urban basic endowment insurance and have plan to participate?	Never heard of or not informed	23.83
	Informed but migrant workers are not allowed to participate in.	2.62
	Informed but couldn't afford it.	33.68
	Informed but feel no need to participate in.	15.41
	Informed. Employers substitute a salary increase for insurance.	0.75
	Informed. Employers neither buy insurance nor raise salaries.	1.27
	Informed but the procedure for insurance is troublesome.	1.93
	Informed but there is possibility to change jobs.	4.03
	Informed but feel rural basic endowment insurance is enough.	5.53
	Others	10.95

Table 5. Monthly price that the non-participating groups are willing to pay for the urban basic endowment insurance

Question 4	Answer	Percent
If an endowment insurance can make your monthly salary half of the social average level of work site from retirement paying for 15 years, how much money at most is you willing to pay for it every month?	Less than 200 yuan.	28.09
	200 yuan to 300 yuan.	26.40
	300 yuan to 400 yuan.	10.71
	400 yuan to 500 yuan.	12.33
	500 yuan to 600 yuan.	8.04
	600 yuan to 700 yuan.	2.19
	700 yuan to 800 yuan.	1.88
	800 yuan to 900 yuan.	0.90
	900 yuan to 1000 yuan.	1.94
	More than 1000 yaun.	1.56
	Others	5.96

5. CONCLUSIONS

Our analysis contributes theoretically and macroscopically to introduce the institutional system and the status quo of the basic endowment insurance in China. Using the representative database from RUMiC in 2017 statistically, we analyzed the willingness to pay for the insurance of the increasingly concerned migrant population group, which supports technically for policy proposals to improve migrant population's social security in urban areas.

Our study made several important contributions. Firstly, starting from 2010, the number of people participating in the basic endowment insurance increased rapidly in the first two years, and then increased steadily. And the average coverage rate of the basic endowment insurance in central regions of China is the highest, while that in northeast regions of China is the lowest. The average coverage rates of basic endowment insurance in the eastern and central regions are significantly higher than that in the western and northeastern regions. And it is advisable to learn from the mature endowment insurance's developing experience of mostly eastern and central regions like Beijing, Shandong, Zhejiang, Anhui, Henan and Shaan.

Secondly, the aging tendency of migrant population aggravates the burden of the endowment. The ageing of the population will not only increase the cost of pensions directly, but also cause the share of health spending in GDP to rise sharply. Delaying the legal retirement age and adjusting the birth policy are effective measures to realize the sustainable development of the endowment security system [16]. What's more, affordable services, equitable distribution of service resources, efficient and quality services, and adequate reimbursement rates are the four major challenges to address the health and social security needs of the elderly.

Thirdly, the paying proportion of enterprises in employees' insurances is not optimistic. No more than a quarter of the urban basic endowment is paid by the enterprise and their own, only a small part are paid totally by the enterprise. Therefore, enterprises should increase the proportion of insurance borne by migrant population's enterprises. As a part of urban workers, the migrant population should enjoy the right of the employer to buy endowment insurance. Fortunately, according to the reform plan for the collection and management system of national and local taxes issued by the state office of the CPC central committee starting from January 1, 2019, the migrant population will be subject to the unified purchase of social security by the enterprises or units where they work. And all kinds of employee insurances, including endowment, medical care, unemployment, work-related injury and maternity, will be collected by the tax department. This means that companies must make it compulsory to pay insurance for every migrant worker. In addition, a large proportion of the migrant population choose not to participate because they cannot afford it. Therefore, all kinds of private economic organizations should bear the system cost of social security construction, and handle the social insurance affairs of employees properly [17].

Fourthly, the payment willingness of the urban basic endowment insurance for migrant population is not so high because of their low insititutional cognition. Most of the migrant population do not have the willingness to pay because they do not know endowment insurances throughly, so they do not think it necessary to participate in them. One of the reasons is that the education level of migrants is not so high as well as few information acquisition channels. Besides, the propaganda and popularization efforts of the government are not enough. Therefore, promoting the policy and popularizing the two insurances for migrant population are vital. For example, targeted improvements can be made in the promotion methods so as to fit in with the actual needs of migrant workers, and achieve "effective publicity" instead of formalism [18].

Based on the above policies and conclusions, we aim to improve the average coverage rate of migrant population's urban basic endowment insurance, alleviate the problem that the aging tendency of them may aggravate the burden of endowment, and alleviate the problem of their low payment willingness in urban basic endowment insurance.

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REFERENCES

[1] Qiao, X. C., & Huang, Y. H. (2013). The situation of cross-provincial floating population in China: analysis based on the data of "six universal policies". Population and Development, 19(01):13-28.

[2] Yu, Y., Han, W. S., Jiang, Y., & Xu, Z. (2018). Status evaluation and countermeasures of migrant workers' participation in medical insurance in the new era. Guangxi Social Sciences, (10):154-159.

[3] Yu, L. Y. & Shi, Q. L. (2019). Review on the development and research of social security for floating population in China in the past 40 years of reform and opening-up. Social Security Research, 62 (01), 97-104.

[4] Pei, J. (2017). Study on pension insurance participation of floating population in China. Volume, (24) : 273-273.

[5] Wu, Z. H. & Chen, D. Y. (2013). Investigation on social insurance status of floating population and countermeasures: a case study of jinan, shandong province. Exploration, (01):155-160.

[6] Guo, Y. (2010). Demand and reality: analysis of influencing factors on the participation degree of pension insurance for migrant workers :an investigation based on data of 7 cities. Journal of agricultural technology and economy, (11):37-45.

[7] Dai, J. J., Lu, C. X., Wu, Y. J., & Chen, Z. Y. (2018). Analysis on the participation behavior and influencing factors of migrant workers' pension insurance -- based on the survey data of zhejiang

province. China Market, (07):58-61+63.
[8] Hu, F. X., Li, Y. M., & Wang Y. B. (2019). Empirical study on the status quo and influencing factors of migrant workers' participation in the basic endowment insurance for urban enterprise employees. China Labor, (07):39-50.
[9] Wang, C. Q., & Wei, C. N. (2015). Analysis on participation behavior and influencing factors of social endowment insurance for migrant workers based on field investigation in wuhan and nanning. Journal of Huazhong Agricultural University (social science edition), (01):39-47.
[10] Lu, H. Y. (2009). Major breakthrough and policy orientation of the new endowment insurance system with Chinese characteristics. Social Security Research, (6).
[11] Zheng, B. W. (2010). The transfer of pension insurance relationship affects the lives of hundreds of millions of people. Shanghai Securities News.
[12] Sha, Z. H. & Luo, J. (2012). Research on the relationship transfer and continuity mechanism of migrant workers' basic endowment insurance. Economic Restructuring, (2).
[13] Yang, H. & Cao, Y. F. (2013). Analysis and Suggestions on the policy of linking urban and rural social endowment insurance transfer. Journal of Northeast Agricultural University (social science edition), 11 (4).
[14] Sui, D. C., Dong, L., & Zhang, S. T. (2014). Reflections on the merging of endowment insurance for urban and rural residents. Beijing Social Sciences, (7).
[15] Guo, T. (2019). Impact of fertility policy and demographic structure on pension fund of urban workers. Economic Research Guide, (10):59-60+108.
[16] Yu, H., & Zeng Y. (2015). Retirement age, fertility policy and sustainability of China's basic pension fund. Journal of Finance and Economics, 41(06):46-57+69.
[17] Liang, X. J., & Liu, P. Q. (2010). Status quo and countermeasures of rural migrant workers participating in four social insurance schemes: based on a questionnaire survey of 1,702 samples in five cities (districts) of zhejiang, fujian and tianjin. World of Labor Security (theoretical edition), (02):28-36.
[18] Gu, Y. T., & Wei, W. S. (2017). Analysis on the pension insurance participation demand of migrant workers from the perspective of urbanization. Financial Economy, (10):15-19.

Strategies and Approaches for Traditional Hua-gu Music to Absorb Elements of Modern Music

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Abstract: Changsha Hua-gu opera (AKA Flower Drum) originated from folk songs all over central Hunan Province. It was developed and formed on the basis of "Duizi Hua-gu" sung by character of Chou and Dan. Its development is inseparable from the prevailing ground drum, lantern and bamboo horse lantern in this area of Hunan. From the early Qing Dynasty to the middle, this kind of Hua-gu opera relying on regional culture gradually spread and developed. Drinking tea and listening to opera became a way of life for a long period of time.

However, from the perspective of the development of traditional Chinese opera, the generation gap between the musical form represented by Hua-gu opera and modern music is getting wider and wider. This kind of music is not about who is advanced and who is backward. From the perspective of music, there is no such thing as lag behind, only the diversity of artistic expression techniques.

Then can Hua-gu music be improved with the help of some arrangements and performances of modern music? The answer is certainly yes. Only by absorbing the essence of modern music can it best inherit and carry forward traditional national music.

Whether the music presented in traditional Hua-gu opera can absorb the elements of modern music or not, it is very important not to destroy the characteristics of Hua-gu music itself. To understand the characteristics of Hua-gu music, corresponding strategies can be formulated.

Hua-gu music refers to the musical expression of Hunan Hua-gu opera, which is an important component of ancient Chinese operas (mainly the development after the middle of Qing Dynasty). It was formed in the middle of the Qing Dynasty, born and developed among people, spread and inherited as the folk or local opera.

Due to different local customs and different musical expressions, six kinds of local Hua-gu operas with different regional styles have been gradually formed, especially in singing, which present distinct Hunan local characteristic and local people's daily life.

However, with the diversification of musical expression in modern society, the musical expression of Hua-gu opera is somewhat isolated and eventually hit its trough. We do not want the traditional Hua-gu opera to be forgotten, and all the musical expressions representing the carrier of Chinese culture can be kept intact.

Keywords: Hua-gu Opera, Traditional Music, Modern Music.

1. THE PRELIMINARY FORMATION OF HUA-GU OPERA

Hua-gu opera has a long history, but it was recorded in the local Chronicles of Shimen county in northern Hunan in the late Qing Dynasty. This is mainly because it was not a mainstream opera at that time, and the government didn't pay much attention to it until the founding of P.R.C [1].

According to the county annals in Jiaqing years of Qing Dynasty, the Hua-gu opera has already formed as a Dan and a Chou character sing together. Till the first year of Tongzhi years, Hua-gu opera has developed into “Three Small” namely Small Dan, Small Chou and Small Sheng opera, its performance form has begun to take a certain scale.

In the early stage, Hua-gu opera was based on folk melody, mainly in the form of humming, singing and dancing with Pai Tongs. Simple performing style with very few plays, it was a bit like a small theater show which normally performed at tea house or restaurants.

Lacking of formal stage performances led to low social status. The performers were often discriminated against and banned, until the early years of the Chinese Republic, when Hua-gu opera was trending to presenting multiple pieces and forms. In order to survive, all the Hua-gu opera troupe were performing the local popular drama as a cover, under the name of a famous troupe, which helped the opera to retain and develop.

With the enrichment of repertoire, the content of Hua-gu opera also changes from simple life to a more complex level, and the folkloric repertoire with strong stories gradually emerges. Hua-gu opera therefore graduate produced other performance means, especially in the drums and accompaniment tunes accordingly approached to the popular dramas. In the way of performing different pieces of different types of drama, the performance catered to audiences with various hobbies and was widely welcomed. Today, some rural folk small troupes still perform in this way. This kind of drama is accompanied by and mixed with small drama, which is interspersed with the stage performance of the drama. For Hua-gu opera, the relatively perfect system and strict performance procedures, such as the standard blanket skill and handle skill, make Hua-gu opera more mature in the performance art. It is particularly important that the expression of the opera vocal cavity has a great influence on the opera vocal cavity and promotes the development of Hua-gu opera.

2. THE STATUS QUO OF HUA-GU OPERA

With the emergence and development of six kinds of Hunan opera, after hundreds of years of self-exploration, its content has been highly enriched. The cavity tone began to show more diversified especially in the period of the Republic of China, which made the opera once the rage into the mainstream society of the entertainment circle. It had been highly acknowledged officially and thus developed largely.

Hua-gu opera had more than 400 themes, focusing on the folk life, and joys and sorrows of the low-level production worker class. Their themes were particularly in combination with the local marriage stories and family conflicts, which are quite characteristic. Its liveliness of expression of the language, together with the characteristics of regional rural life, made the opera popular in mainstream society.

After the founding of the P.R.C., Hua-gu opera art has a larger development, arranging a batch of popular and classic songs such as "Liu Hai Cut Firewood", as well as traditional drama, such as "Shoot Bird". It also produced some with era characteristic like "Double SongLiang", "Busy Anties", "Three Mile Bay" and so on. Later on, some was produced into films and television drama on screens such as "Play Bronze Gong", "State of Wild Ducks", etc., which received very good ticket returns at the time and raised a great sensation.

In 2011, Hunan Hua-gu opera was included in the second batch of national intangible cultural heritage list of China, which also means the recognition and protection from the central government, is worthy of celebrating. But at the same time, we also need to see that opera art emotion from the audience has been constantly dilute. With this desalination and the cold market, the opera editing team is facing problems of brain drain and no successor. After the arrival of the Internet era, with the diversified development of network digitalization, a number of new media forms have emerged, which have brought huge impact on the folk traditional art. The once numerous Hua-gu opera troupes are now rare and unsustainable. The main problem is lack of fund support. Due to the market situation of Hunan Hua-gu opera, some good actors changed industry to make their livings. The number of performers in Hunan Hua-gu opera has decreased from tens of thousands to hundreds of people. Hua-gu opera is facing a critical survival crisis and must be changed or reformed urgently [2].

3. HOW TO BETTER INHERIT AND CONNECTION BETWEEN HUA-GU OPERA AND MODERN MUSIC

In view of the inheritance of Hua-gu opera, the author thinks that it should be strengthened from two aspects. First is theoretical research and study, the second is technical salvage and sorting. In the current era with rapid development of information technology, effective analysis and preservation is a must, especially by using new media. Thourough theoretical researches on different historical stages of Hua-gu opera is indispensable, which will fully reflect the historical value of each stage.

Also, strengthening the salvage and protection of Hua-gu opera is necessary. Professionals needed to establish archives for the endangered Hunan Hua-gu opera script, making standardized musical scores, recording the old artists' singing and stage performance. At the same time, we should collect those opera repertoires that have a deep mass basis, wide influence, great potential for development, as well as strong ideological, artistic and ornamental value, and cultivate some representative high-quality operas to form their characteristics [3].

Finally, self-innovation of Hua-gu opera is expected to be strengthened. By effectively combining the creation of traditional Hua-gu opera with modern music, modern music elements will be integrated into this historical drama. At the same time of the integration, it is important to reflect the local cultural characteristics. In terms of artistic pursuit, art may not meet the needs of all people, but artistic expression must be advanced, must be able to guide and inspire people's aesthetic needs.

In practice, it is necessary to modernize and diversify accompaniment instruments and methods, so as to meet and achieve the perfect combination of accompaniment instruments and singing. At this point, Hua-gu is deficient due to its single expression form. To produce better Hua-gu opera, a better management mode of Hua-gu opera troupe at the same time is compulsory. Establishing a management mode which is flexible and attractive like modern enterprise managements, talent performers then will be better attracted and retained. Make good use of the new media to maximize the dissemination.

4. STRATEGIES AND METHODS OF HUA-GU OPERA IN ABSORBING MODERN MUSIC ELEMENTS

4.1 Design of the whole plan

In designing Hua-gu opera, we should not only preserve the classical beauty but also the modern creation beauty. That's the key point of the dual perspectives of nationality and modernity in the development of opera music. We can then establish the dual musical sense of Chinese and foreign music culture. For example, large modern opera "Qi Baishi" is a typical combination of the Hua-gu opera, folk songs, country-side music and modern music element. While retaining Hua-gu music features, it well integrated local characteristics and modernization.

Based on the reality of the drama performance, it inherits the freehand tradition, uses traditional way of opera speaking, and makes tremendous innovation, making it a popular modernized opera.

4.2 Music arrangement

Retaining traditional opera instruments in music arrangement, and integrating into modern western musical Instruments at the same time such as keyboard, Celesta, bass, sand hammer and strings. Keyboard music is variable and full of tension. Bass helps strengthen the rhythm. Strings bring more dimensions. All these make Hua-gu opera to better display as the power of a music language, perfectly enrich the sound performance.

The arrangement of traditional opera is relatively single. Using traditional folk instrument in a way of modern music arrangement is inevitable, which helps enriching the form of music, combining instruments of traditional and modern ones. This is particularly important.

4.3 Creation techniques

A large number of creative techniques of modern music and symphonic music are integrated into the dramatic performance of Hua-gu opera, which solves the relatively single acoustic performance and makes the dramatic expression more plentiful. For example, dissonant second string high builds an uneasy mood, which can’t be created by traditional folk musical Instruments. The resonance sound of symphonic orchestra expresses angry mood. This had been presented in the Chinese traditional operas. PAD music is used in expressing the gloomy mood of a sacrifice ceremony etc., These elements of modern music are integrated into Hua-gu opera, which enrich the expression of the drama performance, and help shape the characters with the distinctive characteristics.

4.4 Efficient usage of musical symbols

China is a multi-ethnic country with different nursery rhymes. They may be modern music, may also be a folk or even a kind of singing without instruments, expressing distinct regional styles. The combination of nursery rhymes and Hua-gu opera is beneficial to the unidirectionality of regional culture. When the characters from different regions appear, they can quote the melody of local folk songs, which can play a good role in identification, and is very helpful for displaying the national style or regional characteristics of the characters [4].

4.5 More practice in combining modern music with Hua-gu Opera

To improve people's appreciation of Hua-gu opera requires a good combination of Hua-gu opera and modern music. Hua-gu opera is facing a modern audience group, if there is no audience, there will be no drama. What the modern audience need is Hua-gu opera with the characteristics of the current age, or an innovative Hua-gu musical expression form.

Hua-gu opera should not be changed for the sake of the market. It still needs to maintain its own characteristics, but to add the expression of modern music to improve the artistic accomplishment of the opera.

5. CONCLUSION

As a local opera, Hua-gu opera needs the modernization of music to adapt the local opera music to the needs of modern life. From this point of view, on the premise of maintaining its characteristics, Hua-gu opera needs more innovative creation of accompaniment arrangement and expression form in order to better display itself. It should not only keep the strong characteristics of traditional opera music, but also blend into the music with a distinct flavor of the modern times, so as to meet the aesthetic needs of the contemporary audience.

REFERENCES

[1]Ouyang Juewen, Liu Zhaoqian, (2005) Selected Famous Parts of Hunan Hua-gu Opera. Changsha: Hunan Literature and Art press.

[2]Dai Liming, (2006) Study on Local Opera Rhymes. Beijing: Commercial Press.

[3]Zhao Hui, (1995) Research on the Cultural Background of Hunan and Chu. Wuhan: Hubei Education Press.

[4]Tan Liqin, (2003) Cultural Value Analysis of Hunan Dihuagu. Journal of Loudi Teachers College. 04.

Research on the Growth Strategy of Chinese Young Management Teachers

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Abstract: This paper first analyzes the challenges confronted by Chinese young management teacher from social practice, academic research, teaching and family life, not only did these challenges have serious obstacles on young management teacher's healthy growth, but also have important effect on the development of the whole management discipline. On this basis, we use system dynamics analysis the formation mechanism of various challenges and the mutual relationship between them. Finally, in order to promote the healthy growth of young management teacher, to solve the differences and conflicts between stakeholder evaluation standards, we put forward the specific strategies to meet the challenges from into new team, taking an active part in academic meeting, applying for professional degree course and promoting teaching effect.

Keywords: Young management teacher (YMT); Growth; Challenge; Strategy

1. INTRODUCTION

Chinese educator Mr. Mei Yiqi has a famous saying: "The so-called 'University' is not meant to have a building, but also a master." That is to say, the development of a university depends on the development of teachers [1]. Young teachers are an important part of the university faculty and a reserve force for university development [2]. With the economic and social development, the growth of young teachers faces severe challenges [3].

As the size of the university continues to expand, the number of young teachers is increasing. According to the latest statistical data provided by the Department of Development Planning of the Ministry of Education of the People's Republic of China, in 2016, the proportion of teachers under the age of 30 in ordinary colleges and universities was 13%, and the proportion of teachers under 35 was 33%.

Young teachers under the age of 35 are a special group. Most of them are doctoral graduates who have just graduated. They have a high academic level, active thinking, rich imagination, strong motivation for achievement, a solid professional foundation, and good at accepting new knowledge [4]. However, most of them do not have teacher education and less knowledge of teachers' professional knowledge, difficulty in adapting to roles, and weak self-development awareness. The survey found that forcing, anxiety, and anxiety are the major mental health barriers in the current university teachers. About 61.0% of the respondents had different levels of psychological problems: 37.5% of teachers often felt extremely anxious about personal health, sleep and work efficiency; 36.0% of teachers did not adapt to role change and socialization; 62.5% Teachers feel that being a good university teacher is stressful. The pressure on young teachers under the age of 40 has increased significantly, and the pressure felt by teaching assistants and lecturers is higher than that of associate professors and professors.

Young teachers are at a transitional period from school to society. Adapting to society and adapting to work has become a very important source of stress. They are the main undertakers of teaching work and are important participants in scientific research work. However, they are still immature in all aspects of their work, and they must continue to learn. They have to adapt constantly in human relationships and do not have sufficient qualifications. Therefore, they face more challenges. Perhaps the challenges faced by young teachers in different disciplines and their causes are common. However, the differences in disciplines will cause young teachers in different disciplines to face different challenges, and the reasons for their formation will also be different. This article will take the management discipline with strong practicality as an example, use the expression of system dynamics to analyze the challenges faced by management teachers and propose corresponding countermeasures.

2. CHALLENGES FACING YOUNG MANAGEMENT TEACHERS

Young management teachers face challenges in many aspects, some from social practice, some from scientific activities, some from teaching, and some from family life [5]. This section does not intend to exhaust all aspects and analyze only a few aspects that have a significant impact on their growth.

(1) Challenges from social practice

Management is a highly practical subject, and the famous management scientist Mintzberg clearly stated that management is neither science nor art but practice. In-depth management practice is an indispensable aspect of the growth of young management teachers. However, young management teachers are rather lacking opportunities to participate in practical activities. There are several reasons for this result:

As market competition intensifies, any oversight can have catastrophic consequences for the company. In order to avoid risks, enterprises cannot use themselves as experimental fields for young management teachers. There is not only the Matthew effect in the academic field, but also the practice field. Enterprise managers believe that only experienced management masters can provide them with valuable suggestions. Young management teachers can only give priority to doctors and professors.

At present, all universities and colleges have proposed the grand goal of "building a world-class university". What is more, they have also put forward the exaggerated slogan of "Building a international first-rate university" and formulated some unrealistic targets. The promotion indicators of college teachers have also been correspondingly improved. Young management teachers are already struggling to complete the assessment indicators of the school and there is simply no time to participate in practical activities.

Young management teachers do not have the time or lack of opportunities to participate in management practices, but will also cause further lack of their practical experience and form a vicious circle (as referred figure 1).

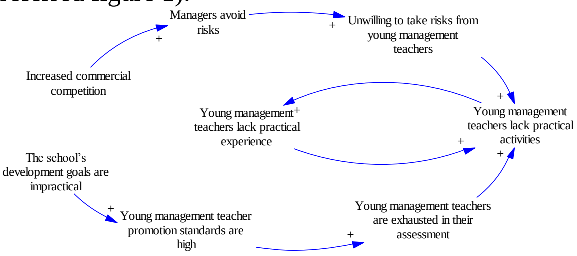

Figure 1 Challenges faced by young management teachers in social practice

(2) Challenges from scientific research

Engaging in academic research activities is one of the essential tasks of youth management teachers. However, due to the lack of research conditions for young management teachers, research work is difficult. The lack of research conditions is mainly reflected in two aspects: lack of team support and lack of fund support.

The teacher profession is a relatively stable profession and has a high social status. Therefore, it has become the preferred employment direction for doctoral graduates in major universities and the competition is fierce. The recruitment standards of colleges and universities have also been correspondingly improved, and the opportunities for graduates of the school to stay in school are getting smaller and smaller. Integrating a new research team and adjusting the research direction is a practical problem that young management teachers urgently resolve. Previous research results have failed to support new research directions, and the lack of research foundation has become an inevitable phenomenon.

Lack of team support and research foundations make it difficult for young management teachers to apply for research funds [6]. The funding from the National Natural Science Foundation fully explained this point. Take the grant of the National Natural Science Foundation of the Ministry of Management Science in 2017 as an example (see table 1):

Table 1 Funding of the National Natural Science Foundation of China in 2017

	Application	Approval	Approval rate	Age distribution of the person in charge				
				<=25	26-30	31-35	36-40	>=41
General Program	4072	755	18.54%	0	5	143	223	384
Regional Science Fund	782	136	17.39%	0	6	25	46	59
Key Program	108	28	25.93%	0	0	1	1	26
Youth Science Fund	4127	815	19.75%	The applicant was less than 35 years old in January 1st				
Distinguished Young Scholars	92	7	7.61%	The applicant was less than 45 years old in January 1st				

Source: National Natural Science Foundation of China, 2017 National Natural Science Fund Project Statistics, http://www.nsfc.gov.cn/nsfc/cen/xmtj/pdf/2017_table.pdf

Lack of fund support has increased the difficulty of youth management teachers' publication of papers. Although major academic journals do not explicitly require non-funded papers to be unpublished, papers that are not supported by funds are difficult to get published. It is even more difficult to publish in high-level journals. In addition, the less opportunity to participate in academic seminars is another important factor. Lack of research results will further strengthen issues such as weak research foundation and difficulties in applying for funds, resulting in a vicious positive feedback loop (as referred figure 2).

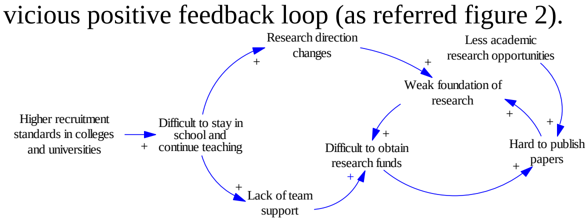

Figure 2 Challenges faced by young management teachers in scientific research

(3) Challenges from teaching

Management disciplines have strong practicality, and teaching effectiveness is increasingly dependent on teachers' management experience. For professional degree teaching activities, management practices are more important. The biggest difference between a professional degree student and a science degree student is that they have certain practical experience and have their own judgment on the correctness of theoretical knowledge. The teaching of professional degrees, especially MBAs, seminars, and president classes, require teachers to have more abundant management practice experience. Otherwise, they cannot communicate effectively with students and cannot form interactions. Naturally, it is difficult to have good teaching effects (as referred Figure 3).

(4) Integration

Based on the above three aspects, we can construct a system diagram of the mutual influence of various challenges for young management teachers (as referred figure 4).

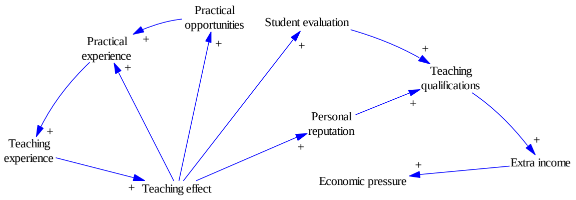

Figure 3 Challenges faced by young management teachers in teaching

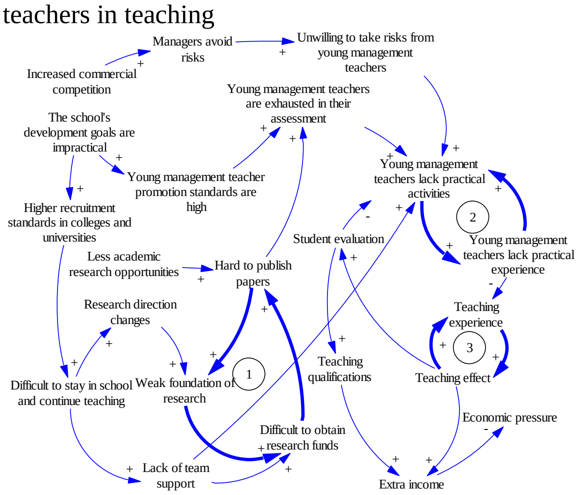

Figure 4 Challenges mutual influence system diagram

There are three positive feedback loops in Figure 4 (which are already shown in the figure), where ① and ② are vicious circles, and ③ may be a benign cycle or a vicious circle. According to the principle of system dynamics, the fundamental strategy for solving problems lies in breaking the vicious circle. If it is difficult to break the vicious circle, it should find out the influencing factors and set up the adjustment variables.

For cycle ①, it is quite difficult to directly change the three elements. Therefore, we can start from its influencing factors. There are three direct influencing factors in this circle: "change in research direction", "lack of team support" and "less opportunity to participate in academic research". "Change in research direction" is closely related to the choice of the new team. If the research direction of the new team is closely related to the previous research direction, the change of research direction will be small, and the reinforcing effect on the cycle will be smaller, and vice versa. "Lack of team support" is related to the ability to successfully integrate into the new team. If the youth management teachers successfully integrate into the team within a short period of time, it is easier to obtain support from the team and weaken the cycle. "Less opportunity to participate in academic research" is related to participation in academic conferences. Active participation in academic conferences will be an effective strategy. Through analysis, we can find that the effective strategy of the weakening cycle ① is to integrate new teams and participate in academic conferences.

For cycle ②, it faces the same problem with cycle ①, that is, it is quite difficult to directly change the elements in the ring. The cycle ② has the same influencing factor as the cycle ① "lack of team support", so the integration into the new team is also effective in weakening the cycle ②.

For cycle ③, its external influence mainly comes from cycle ②, so the weakening strategy of cycle ② is also valid for cycle ③. In addition, circulation ③ does not necessarily create a vicious circle. After the young management teachers have accumulated certain teaching experience, circulation ③ will be a virtuous circle. Therefore, its strategy is to actively strive for professional degree teaching activities and strive to improve teaching effectiveness.

3. STRATEGIES

Through the analysis of figure 4, we can propose strategies to deal with challenges from three aspects: integration into new research team, active participation in academic conferences, and promotion of professional degree teaching effectiveness, as shown in figure 5.

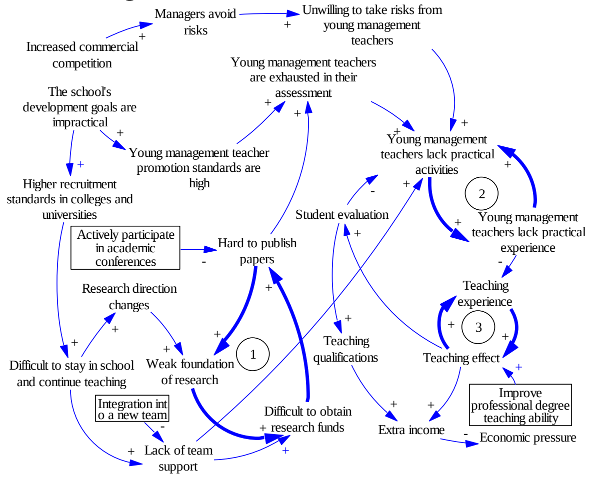

Figure 5 Strategies

(1) Integration into a new team

From the development of management, we will notice the special contributions of management research groups and management schools to the development of management, and will find the importance of teamwork in the study of management theory. It is only one person's strength to highlight the individual ability of the youth management teachers. Moreover, the study of management theories requires not only manpower, but also the need for financial support and management experience, which are difficult to solve by one person alone. The construction research team is also not an overnight success. For young management teachers, the most effective way is to choose the right research team and integrate into it.

Integration into the research team will bring three benefits to the young management teachers (pictured): First, the increase in the number of opportunities for practice. The practice opportunities here mainly refer to the opportunities for inspecting or consulting companies. Second, reducing the difficulty of publishing papers. The main reasons are reflected in two aspects: on the one hand, due to the support of the team's existing funds, and on the other due to the results that can be claimed by other members of the team. Third, improve academic research capabilities. The other members of the team, especially the scientific research probes of the team, have extensive research experience and can provide guidance to young management teachers. To successfully integrate into a new team, young management teachers need to do the following:

First, you need to choose the right team. In fact, the strength of the leader of the team can basically represent the strength of the team, so choosing the right team can be simplified to select the right team leader. First of all, you need to consider whether the character of team leader can match with yourself and whether you can live in harmony. Second, it is necessary to examine the research direction of the leaders, including relevance, value, interests, benefits, and reserves. Correlation refers to the relevance of the leader’s research direction and your own research direction. Value refers to the theoretical value and practical value of the research direction. Interest is whether you are interested in the direction of the research. Earnings means that research in this direction can bring benefits. Reserves refer to the sustainability of the research direction. Third, it needs to consider the influence of the leader, including the academic influence and the influence of the field of practice.

Second, adjust the research direction. Adjusting the direction of research has become a task for young management teachers, especially young management teachers who have just been employed. If you do not adjust the research direction, although the young management teachers can make full use of the previous research results, but will make themselves out of the team, can not reflect their value to the team and really integrate into the team. If you completely abandon the previous research direction, years of accumulation will be wasted. The best practice is to make a partial adjustment to the research direction based on the selection of a suitable team. This will inject fresh blood into the team and fully reflect your own value. On the other hand, it will be able to make full use of previous research results.

Third, actively participate in team activities. Success comes from being proactive, not waiting for a chance. The fundamental purpose of the integration of the young management teachers into the team is to develop themselves through the strength of the team. However, there is no free lunch in the world. There is no gain without paying. Young management teachers can exchange their recognition and support for themselves only by actively participating in team activities, and ultimately achieve their own success.

(2) Actively participate in academic conferences

Academic conference aims to encourage academic contention, active academic ideas, and promote scientific spirit, providing a platform for exchange of various academic ideas, theoretical perspectives, and academic inspiration. The value of actively participating in academic conferences for young management teachers is reflected in three aspects:

First, publish research results, pursue peer recognition, and enhance their value. First of all, for young management teachers, publishing high-level journals is a difficult task. In this case, it is particularly important to publish scientific research results at academic conferences. Second, young management teachers may still have deficiencies in research ideas and research methods. Young scholars participate in academic seminars, receive peer review, and can receive valuable suggestions to enhance their scientific research capabilities. Once again, it will help improve your own value. Academic conferences are a good way to cultivate talents, discover talents, and promote talents; a good academic report may affect one's life and change his world outlook and life path.

Second, make new and old friends. Individual success and career development are inseparable from extensive social relations. Young management teachers are at the start of their careers, and their social resources are still relatively weak. Participation in academic conferences just provides opportunities for young management teachers to make new and old colleagues.

Third, understand the research trends of peers, especially top management scholars, and understand the trend of scientific research. The first-rate management scholars have relatively accurate grasp of research trends. Through communication with them, young management teachers can shorten the time for understanding research hotspots and research trends. Re-examining their own research will help them or their team develop unique and innovative research directions.

(3) Improve professional degree teaching ability

Higher income can be obtained by teaching students studying for a professional degree. Not only has that, but also through them to understand the phenomenon of some management practices, the practical problems of the company, to gain practical experience. Due to the above reasons, professional degree courses have become popular, but it is not easy to take good professional degree courses. For young management teachers, the following aspects need to be done:

First, study advanced [7]. Young management teachers lack teaching experience and must strengthen their learning. Learn how experienced teachers teach and how curriculum design is done. It is very necessary to have effective teaching methods and teaching styles.

Second, prepare carefully before class. Pre-class preparation is very important for a good class, and you need to be aware of what you are going to teach. It is not only necessary to have an in-depth understanding of the theories mentioned in the textbooks, but also to look up information and expand related knowledge [8]. It is necessary to anticipate what the trainee cares about, where to explain it in depth, and where to go with it.

Third, meticulously organize the teaching process. Teachers must not only have a reasonable grasp of the classroom rhythm, but also effectively control the classroom speech and discussion. Teachers should use a variety of means such as tips, rhetoric, questioning, encouragement, praise, etc. to create a relaxed and strong discussion atmosphere and guide the students to actively participate [9].

Fourth, do a serious summary after class. Through the performance of students in the classroom, young teachers should carefully sum up the shortcomings in various aspects such as preparation before class and teaching methods, and fully combine the needs of students to make improvements. Cycle back and forth, the ideal effect can be achieved.

4. CONCLUSION AND RECOMMENDATION

Young teachers occupy a considerable proportion in the management team of teachers. They are the future of management. Due to the characteristics of management science and the characteristics of the youth management teachers themselves, they face severe challenges in social practice, scientific research, and teaching. These challenges not only have a significant impact on the growth of young management teachers themselves, but also on future management. This paper uses the form of system dynamics to analyze the inner working mechanism of various challenges and their mutual influence, and proposes a coping strategy from three aspects: integrating into a new team, actively participating in academic conferences, and doing professional degree teaching.

The growth of young management teachers is a complex issue involving many issues such as career planning, assessment and promotion systems. The research in this article is only a preliminary exploration of the challenges and coping strategies facing the growth of young management teachers. It is worth further research in the following two aspects: First, there are issues related to the reform of the academic evaluation system [10]. The academic evaluation system is a baton and there should be a clearer direction. However, the current system blindly pursues the so-called integration with the international evaluation system (that is, publishing papers in the world's top management magazines) and deviates from the practice of Chinese management.

Second, the youth management school teacher career planning [11]. The career of teachers is a kind of recyclable and reborn career development system. It includes pre-work preparation stage, guidance and self-adjustment stage, establishment of teaching ability stage, enthusiasm and growth stage, career frustration stage, stable but stagnant stage, decline stage, and retirement stage. Scientific development of career planning plays an important role in the growth of young management teachers. On the one hand, young management teachers need to develop their own development goals according to their own characteristics, clarify their role in each stage of development. On the other hand, the colleges and universities in charge need to provide guidance and support for youth career management teachers in formulating career plans.

In short, the growth of youth management teachers has attracted the attention of researchers, but more in-depth research is needed.

REFERENCES

[1]Guo, L., & Wang, B. What determines job satisfaction of teachers in universities?. Eurasia Journal of Mathematics Science & Technology Education, 2017, 13(8), 5893-5903.

[2]Jääskelä, P., Häkkinen, P., & Raskuputtonen, H. Supporting and constraining factors in the development of university teaching experienced by teachers. Teaching in Higher Education, 2017, 22(6), 1-17.

[3]Sun, W., Wu, H., & Wang, L. Occupational stress and its related factors among university teachers in china. Journal of Occupational Health, 2011, 53(4), 280-286.

[4]Gail D. Hughes. Teacher retention: teacher characteristics, school characteristics, organizational characteristics, and teacher efficacy. Journal of Educational Research, 2012, 105(4), 245-255.

[5]Nghia, T. L. H. What hinders teachers from translating their beliefs into teaching behaviors: the case of teaching generic skills in vietnamese universities. Teaching & Teacher Education, 2017(64), 105-114.

[6]Yue, J. J., Chen, G., Wang, Z. W., & Liu, W. D. Factor analysis of teacher professional development in chinese military medical universities. Journal of Biological Education, 2017(51), 1-13.

[7]Troncoso, G. D., Pérez, V. C., Vaccarezza, G. G., Aguilar, A. C., & Muñoz, N. N. The influence of pedagogic and discipline training on the teaching quality of university professors. Revista Medica De Chile, 2017, 145(5), 610-618.

[8]Sue Bennett, Lisa Thomas, Shirley Agostinho, Lori Lockyer, Jennifer Jones, & Barry Harper. Understanding the design context for australian university teachers: implications for the future of learning design. Learning Media & Technology, 2011, 36(2), 151-167.

[9]Wanner, T., & Palmer, E. Personalising learning: exploring student and teacher perceptions about flexible learning and assessment in aflipped

university course. Computers & Education, 2015(88), 354-369.
[10]Ion, G., & Cano, E. University's teachers training towards assessment by competences. Educacion Xx1, 2012, 15(2), 249-270.
[11]Watt, H. M. G., Richardson, P. W., & Wilkins, K. (2014). Profiles of professional engagement and career development aspirations among usa preservice teachers. International Journal of Educational Research, 65, 23-40.

Empirical Research on the Impact of E-commerce on Bilateral Trade Based on the Data of Countries along the Belt and Road

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Abstract: This paper constructs Linear Weighting Method to measure the e-commerce level of the countries along the Belt and Road. On this basis, this paper uses improved Gravity Model to make an empirical analysis on the bilateral trade between China and countries along One Belt One Road route. The result shows that e-commerce has significant influence on bilateral trade, but the promotion of bilateral trade by e-commerce with European countries, which have higher level, is smaller than Asian countries. Based on the findings, this paper put forward such policy suggestions as improving the e-commerce level of countries along Belt and Road, strengthening the construction of the e-commerce infrastructure and building multifaceted e-commerce cooperation mechanism.
Keywords: E-commerce; Belt and Road; Bilateral Trade

1. INTRODUCTION

Based on the Internet and related equipment, e-commerce has become a new way and a new growth point of international trade by connecting the international logistics and breaking the space and time restrictions in the traditional international trade. Taking B2C as an example, relevant statistics show that the average annual growth of cross-border B2C electronics in the world is as high as 27%, and the global market size in 2014 has reached US $230 billion, and will reach US $1 trillion in 2020. In promoting the steady implementation of the "belt and road" initiative, the analysis on the impact of e-commerce on the bilateral trade between China and the countries along the belt and road is of great significance for promoting its smooth implementation and achieving better later results.

The author has not yet retrieved the relevant foreign literatures in the field of the relationship between e-commerce and the bilateral trade in the countries along the belt and road, while the domestic related research mainly involves trade facilitation, regional economic and trade cooperation, trade complementarity and other issues. For example, Wang Jie and Quan Yi[1] selected indexes including e-commerce to measure the level of trade facilitation of major countries along the maritime silk road, and used the gravity model to conduct an empirical study based on the cross-sectional data, and found that trade facilitation significantly promotes China's foreign exports. Liu Xiangfeng[2] analyzed the economic and trade cooperation between China and Kazakhstan, and advocated the expansion of trade import and export in the context of the "belt and road" initiative, so as to create an international trade industrial chain in the region. Han Yonghui[3] studied the competitiveness and complementarity of economic and trade cooperation between China and Western Asian countries by measuring the intra-industry trade index and comparative advantage index, and found that the complementarity between China and Western Asian countries in developing international trade is much higher than that in competition, which can be used to enhance trade cooperation in the context of "belt and road" initiative. Yang Lizhuo, et al.[4] analyzed the trade complementarity between China and Central Asian countries, and found that trade between China and Central Asian countries is highly complementary and has huge trade potential, and finally proposed to strengthen infrastructure construction and promote economic and trade cooperation in the context of the "belt and road" initiative. The above studies pay more attention to the various influencing factors of the bilateral trade development of the countries along the line, but there is still a lack of special research on the level of e-commerce of the countries and the bilateral trade relations with China. In this paper, aiming at collecting relevant data to measure the development level of e-commerce in the countries along the line, the expanded trade gravity model is used to make an empirical analysis to study the influence of e-commerce level along the belt and road on China and its bilateral trade. In view of the fact that all countries along the belt and road are dominated by Eurasian countries, in order to facilitate analysis and comparison, the research objects will be divided into European group countries and Asian group countries.

2. THEORETICAL MECHANISM AND RESEARCH HYPOTHESES

2.1 Theoretical mechanism

Since the mid-1990s, e-commerce has flourished in international trade and become a new topic of international trade, which has aroused the multi-level theoretical research on the mechanism of the role of e-commerce in international trade by scholars at home and abroad. In foreign studies, Freud and Weinhold [5] used panel and cross-sectional data from 34 countries to conduct an empirical analysis based on the improved gravity model, and they believed that the use of the Internet would promote the growth of exports because the Internet reduced the fixed costs of specific markets in international trade. Choi[6] used data from 151 countries for 17 years to conduct an empirical analysis, and found that although the use of the Internet has a small role in promoting trade in services, it will promote trade in goods and foreign direct investment. He et al.[7] established an impact model of e-commerce on international trade based on Krugman's iceberg cost theory, and found that e-commerce will affect the production and price of products, not only changing the pattern of commodity trade in different markets, but also promoting the steady growth of global total commodity trade and corporate profits. In terms of domestic research, Zhang Xu[8] analyzed the impact of e-commerce on the operation mechanism of international trade and government supervision mechanism, and found that the operation mechanism of e-commerce based on interactive network improved the market information completeness of international trade, shortened the intermediate links, reduced the cost of enterprises, and was more conducive to the development of international trade. Zhang Lin[9] found that e-commerce, as an innovative trade mode, is an effective way for SMEs to break through low-carbon trade barriers. Research by Guan Lixin et al.[10] shows that e-commerce has brought forth new ideas in the retail trade mode, expanded the sales channels in the international trade market, and promoted the upgrading of the value chain. Han Linlin and Tian Bo[11] used network infrastructure and customs administrative efficiency to build a modified gravity model to analyze the impact of e-commerce on China's export trade, and found that network infrastructure has a greater impact on China's export trade of low value-added products, and e-commerce of high value-added products is more vulnerable to customs clearance efficiency.

According to the research results of domestic and foreign scholars, the mechanism of e-commerce for international trade is summarized in this paper from the following four aspects:

(1) E-commerce plays an important role in international trade by enhancing the symmetry of international trade market information, and it has built an online trading platform to increase information release channels for suppliers and information receiving channels for consumers. Besides, the amount of information that traders transmit through the network is far more than that of paper in traditional trade, which can effectively improve the symmetry of trade information.

(2) By expanding the scope of transaction subjects, e-commerce has played an important role in international trade, reducing the requirement for market access of international trade and enabling more small and medium-sized enterprises to enter. At the same time, e-commerce can play a long tail effect to meet the diverse needs of consumers, so as to attract more consumers to enter the international trade market and become the main body of international trade.

(3) By improving the transaction efficiency and acting on international trade, e-commerce promotes the electronic process of all aspects of international trade, improves the linkage of different departments in international trade, and improves the efficiency of business negotiation, so as to promote the whole transaction efficiency

(4) E-commerce plays an important role in international trade by reducing trade cost. The use of the Internet is conducive to reducing the cost of information collection in international trade and the fixed cost of specific markets, and carrying out B2C transactions so that enterprises can face consumers directly to reduce the trade cost of enterprises.

2.2 Research hypotheses

H1: E-commerce has a positive effect on the bilateral trade of the countries along the belt and road.

H2: The higher the level of e-commerce of trading partner countries, the greater the promotion of their bilateral trade with China.

3. MEASUREMENT OF THE LEVEL OF E-COMMERCE OF THE COUNTRIES ALONG THE BELT AND ROAD

3.1 Measuring methods

The level of e-commerce is a quantitative indicator to measure the development of e-commerce in a country or region. In the existing theoretical research, many institutions or scholars have constructed relevant measurement methods according to their own understanding of e-commerce (see Table 1).

Among the calculation methods listed in Table 1, the most representative ones are Aliresearch e-commerce development index and Zhang Yabin's[12] e-commerce measurement index. The e-commerce development index calculated by Aliresearch uses the online business index and online shopping index from Aliresearch. Each index is given the same weight, which is calculated by using the weighting method. The formula is as follows:

E-commerce development index = online business index * 0.5 + online shopping index * 0.5

Zhang Yabin et al.[12] used the linear transformation method to standardize the original data of the four secondary indexes, namely, the number of Internet users, the use of information and communication technology, the relevant laws and regulations of information technology, and the availability of new technology, when building the e-commerce measurement indexes, and finally obtained the standard value of the e-commerce measurement indexes. The formula is:

Specification value = original value / maximum value.

Table 1. Overview of description and measurement methods of e-commerce level

Organizations / institutions / scholars	Description method	Measuring methods
APEC	E-commerce preparation	Single or multiple selection of indexes
Office for National Statistics	International e-Commerce Benchmarking	IAP's adoption model
CII e-commerce knowledge research and measurement research group[13]	E-commerce index	Comprehensive scoring analysis, linear weighting method
Liu Min et al.[14]	E-commerce level indexes	ANN method
Yang Jianzheng et al.[15]	Cross border e-commerce evaluation system	Factor analysis
Zhang Yabin et al.[12]	E-commerce measurement indexes	Linear transformation
Aliresearch	Alibaba e-commerce development index	Weighting method

Source: according to the relevant materials collected by the authors

Referring to the above two research methods, in this paper, the number of Internet users (per 100 people), secure Internet server (per million people), and logistics performance index are used as the measurement indexes of e-commerce level. In order to eliminate the influence of variable's difference and numerical value, linear transformation is firstly used to divide the annual data by the maximum value of each index, so as to obtain the form of indexation. Then, the indexes are arithmetically averaged to obtain the measurement data of the country's e-commerce level in that year. The calculation formula is:

$$Y_{\mathrm{i}} = X_i / X_i^{\max} \qquad E_{\mathrm{j}} = \sum_{i=1}^{n} Y_i / n$$

where,

X_{i} = The initial data of the i-th index;

Y_i = The data after linear transformation of the i-th index;

E_{j} =The final indicator of the calculated level of e-commerce in the country.

3.2 Index selection

Because there are many kinds of indicators related to e-commerce, the evaluation systems adopted by various international economic organizations are not the same. The ETI index is selected in the annual trade promotion report issued by the world economic forum, in which mobile phone, Internet, broadband coverage and other indicators are used to measure the availability of information and communication technology. The World Bank uses DoB index and logistics performance index as indicators to score trade enterprises and international logistics companies annually. Yang Jianzheng et al.[15] used Internet marketing, international e-payment, E-customs clearance, international e-commerce logistics and e-commerce legal indicators to build a Chinese e-commerce evaluation system.

The above and other index systems that are not detailed one by one show that the level of e-commerce in a country is determined by a number of factors. In this paper, the number of Internet users (per 100 people), secure Internet servers (per million people) and logistics performance index are selected as the measurement indicators of e-commerce level. On the one hand, they are subject to the availability of data; on the other hand, the most directly related factors are considered in combination with the characteristics of e-commerce in international trade. The specific reasons are:

(1) The number of Internet users (per 100 people) reflects the preference of residents in a country for the Internet, based on which the possibility of e-commerce transactions in the country and the potential of B2C market can be measured.

(2) The development of e-commerce needs enough network communication infrastructure as support, such as Internet security server, which is used to represent the construction of Internet infrastructure in this paper.

(3) Logistics performance is a comprehensive index that can reflect the efficiency of customs clearance procedures, the quality of trade and transportation related infrastructure, the quality of logistics services and a series of basic indicators. Logistics is closely

related to e-commerce. The higher the logistics performance is, the more conducive to the smooth completion of e-commerce transactions.

The empirical meanings of each index are as follows:

(1) The number of Internet users (per 100 people) reflects the number of people using the Internet in the country. 0 means that no one in the country uses the Internet, and 100 means that everyone in the country uses the Internet.

(2) Secure Internet servers (per million people) reflect the number of servers in the country that use encryption technology in the process of Internet transactions per million people. 0 means that there are no secure Internet servers.

(3) Logistics performance index measures the logistics performance of a country from the efficiency of customs clearance procedures, the quality of transportation infrastructure, the quality of logistics services, the competitiveness of logistics prices, the ability to track goods in the whole process, and the ability to deliver goods on time. The greater the range, the better the logistics performance.

3.3 Data source and processing

The number of Internet users (per 100 people), secure Internet servers (per million people), and logistics performance index are all extracted from the WDI database of the World Bank. Since the logistics performance index has been published every two years since 2007, the data in 2007, 2010, 2012 and 2014 can be used at present. Therefore, the number of Internet users (per 100 people) and the security Internet servers (per million people) used in this paper also select the data in 2007, 2010, 2012 and 2014 in the WDI database of the world bank for evaluation.

According to statistics from Zou Jialing et al.[16], there are 64 countries along the belt and road, including Europe, Asia and African countries. Due to the lack of data in the three indicators of logistics performance index, the number of Internet users (per hundred people) and secure Internet servers (per million people) in some countries, the countries with missing data are excluded in this paper. Because Egypt is not a European or Asian country, it is also excluded. Finally, there are 46 countries included in the measurement of e-commerce level in this paper (Table 2).

Table 2. The 46 European and Asian Countries along Belt and Road included in the calculation

Area	Country
Europe （17countries）	Bulgaria, Bosnia and Herzegovina, Czech Republic, Estonia, Croatia, Hungary, Lithuania, Latvia, Moldova, Kingdom of Macedonia, Poland, Romania, Russia, Slovak Republic, Slovenia, Turkey, Ukraine
Asia （29 countries）	Afghanistan, United Arab Emirates, Armenia, Azerbaijan, Bahrain, Indonesia, India, Kazakhstan, Kyrgyzstan, Cambodia, Kuwait, Laos, Lebanon, Sri Lanka, Myanmar, Mongolia, Malaysia, Nepal, Oman, Pakistan, Philippines, Qatar, Saudi Arabia, Singapore, Syrian Arab Republic, Thailand, Uzbekistan, Viet Nam, Republic of Yemen

Source: listed according to Zhou Jialing's List of Belt and Road Countries[16] after excluding countries with missing data.

3.4 Measurement results

In this paper, linear weighting method is used to measure the level of e-commerce. The number of Internet users (per 100 people), secure Internet servers (per million people) and logistics performance index in 2007, 2010, 2012 and 2014 are substituted into the formula $Y_{\mathrm{i}} = X_i / X_i^{\max}$ $E_{\mathrm{j}} = \sum_{i=1}^{n} Y_i / \mathrm{n}$ to measure the level of e-commerce in 46 countries along the belt and road in 2007, 2010, 2012 and 2014, as shown in Table 3.

In order to facilitate the follow-up comparative analysis and empirical research on trade gravity model, in this paper, the European and Asian countries along the belt and road are divided into European and Asian groups according to their location. The basic situation of the two groups' e-commerce level is shown in Figures 1 and 2.

3.5 Evaluation of e-commerce development level in Eurasian countries along the belt and road

According to Table 3, in addition to a few countries, the level of e-commerce in all the countries along the belt and road has been increased in recent years, reflecting the importance of e-commerce development in all countries and the overall trend of e-commerce in the world as a whole. However, Table 3 also shows that the development level of the countries along the line is uneven. For the convenience of evaluation, in this paper, according to the measurement results of the e-commerce level of each country in 2014 (see Table 3), one-third and two-thirds of the measured e-commerce level of all countries in that year are taken as the boundary to mark off the countries with higher level, intermediate level and lower level. The results are shown in Table 4.

Table 3. The E-commerce level of countries along Belt and Road

Country	2007	2010	2012	2014
Bulgaria	0.405081	0.481326	0.537523	0.52857
Bosnia and Herzegovina	0.334398	0.414852	0.454145	0.463142
Czech Republic	0.593945	0.790276	0.790328	0.829579
Estonia	0.74946	0.858866	0.861096	0.918769
Croatia	0.483004	0.580999	0.611913	0.582895
Hungary	0.559435	0.634456	0.646778	0.673937
Lithuania	0.509037	0.647253	0.628804	0.601718
Latvia	0.586457	0.682521	0.637659	0.689084
Moldova	0.285438	0.360144	0.363825	0.408044
Kingdom of Macedonia	0.371844	0.469514	0.444237	0.483557
Poland	0.524769	0.687889	0.664176	0.688002
Romanian	0.377289	0.433806	0.451228	0.513518
Russia	0.310256	0.414738	0.469368	0.511592
Slovak Republic	0.56633	0.678283	0.648013	0.677896
Slovenia	0.649451	0.733175	0.802284	0.775723
Turkey	0.424703	0.500426	0.512395	0.497948
Ukraine	0.23673	0.320366	0.375339	0.422245
Afghanistan	0.105536	0.20062	0.206848	0.195918
United Arab emirates	0.651948	0.681741	0.721262	0.729873
Armenia	0.202993	0.326915	0.362061	0.405888
Azerbaijan	0.252057	0.420883	0.408684	0.430918
Bahrain	0.445461	0.578175	0.646445	0.651849
Indonesia	0.267727	0.274267	0.294249	0.321222
India	0.26395	0.288629	0.297981	0.323966
Kazakhstan	0.188784	0.373049	0.422747	0.429889
Kyrgyzstan	0.254738	0.285987	0.266715	0.290282
Cambodia	0.201696	0.199753	0.22681	0.262067
Kuwait	0.453116	0.615813	0.580152	0.608905
Laos	0.187443	0.231811	0.242949	0.251628
Lebanon	0.28812	0.482079	0.464387	0.518682
Sri Lanka	0.211793	0.242271	0.295026	0.322441
Burma	0.149025	0.191031	0.19538	0.19511
Mongolia	0.215185	0.23501	0.25331	0.304716
Malaysia	0.562789	0.554598	0.563917	0.576645
Nepal	0.177895	0.215267	0.208114	0.272746

Oman	0.317202	0.405661	0.486693	0.533682
Pakistan	0.241249	0.242042	0.266778	0.286134
Philippines	0.246118	0.370185	0.385331	0.398582
Qatar	0.445752	0.597682	0.601969	0.709374
Saudi Arabia	0.389002	0.453696	0.475814	0.510667
Singapore	1	0.979263	0.92292	0.927934
Syrian Arab Republic	0.221205	0.314507	0.302079	0.276571
Thailand	0.365451	0.375361	0.366592	0.420997
Uzbekistan	0.207696	0.315571	0.33722	0.358608
Viet Nam	0.329451	0.378153	0.395056	0.442883
Republic of Yemen	0.206156	0.26483	0.299558	0.264213

Data Source: calculated by the authors based on WDI data of the World Bank

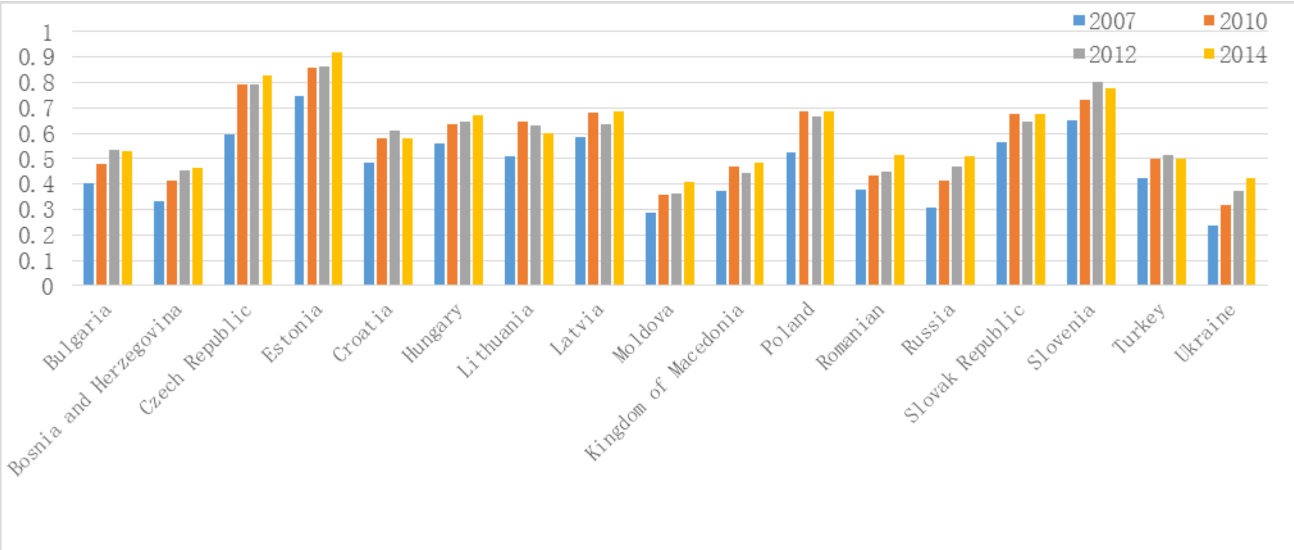

Figure 1 The E-commerce level of European countries.
Data Source: the calculation of this paper

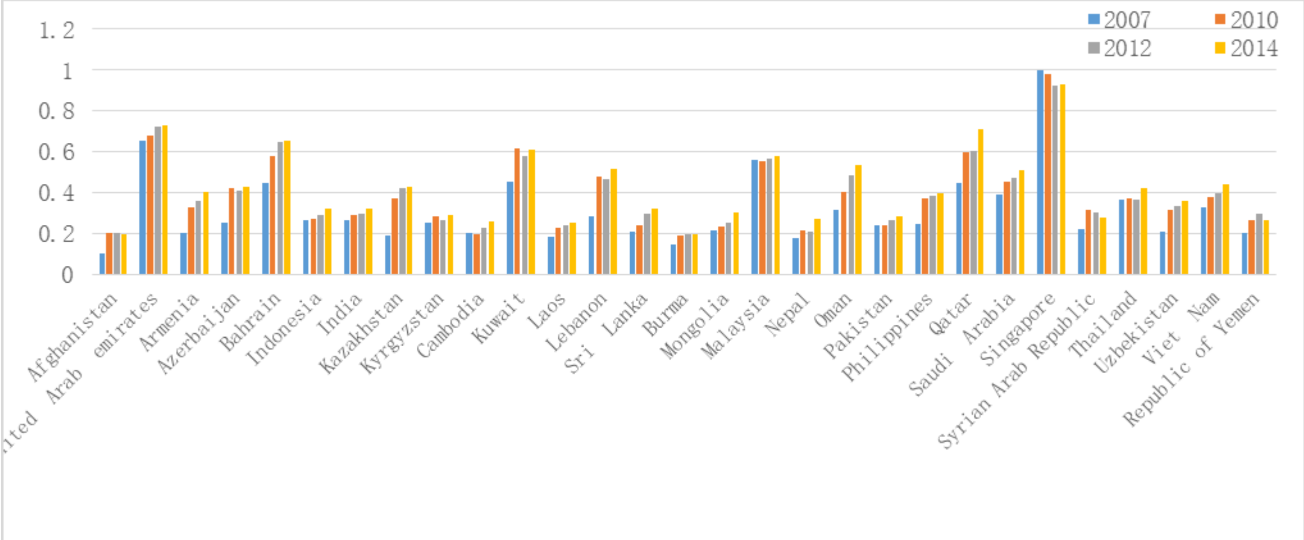

Figure 2 The E-commerce level of Asian countries.
Data Source: the calculation of this paper

Table 4. The evaluation of the E-commerce level of countries along Belt and Road

Level	European Group	Asian Group
High (10)	Czech Republic, Estonia, Hungary, Latvia, Poland, Slovakia, Slovenia	United Arab Emirates, Qatar, Singapore
Medium (23)	Bulgaria, Bosnia-Herzegovina, Croatia, Lithuania, Moldova, Macedonia, Romania, Russia, Turkey, Ukraine	Armenia, Azerbaijan, Bahrain, Kazakhstan, Kuwait, Lebanon, Malaysia, Oman, Philippines, Arab, Thailand, Uzbekistan, Vietnam
Low (13)	/	Afghanistan, Indonesia, India, Kyrgyzstan, Cambodia, Laos, Sri Lanka, Myanmar, Mongolia, Nepal, Pakistan, Syria, Yemen

Data Source: classified by the authors according to the data of Table 3

According to Table 4, the countries with high level include 7 European countries and 3 Asian countries, those with middle level include 10 European countries and 13 Asian countries, and those with low level are all Asian countries, which show that the e-commerce level of European countries is higher than that of Asian countries as a whole.

4. IMPACT OF E-COMMERCE LEVELS OF COUNTRIES ALONG THE BELT AND ROAD ON THEIR BILATERAL TRADE WITH CHINA

4.1 Modeling

Since Tinbergen first introduced the trade gravity model in 1962, it has been quoted or used for reference in many theoretical researches, and has been widely used in the empirical research of trade influencing factors under the premise of considering the physical distance between countries. Its basic form is:

$$X_{ij} = \frac{K(Y_i)^a(Y_j)^b}{(1+eD_{ij})^f}$$

where,

X_{ij}=Performance indicators of trade flows between two countries;

Y_i and Y_j represent the economic scale of countries i and j, generally denoted by GDP;

D is the distance between two countries, a and b are parameters, K and E are constants.

In order to facilitate regression and reduce the negative impact of heteroscedasticity, the trade gravity model is generally transformed into a logarithmic linear form, as follows:

$$lnTrade_{ij} = \beta_0 + \beta_1 lnGDP_i + \beta_2 lnGDP_j + \beta_3 lnD_{ij} + u_{ij}$$

where,

$Trade_{ij}$=the volume of trade exported from country i to country j;

GDP_i=GDP of country i;

GDP_j=GDP of country j;

D_{ij}= the distance from country i to country j;

β_0=the constant term;

u_{ij}=the random error term.

In recent years, gravity model has been widely used in the study of e-commerce. For example, Estrella et al.[17] pointed out that trade gravity model can be used to explain online cross-border trade flows within the EU. Han Linling et al.[11] used the expanded and modified trade gravity model to analyze the impact of cross-border e-commerce on export trade. For the purpose of analyzing the influence of e-commerce level on the bilateral trade between China and other countries along the belt and road, by referring to the practice in the academic circles, based on the trade gravity model proposed by Tingbergen, the variable E_j is added to the original model to represent the level of e-commerce. The expanded trade gravity model is as follows:

$$lnTrade_{ij} = \beta_0 + \beta_1 lnGDP_i + \beta_2 lnGDP_j + \beta_3 lnD_{ij} + \beta_4 E_j + u_{ij}$$

4.2 Variable selection and data source

See Table 5 for relevant variables and descriptions involved in the above model.

Table 5. Variables and descriptions

Explanatory variables	Meanings	Symbols	Descriptions
$Trade_{ij}$	Import and export volume between China and its trading partners	/	It reflects the bilateral trade flow between China and the country
GDP_i	Economic scale of China i	+	The stronger China's economic strength is, the greater its export supply capacity is, and the more it can promote bilateral trade by expanding exports
GDP_j	Economic scale of trading partner country j	+	The stronger trading partner's economic strength is, the greater its export supply capacity is, and the more it can promote bilateral trade by expanding exports
D_{ij}	Distance to China	-	The longer the distance is, the higher the cost of transport logistics will be, which will have a negative impact on bilateral trade
E_j	E-commerce	+	The higher the level of e-commerce, the more conducive to the development of international trade

Because $Trade_{ij}$ represents the volume of trade from i to j, in this paper, the total import and export volume of bilateral trade between 46 participating countries along the belt and road and China in 2007, 2010, 2012 and 2014 is used in in this paper, which is derived from the United Nations COMTRADE database.

GDP_i represents the GDP of country i; GDP_j represents the GDP of country j. In this paper, the GDP of 46 participating countries along the line in 2007, 2010, 2012 and 2014 is used, and the data source is WDI database of the World Bank;

D_{ij} represents the distance from i to j, extracted from the CEPII database;

E_j represents the level of e-commerce, using the data listed in Table 3 of this document.

4.3 Regression results and analysis

4.3.1 Regression results

In this paper, based on STATA12.0, by using the general least squares method, the extended trade gravity model is used to analyze the panel data of 182 groups of panel data of the four year bilateral trade between China and all countries along the belt and road, the panel data of the 68 groups in the European Group and the 110 panel data of the Asian group. The regression results are shown in Table 6:

The regression results show that each regression coefficient in the regression equation is significant, which is consistent with the expectation. It is proved that the scale of economy and the level of e-commerce will have a positive effect on the bilateral trade between China and the European and Asian countries along the belt and road. The distance between the two countries will have a negative negative effect on bilateral trade. The details are as follows:

(1) China's economic scale and bilateral trade flow: according to the regression results of the whole sample, the regression coefficient of $LnGDP_i$ is 0.2387395, indicating that for every 1% increase in China's economic scale, the bilateral trade volume

will increase by 0.2387395%.

(2) Trade partner's economic scale and bilateral trade flow: according to the regression results of the whole sample, the regression coefficient of $LnGDP_j$ is 1.050961, indicating that for every 1% increase in trade partner 's economic scale, the bilateral trade volume will increase by 1.050961%.

(3) Geographical distance and bilateral trade flow: according to the regression results of the whole sample, the regression coefficient of LnD_{ij} is -2.118858, indicating that the farther the geographical distance between the two countries is, the 2.118858% of bilateral trade will be reduced for every 1% increase in geographical distance. According to the regression results of the European group, the regression coefficient of LnD_{ij} is -2.413738, indicating that for every 1% increase in geographical distance, the bilateral trade volume will decrease by 2.413738%. According to the regression results of the Asian group, the regression coefficient of LnD_{ij} is -1.727993, indicating that for every 1% increase in geographical distance, the bilateral trade volume will decrease by 1.727993%.

(4) E-commerce level and bilateral trade flow: the regression coefficient of E_j in the whole sample is 1.465174, indicating that the bilateral trade volume will increase by 1.465174% for every 1% increase in e-commerce trade facilitation level of trading partner countries. According to the regression results of the European group, the regression coefficient of e-commerce is 1.849191, less than that of Asian group of 2.127962.

Table 6. Regression results

VARIABLES	Whole sample	Europe	Asia
	$LnTrade$	$LnTrade$	$LnTrade$
$LnGDP_i$	0.2387395*	0.2773592*	0.2053911**
$LnGDP_j$	1.050961***	1.111344 ***	0. 9530851***
LnD_{ij}	-2.118858***	-2.413738***	-1.727993***
E_j	1.465174***	1.849191***	2.127962***
Observations	182	68	110
R-squared	0.8458	0.9360	0.8028

Note: * * *, * * and * mean the significance levels at 1%, 5%, and 10%.

4.3.2 Correlation analysis

According to the regression results, e-commerce has played a significant role in promoting the development of bilateral trade along the belt and road, and has exceeded the impact of economic scale on bilateral trade flows, indicating that the H1 is true.

However, the regression results are contrary to H2: according to the previous analysis, the level of e-commerce in the European Group is higher than that in the Asian Group on the whole, but its promotion effect on bilateral trade is lower than that in the Asian group, indicating that H2 is false, which may be related to the difference of e-commerce level between the two regions. According to the principle of diminishing border efficiency, the development of e-commerce will also promote the bilateral trade between China and European countries. The level of e-commerce in Asia is generally low, and the continuous development of e-commerce can significantly enhance the role of promoting China and Asian countries.

5. CONCLUSIONS, SUGGESTIONS AND PROSPECTS

5.1 Research conclusions

In this paper, the linear weighting method is used to measure the e-commerce level of 17 European countries and 29 Asian countries along the belt and road as the key indicator, and the established trade gravity model is used to conduct an empirical test. Finally, the following conclusions are drawn,

(1) The development level of e-commerce in the countries along the belt and road is different, but it is higher on the whole, while that in Asian countries is lower.

(2) For every 1% increase in the level of e-commerce of the countries along the line, the bilateral trade volume with China will increase by 1.465174%, that is to say, hypothesis 1 is true.

(3) The promotion effect of e-commerce development in Asian countries on bilateral trade is

greater than that in European countries, that is to say, hypothesis 2 is not tenable, which shows that improving the level of e-commerce in Asian countries has a more important role in promoting the development of bilateral trade.

5.2 Policy suggestions

5.2.1 Efforts should be made to enhance the level of e-commerce in all countries along the belt and road

It is advocated that all countries along the line recognize the mutual benefit and win-win situation of "one belt and one road" and the role of e-commerce in promoting bilateral trade, and strengthen their own e-commerce level, especially in the low level e-commerce countries in Asia, such as India and Afghanistan.

5.2.2 E-commerce infrastructure construction should be strengthened

Many Asian countries along the belt and road are still weak in e-commerce infrastructure. Taking Pakistan (with a low level of e-commerce) as an example, the number of secure Internet servers in 2014 (per million people) was 1.848206, while that in 2014 (per million people) in high-level countries, such as the Czech Republic, was 690.6186, hundreds of times different. To change this situation, on the one hand, the Asian countries themselves should attach importance to the construction of network communication infrastructure; on the other hand, the support of the related countries should be fully considered in the strategic deployment of the "belt and road" initiative. For example, the Asian investment bank led by China can focus on increasing financing support for e-commerce infrastructure construction projects in Asian countries, and China should also focus on OFDI projects in relevant countries.

5.2.3 A multi-level e-commerce cooperation mechanism should be built

In order to more effectively enhance the e-commerce activities between China and the countries along the belt and road, so as to give full play to its role of promoting bilateral trade development, the countries along the line should actively explore and build relevant international cooperation mechanisms, and the cooperation field should involve all levels of e-commerce development as far as possible, such as e-commerce industry alliance, cross-border logistics alliance, e-commerce platform, clearing system, customs cooperation mechanism, etc.

5.3 Research prospects

In this paper, the number of Internet users (per 100 people), secure Internet servers (per million people) and logistics performance index are selected as the basic indicators to measure the level of e-commerce based on their availability. However, there are some other factors that affect the level of e-commerce, such as e-commerce turnover, E-customs clearance efficiency, the availability of new technology, the relevant laws and regulations of e-commerce, and human capital, which are worth considering. Therefore, the indicators reflecting the level of e-commerce will be included as fully as possible in the follow-up study, so as to get more accurate measurement results. In addition, due to the lack of data, only 47 countries along the belt and road have been quantitatively analyzed in this paper, and the research scope has certain limitations, which should be further improved in future research.

REFERENCES

[1]Wang Jie, Quan Yi. Study on trade facilitation of the 21st century Maritime Silk Road. International Business, 2015 (06): 36-46.

[2]Liu Xiangfeng. China and Kazakhstan economic and trade cooperation under the "belt and road" strategy. International Trade, 2015 (11): 34-38.

[3]Han Yonghui, Luo Xiaofei, Zou Jianhua. Research on the competitiveness and complementarity of trade cooperation between China and Western Asia -- Based on the "one belt and one way" strategy. world economic research, 2015 (03): 89-99.

[4]Yang Lizhuo, Liu Xuejiao, Yu Wence. Research on trade complementarity between China and Central Asian countries under the background of "one belt and one road". Shanghai Econmic Review, 2015 (11): 94-103.

[5]Caroline L.Freund, Diana Weinhold. The Effect of the Internet on International Trade. Journal of International Economics, 2004(62): 171-189

[6]Changkyu Choi. The Effect of the Internet on Service Trade. Economics Letters, 2010(109): 102-104.

[7]He Yong, Li Jun-yang, Wu Xue-pin, and Jiang jiao-jiao. Impact of E-Commerc on International Trad-Based on a Iceberg Cost Model. International Journal of Trade, vol. 2, No. 3, pp. 175-178, 2011

[8]Zhang Xu. The impact of e-commerce on international trade. Finance & Economics, 2007 (7): 112-117

[9]Zhang Lin. prospects for China's foreign trade during the 13th Five Year Plan Period: opportunities and challenges. Journal of International Economic Cooperation, 2015 (9): 34-38.

[10]Guan Lixin, Song Siyuan, Sun Jiyong. Influence of "Internet +" on the integration of domestic and foreign markets and countermeasures. International Trade, 2015 (12): 20-25.

[11]Han Linlin, Tian Bo. Study on the export mode of cross-border e-commerce in Shanghai free trade zone from the perspective of trade commodity structure. Economic Survey, 2016 (2): 60-65

[12]Zhang Yabin, Liu Jun, Li Chenglin. Measurement of trade facilitation and China's trade potential in the Silk Road Economic Belt. Finance & Economics, 2016 (5): 112-122.

[13]CII e-commerce knowledge research and measurement research group. Research on the measurement of e-commerce level. Statistical Research, 2001 (12): 26-31.

[14]Liu Min, Sun Shudong. Determination method of e-commerce level measurement index weight based on ANN. Soft Science, 2006 (4): 136-144.
[15]Yang Jianzheng, Zheng Bixia, Yang Lifan. Research on e-commerce evaluation index system based on factor analysis. Finance & Trade Economics, 2014 (9): 94-102.
[16]Zou Jialing, Liu Chunla, Yin Guoqing, Tang Zhipeng. Spatial patterns and economic effects of China's trade with countries along the Belt and Road. Progress in Geography, 2015（5）：598-605
[17]Estrella Gomez-Herrera, Bertin Martens, Geomina Turelea. The Drivers and Impediments for Cross-border E-Commerce in the EU. Information Economics and Policy, 2014(28): 83-96.

Study on Foreign Exchange Risk Management System of Multinational Corporations: A Case Study of ZTE Corporation

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Abstract: In the floating interest rate, the effective foreign exchange risk management of multinational companies has become a very important topic. As a leading international provider of telecommunications solutions, ZTE (Zhongxing Telecommunication Equipment Corporation) has business in more than 160 countries and regions, with overseas business accounting for about half of its total revenue. Therefore, its business involves a variety of currencies, large exposure, wide distribution, so that the company is facing a greater exchange rate risk. In 2011, ZTE suffered exchange losses of 836 million yuan. The huge exchange loss sounded the alarm bell to the company and also opened the systematic exploration of the company in foreign exchange risk management. Through continuous exploration in practice, ZTE has gradually improved the foreign exchange risk management system suitable for its own development model and achieved remarkable results. From 2013 to 2018, ZTE's financial expenses (including exchange losses) decreased year after year. Taking ZTE as a case, this paper summarizes the strategies of ZTE corporation as a multinational enterprise in exchange rate risk management.
Keywords: Foreign exchange risk; Multinational enterprises; Financial derivatives; ZTE

1. INTRODUCTION

At the beginning of the 20th century, Chinese enterprises began to go to the international market. They always operated according to the fixed exchange rate chosen by the country. With the reform of the exchange rate system, more and more emphasis was placed on marketization. It is very important to have the corresponding exchange rate risk management system and to be equipped with senior professional talents, which determines whether transnational enterprises can reasonably avoid the risks brought by exchange rate fluctuations. If not paid attention to and utilized, enterprises may suffer huge risk exposure, and the growth and development of transnational enterprises will be hindered [1]. At present, there are more than 10,000 multinational companies in China, and their subsidiaries are distributed in the global scope, mastering a lot of first-class technology, and the currency formation of sales revenue is also diverse. Therefore, transnational enterprises are bound to face more political risk, interest rate risk, war risk, exchange rate risk and so on. The promulgation of the regulations on the centralized operation and management of foreign exchange funds of multinational corporations (trial) in 2014 has played an unusual role in the foreign exchange risk management of Chinese multinational enterprises, which will directly affect the efficiency and effect of foreign exchange risk management. ZTE is one of the earliest multinational enterprises to engage in financial derivatives and has gradually formed its own exchange rate risk management mechanism over the years. As China's exchange rate regime has become more market-oriented, ZTE has used more financial instruments to hedge risk. Through the case of ZTE, this paper analyzes whether the impact of exchange rate on multinational companies is significant and summarizes effective management methods of exchange rate risk, providing reference for Chinese multinational enterprises to avoid exchange rate risk [2].

2. BASIC INFORMATION OF ZTE CORPORATION

Founded in 1985, ZTE Corporation is China's largest listed telecommunications equipment company, legal representative hou weigui, and successfully listed on the shenzhen stock exchange and the Hong Kong stock exchange. Pursuing excellence and innovation, ZTE Corporation has set up 18 R&D centers around the world, which are located in different countries. These research institutes include nearly 30,000 domestic and foreign researchers. In 2007, the company was selected as one of the "top ten listed companies influencing China", making a breakthrough in its internationalization strategy. In the same year, the main business income of the company in foreign countries accounted for more than 60%, making it a truly multinational company. In order to avoid the foreign exchange risk exposure of the group company, the company has invested in the foreign exchange management financial center and the fund swap platform of multinational companies in the mainland. Through the resolution of the general meeting of shareholders, the company USES the financial derivatives to carry out the hedging business in a certain limit, so as to avoid the foreign exchange risk of the enterprise [3]. These businesses mainly involve foreign exchange forward and structural forward, supplemented by foreign exchange swaps and foreign exchange options. This company was selected as the object of the case study. ZTE began to hedge the exchange rate risk of derivatives in 2008, which has certain representative significance.

3. FOREIGN EXCHANGE RISK MANAGEMENT FRAMEWORK OF ZTE

Under the company's overall goal of achieving stable growth, the purpose of foreign exchange risk management is to effectively reduce the impact of exchange rate changes on the company's business activities. Specifically, the first is to take "exchange neutrality" as the primary objective of foreign exchange risk management, and to implement active exposure management and internal exchange settlement transmission mechanism, supplemented by a certain degree of hedging operation. Second, based on the principle of business priority, the company should lock the acceptable exchange rate of the project, ensure the gross profit of the project, improve the company's overall ability to deal with risks and market changes, and ensure the achievement of the company's comprehensive exchange profit and loss goals. Under this purpose, ZTE has carried out a multi-level objective decomposition of foreign exchange risk management. Based on ZTE's international business sales volume of nearly 50 billion yuan in the past two years, the company's absolute target of comprehensive exchange profit and loss is 0.2% to 0.5% of international sales revenue, that is, 100 million to 250 million yuan.

In order to effectively implement the foreign exchange risk management objectives, ZTE has established a "non-6 +1" management structure and mechanism throughout the whole business process and business units. With the foreign exchange risk control platform of the group's capital department as the core, the management structure consists of business group, business group, accounting group, financing group, contract group and capital group (see the attached picture), connecting the three major departments of commerce, business and finance. At the same time, in the long-term cooperation with business units, we have explored the demand transfer mechanism of "internal foreign exchange settlement". First, the business units will transfer the income of future orders or projects and the foreign exchange risk position information in the receipt to the foreign exchange risk control platform, and then the foreign exchange risk control platform will hedge with external Banks. Through this internal exchange settlement mechanism, it can not only convey the demand of maintaining the value of the project, but also mobilize the enthusiasm of operating units to manage foreign exchange risks, and at the same time enable the maintenance of the target and bid exchange rate (that is, the exchange rate of the decision point of the project), rather than the gain and loss of market fluctuations in the foreign exchange market, so that it can be controlled [4].

4. ZTE'S FOREIGN EXCHANGE RISK CONTROL STRATEGY

In terms of the use of foreign exchange risk control strategy, ZTE combines its own business characteristics to make flexible layout in natural hedging, exposure control, contract hedging and exchange road construction.

The first is to control the source of commerce and realize natural hedging of income and expenditure. All the foreign exchange risk exposure comes from the contract, so if you can design the signing mode, signing currency and payment terms of the project before signing the order, you can effectively avoid the exchange loss; At the same time, it is also possible to estimate the exchange loss that may be generated during the project life cycle according to the attributes of currency, the risk exposure of the project and the trend of exchange rate, and pre-set the exchange cost into the quotation, so as to transfer and share the exchange risk. In the specific operation, the collection shall be made in the freely convertible currencies with good liquidity, such as us dollar and euro, and certain exchange rate protection clauses shall be added. For the income to be formed or already formed, collection, or risk exposure formed at different stages, the exchange rate shall be locked through the internal exchange settlement mechanism, and the contract delivery shall be guaranteed through collection at maturity; For project outsourcing and other expenses, it is required to "back to back" the payment currency and payment node, forming a natural hedge of income and expenditure.

Second, take a multi-pronged approach to strictly control foreign exchange risk exposure. With the continuous promotion of international layout, the currency involved in the business development process of the company increases day by day, the risk exposure also increases correspondingly, and spread all over the overseas subsidiaries, further increasing the difficulty of management. In recent years, the company has achieved certain results through active and steady exposure control strategy. To be specific, in the process of risk aversion, on the one hand, the company keeps the currency exposure with a clear trend moderately. For example, under the background of the us dollar strengthening, the euro weakening and the RMB exchange rate volatility increasing in 2016, the company can enjoy the exchange gains brought by the exchange rate fluctuations moderately by keeping certain us dollar exposure. On the other hand, continued compression of adverse currency exposure to avoid exchange losses, such as construction of euro liabilities in the context of euro weakness, natural hedging of euro assets and euro liabilities while enjoying low financing costs, generally reduces exchange losses.

In terms of control measures, the company strictly controls foreign exchange risk exposure through business management, financial management and other methods, including: constantly optimizing and adjusting the financing structure, maintaining or appropriately increasing the credit scale of relatively weak currency, and reducing or appropriately reducing the credit scale of relatively strong currency; Strengthen the group's internal settlement discipline, clarify the internal exchanges, accelerate the collection of funds, reduce the group's internal exchange exposure; Reasonable choice of accounting standard currency, accounting exchange rate, current and account entry point, through the designated net investment, debt-for-equity and other instruments, continue to reduce foreign exchange risk exposure; Flexibly manage the liquidity of foreign currency positions and conduct spot transactions on foreign currency risk positions to reduce exchange losses; Overseas subsidiaries are required to conduct classified management according to currency attribute, foreign exchange control degree, currency fluctuation range, exposure size and other dimensions, and continuously monitor and control the exchange rates of major exposed countries.

The third is to adopt flexible and orderly contract hedging, supplemented by information system to further improve the efficiency [5]. Hedging of derivatives is the last barrier to forex risk control. In terms of the operation system of derivatives, the company follows the principle of hedging and hedging, neither excessive hedging nor speculative operation. By establishing the corresponding management system and regular reporting mechanism, the company has standardized and streamlined the operation of derivatives. In the formulation of hedging schemes and strategies, the company regularly formulates hedging schemes according to currency trends and hedging costs, and adopts differentiated hedging strategies according to different currency attributes, including rolling hedging, technical hedging, layered hedging and other strategies. In terms of choice of products, the company under the premise of protection policy, with a low risk products, supplemented by a small amount of structured products, and from the current main through hedging foreign-exchange forward, gradually developed into the future choose options according to market changes into the product structure, product structure of a basket of currencies, in response to not break change foreign currency market and foreign exchange risk. In addition, considering the large group exposure and large contract volume, in order to effectively ensure the efficiency and quality of contract management, the company will continue to build and improve relevant information system construction, supplemented by Reuters terminal, to improve the management efficiency of foreign exchange contracts.

Fourth, we will improve the construction of the exchange rate and avoid exchange rate risks. Like other Chinese companies, ZTE has faced a major problem in the process of internationalization: the restrictions on foreign exchange routes in countries that control the exchange rate, and the high exchange cost caused by this problem. Due to the shortage of foreign exchange in these countries to limit the exchange rate, as well as currency depreciation and other reasons, often resulting in a large number of local currency stranded in the local, laying a huge exchange risk. If we do not solve the problem of capital transfer, it will increase the difficulty of signing orders, and the security of capital will also face corresponding risks. To this, the company constantly expand and extend hui road construction, and in countries such as Egypt, Nigeria, uzbekistan, Zimbabwe, on the premise of legal compliance, exploration and Chinese companies and large enterprises and local agent mode of currency swap, and developed from normal to the joint operations, the implementation of local and foreign exchange between enterprises, reasonable avoid the foreign exchange risk.

Fifth, actively promote the signing of RMB contracts to lock in exchange rate risks. With the official inclusion of RMB in SDR, the company is deeply aware that it will be possible to widely use RMB as the valuation and settlement currency in international trade in the future. To adapt to this trend, ZTE actively guides business units to give priority to the use of RMB as the signing and receiving currency when signing overseas project contracts, especially for emerging market countries along the "One Belt And One Road" line or countries with currency swaps, so as to reduce the exchange rate risk while simplifying the trade process. At the beginning of 2016, the representative office of ZTE terminals in India firstly broke through the first order and signed and settled with international customers in RMB, and then converted the forward exchange rate quotation into RMB to lock the exchange rate risk.

Sixth, strengthen VAR value monitoring and realize the quantitative assessment of foreign exchange risk. VAR (Value At Risk) is the Value At Risk At a given confidence level. As a quantitative analysis method, it is widely used in foreign exchange Risk management of enterprises. VAR can give the maximum amount of exchange loss that a company may generate in a specific period of time in the future, and more accurately define the foreign exchange risk status faced by the company. This is conducive to the external and management management of the company according to the company's operating conditions, objective, quantitative assessment of the company's exchange profit and loss risk. By analyzing the exposure and combining with the exchange rate change, ZTE calculated the exchange loss caused by the exchange rate change in a period of time through VAR value. In recent years, as the company continues to implement the foreign exchange risk management strategy and improve the foreign exchange risk awareness of operating units, the foreign exchange risk has been effectively controlled by adopting various measures to flexibly control the exposure, and the VAR value has declined accordingly. From 2015 to 2018, daily exchange loss volatility dropped by more than 10%.

5. NEW CHALLENGES IN FOREIGN EXCHANGE RISK MANAGEMENT

Under the background of further promotion of "going global" strategy in China, enterprises must improve their foreign exchange risk management ability if they want to gain a place in the international market with fierce competition. It can be said that the strength of their foreign exchange risk management ability determines whether they can stand out in the international market competition. At present, ZTE's foreign exchange risk management concept has gone deep into the grass-roots units and established the corresponding management structure and mechanism. However, facing the rapidly changing financial market, how to effectively prevent and manage foreign exchange risks and improve the company's overall ability to deal with "black swan" and "gray rhino" will be a new challenge for the company's foreign exchange risk management. In view of this, ZTE should focus on the following aspects in the future [6].

First, centralized and unified management of exposure. With the expansion of international business, the exposure of overseas subsidiaries increases accordingly. In the future, we will explore how to centralize our exposure to the headquarters through the Hong Kong finance platform.

Second, the dollar exposure to the hedging strategy. As two-way volatility in the renminbi becomes more normal, it will become more difficult to preserve the value of net exposure to the dollar. In the future, I will try to preserve value respectively according to the company's exposure to dollar assets and liabilities.

Third, the internal settlement mechanism to further improve. At present, the internal exchange settlement mechanism still lags behind in delivering the demand for the preservation of foreign exchange risk of the project, so the project cannot be fully hedged. In the future, we will explore the optimization of the information system and the reasonable embedding of the hedging exchange rate to achieve the goal of completely locking the project and realizing the complete selling of foreign exchange risks by business units.

Fourth, we will continue to expand the foreign exchange channels of countries under foreign exchange control. In the future, while promoting the signing and settlement of RMB, the company will strengthen the communication with relevant government departments, seek the exchange cooperation with Chinese enterprises or local enterprises in the host country, and constantly improve the exchange road development.

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REFERENCES

[1]Prasad K. and Suprabha K, R, Measurement of Exchange Rate Exposure: Capital Market Approach versus Cash Flow Approach, Procedia Economics & Finance, 2015, 25: 394-399.

[2]Huffman, S.P., Makar, S.D., Beyer, S.D., A Three-Factor Model Investigation of Foreign Exchange Rate Exposure, Global Finance Journal, 2017, (21): 11-12.

[3]Belghitar Y, Clark E, Mefteh S, Foreign Currency Derivative Use and Shareholder Value, International Review of Financial Analysis, 2013, 29(3): 283-293.

[4]Dmitrieva M, Interest Rate Risk and Foreign Exchange Risk Management Practice in Russian Non-Financial Companies, Journal of the New Economic Association, 2016, 2(30): 129-159.

[5]Salim Lahmiri, Modeling and predicting historical volatility in exchange rate markets, Physical A: Statistical Mechanics and its applications, 2016.

[6]Adler, M. and Dumas, B., Exposure to Currency Risk: Definition and Measurement, Financial Management, 1984, 13: 41-50.

Research on Attribute Identification and Fiscal and Tax Treatment of Sustainable Debt

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Abstract: In recent years, with the introduction of a series of deleveraging policies, more and more enterprises regard sustainable debt as an important way to optimize the structure of assets and liabilities, reduce enterprise costs and alleviate the pressure of enterprise financing, which provides an opportunity for the sustainable and rapid development of relevant tools and markets. As a kind of "equity-like debt", perpetual debt has the dual nature of equity and debt, and it is widely used in practice when it meets certain conditions and is included in the equity in accounting. In view of the increasingly widespread use of sustainable debt, we will focus on the property identification and accounting treatment of the sustainable debt issuers and holders of the practical impact.

Keywords: Sustainable debt; Attribute identification; Fiscal treatment; Tax treatment

1. INTRODUCTION

Since August 2018, "Key Points of Reducing Corporate Leverage Ratio in 2018", "About Strengthening State-owned Enterprise Assets and Liabilities Constraint Guidance" policy releasing, reduce the asset-liability ratio of state-owned enterprises put forward specific goals, more and more enterprises will be sustainable debt as the optimization of the structure of assets and liabilities, to reduce the enterprise cost, the important way to reduce the pressure on corporate financing, this to the sustained and rapid development of related tools and market provides the opportunity. However, the term design of sustainable debt is to a large extent the game between the issuer and the holder based on their respective economic demands to pursue a win-win result. On the one hand, the issuer hopes to avoid the "contractual obligation" of debt repayment unconditionally, so as to divide the perpetual debt into "shares"; Holder, on the other hand, with an eye to prevent moral hazard of the issuer, credit risk and the uncertainty of future cash flow, trying to push through dividend/brake, accumulation of interest, interest rate jumped, renewal or redemption option and investor protection clause formed economic force or incentives, "rational expectations" for the issuer on time servicing. Therefore, the issue of sustainable debt has always been a hot and difficult point in the practice of accounting and taxation [1].

2. OVERVIEW OF PERPETUAL DEBT

These businesses mainly involve foreign exchange forward and structural forward, supplemented by foreign exchange swaps and foreign exchange options. This company was selected as the object of the case study. ZTE began to hedge the exchange rate risk of derivatives in 2008, which has certain representative significance. Perpetual bonds, also known as life bonds, refer to bonds registered and issued by bond issuers in the inter-bank bond market. For a perpetual bond, it is necessary to choose the interest of the day and the corresponding deferred interest at the coupon date to realize the postponement of the coupon date. Therefore, the funds raised through perpetual debt should have the role of equity capital. In the overseas capital market, although the appearance of sustainable debt is not long, but the application effect is very good, and gradually become an important financing method in China [2].

The special property of perpetual debt is that it has mixed capital property. Whether accounting will count it as financial liability or equity instrument is controversial. The identification of different attributes will have a great impact on the analysis of the capital structure, solvency, profitability and operational capacity of enterprises, and will also have an impact on the treatment of income tax. What's more, it will affect the subsequent issuance terms of sustainable bonds of enterprises, thus exerting a certain impact on the whole financing market of sustainable bonds. In this regard, the ministry of finance has issued regulations for many times to regulate the identification of the attribute of sustainable debt. Accounting standards for business enterprises no. 37 -- presentation of financial instruments (CAS37) has made specific provisions on the classification of financial instruments. In March 2014, the ministry of finance issued the provisions on the classification of financial liabilities and equity instruments and related accounting treatment, which provided more detailed provisions on the identification and accounting treatment of the attribute of sustainable debt.

3. ATTRIBUTE IDENTIFICATION OF SUSTAINABLE DEBT

According to the accounting rules of CAS37 and the relevant provisions of perpetual debt, the attribute of perpetual debt can be identified from the points of maturity and interest rate jump, deferred interest payment and liquidation order [3]:

3.1 Interest Rates Jumped

The general terms of the perpetual bond contract stipulate that the duration includes N years, the issuer has the right of redemption and extension, and the holder has no right of resale. On the surface, it seems that the perpetual bond has no fixed term, and its equity is stronger. But, in fact, due to contract the rate jump, jumping without limit, as long as the bond survive, every once in a cycle of interest rate pricing will jump in the number of points, usually a sustainable debt contract rate are all in the initial spreads, higher than the average cost of debt financing, interest rates after a reset, the interest rate will be very high, considering the cost of funds, if other financing channels and does not appear larger financial predicament, issuers will generally choose early redemption.

Therefore, it is stipulated in the terms of issuance of perpetual bonds that the duration of perpetual bonds is N years, the issuer has the right of redemption and extension and the holder has no right to sell back, but it is essentially limited, and its creditor's right is stronger, and its attribute should be recognized as financial liability. From the Angle of interest rates jumped, even if issuers are not redeemed sustainable debt, its duration is sustainable, but with interest rates jump mechanism design without cap mostly, the interest rate will be more and more high, may end up with the types of financial instruments industry over the same period the average interest rate, to meet this condition, according to new virtue should be regarded as financial liabilities.

3.2 Deferred Interest Payment

The deferred interest clauses of perpetual debt generally stipulate that the interest payment can be deferred without restriction. On the surface, the enterprise does not assume the obligation to pay cash or other financial assets to other parties, that is, it does not pay interest compulsively and meets the recognition conditions of equity instruments. But in practice, the interest on a perpetual bond is usually paid on time, not deferred. This is mainly due to the following reasons [4]:

One is the impact of corporate credit. The deferred interest payment of sustainable debt will affect corporate credit and cause the capital market to worry about corporate profitability and financial status, which is not good for the image of most enterprises in the capital market.

Second, the impact of capital use cost. The interest of the perpetual bond deferred payment shall be calculated according to the current coupon interest rate accumulatively during the extension period. In addition, the terms of interest rate increase will increase the capital use cost of the enterprise and affect the cash flow of the enterprise. According to the statistics, we can see that most of the issuers of sustainable debt are state-owned enterprises, with relatively strong financial strength, there is no need to delay the payment of interest.

The third is the influence of market information. Perpetual bonds have mandatory or deferred interest limits that require issuers not to defer interest payments if they pay dividends or reduce registered capital to equity investors. Enterprises rarely reduce their registered capital under normal operating conditions, but they generally choose to continue to pay dividends for the purpose of not conveying negative information about their profitability or financial status to the capital market.

Therefore, unless there are serious financial problems, enterprises generally will not choose and cannot choose deferred interest payment, and the attribute of perpetual debt should be identified as financial liabilities.

3.3 Payment Order

Generally speaking, when an enterprise goes bankrupt and goes into liquidation, the higher the order of liquidation in various financing instruments, the stronger the creditor's rights will be, and the higher the order of liquidation will be, the stronger the equity will be. The provisions of the relevant accounting treatment according to the sustainable debt, "contract issuer liquidation sustainable debt issuers with common bonds and other debt issued in the same priority, the holder shall carefully consider this order will lead to delivery to the issuer for cash or other financial assets in anticipation of a contractual obligation and determine its accounting classification". The liquidation sequence of existing perpetual bonds is almost all the same as that of other debts of the issuer, indicating that perpetual bonds and other debt financing instruments have the same creditor's right, so its attribute is more appropriate for financial liabilities.

4. FISCAL AND TAX TREATMENT OF SUSTAINABLE DEBT

At present, most enterprises in China recognize perpetual debt as an equity instrument, while a small number of enterprises recognize it as a financial liability. The issuing cost of perpetual bonds is relatively high, but after taking into account the equity of the issuer, it reduces the asset-liability ratio, optimizes the capital structure, prevents financial risks and stabilizes the capital chain of the company. More flexible than other debt financing; Increased refinancing capacity also helps to reduce the expected cost of capital. In addition to the asset-liability ratio, the attribute identification of sustainable debt will have an impact on profits and losses. According to the accounting standards for enterprises in China, if the perpetual debt is divided into equity instruments, the issuance expense generated in the issuance process can directly offset the recorded value of "other equity instruments". If the perpetual debt is classified as a financial liability, these transaction costs shall be recorded in the "bonds payable -- interest adjustment" account. Assuming that interest capitalization is not taken into account, the amortized interest adjustment will directly affect the amount of interest expense during the existence of the perpetual debt, thus affecting the profit and loss of the enterprise. As for the interest expense during the existence of perpetual bonds, when the perpetual bonds are divided into equity instruments, they can be treated as dividends and dividends, which affect the account of owners' equity of the enterprise. When it is classified as a financial liability, interest expenses should be recorded in the "financial expenses" account, and then the impact on the profits and losses of the enterprise [5].

Because of the difference between tax and accounting, there is no necessary connection between the issuer's attribute identification of perpetual debt according to equity instruments or financial liabilities in accounting and whether the interest expense of perpetual debt in tax is deducted before income tax. However, the principle of the new tax regulation is "equity for equity, debt for debt", that is to say, the tax treatment of the issuer can be determined according to whether the interest expense of the perpetuity bond is the dividend of the profit distribution link or the interest of debt repayment [6].

The state has issued the regulations on the differentiation of financial liabilities and equity instruments and related accounting treatment, which is in line with the financial and tax treatment of enterprises' sustainable debt. In accordance with the provisions, if the perpetuity bond is recognized as an equity instrument, the value enterprise can set up a secondary account of the perpetuity bond under other equity instruments to show, and the interest accounting results can also be shown by setting the interest payable on the perpetuity bond under the profit distribution account, and the interest paid by the issuer shall also be calculated through the owner's equity. If the perpetual bond is recognized as a financial liability, the enterprise can include the face value of the issue into the account of bonds payable, and the difference between the initial face value and the fair value can be included in the account of bonds payable in the account of perpetual bond (the difference). At the same time, the gains, losses and interest paid after the repurchase of perpetual bond should be recorded into the current profit and loss. If the perpetual debt is equity investment, the compliance dividend and dividend obtained by the investor can be exempted from enterprise income tax, and the dividend and dividend paid by the issuing enterprise can not be deducted before tax. If the perpetuity bond is a debenture investment, the interest paid by the investor shall be taxed, and the interest paid by the issuing enterprise may be deducted before tax within the prescribed scope; If the perpetual bond is a hybrid investment, it needs to be treated as creditor's right investment for tax treatment. The interest paid by the issuing enterprise can be deducted before tax. The difference generated after the repurchase is the income of debt restructuring and is included in the current taxable income.

5. CONCLUSION

As a financing tool to adjust the capital structure of enterprises, Chinese enterprises have begun to make positive attempts. On accounting confirmation, will be confirmed as sustainable debt equity instruments or financial liability has been a lack of specific claims, although the accounting standards for enterprises no. 37 - presentation of financial instruments in the financial area of debt and equity instruments points and relevant accounting regulations and the classification of financial liabilities to equity instruments made in principle, but for a sustainable debt in the concrete accounting treatment and tax treatment of the actual operational level is still lack of detailed guidance. It is suggested that through the improvement of relevant financing, accounting, tax and other laws and regulations, the treatment of sustainable debt in the specific business environment should be standardized, and the gray zone should be removed as soon as possible.

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REFERENCES

[1]International Accounting Standards Board. IAS 32—Financial Instruments: Presentation. http://www.ifrs.org.2012.

[2]Yao Jin. The Study of Chinese Real Estate Enterprises Issuing Perpetual Bonds Financing: Advantage and Risk. American Journal of Industrial and Business Manage, 2014 (12).

[3]Rodrigo Fernandes Malaquias, Pablo Zambra. Disclosure of financial instruments: Practices and challenges of Latin American firms from the mining industry. Research in International Business and Finance, 2018, 45.

[4]William H Wiersema. More than accounting: Predictive financial tools. Electrical Apparatus, 2019, 72(5): 41-42.

[5]FASB Improvements to Credit Losses Standard. California CPA, 2019, 88(2): 208-235.

[6]Christoph Pelger. Practices of standard-setting-An analysis of the IASB's and FASB's process of identifying the objective of financial reporting. Accounting, Organizations and Society, 2016, 50.

Financing Decision and Financial Risk Prevention of Capital Chain: Case Study Based on R&F Properties

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Abstract: In December 2016, it was proposed at the Central Economic Work Conference that "houses are for living, not for speculation". Therefore, as the main pillar of the market economy, the real estate industry will be subject to more and more strict policy control, because only in this way can the market bubble be effectively prevented and the orderly and sustainable development of the real estate industry be better ensured. In this paper, Guangzhou R&F Properties Co., LTD. (hereinafter referred to as R&F) is selected as the case study object. This paper introduces the major investment and financing events of the enterprise and the current capital chain risks of R&F in terms of financing decisions. Then it is found that R&F has many problems such as single financing channel and over-investment. Finally, based on the above analysis, the article puts forward suggestions on above issues.

Keywords: Real estate enterprises; Financing decisions; Capital chain risk

1. INTRODUCTION

After more than 20 years of rapid development, China's real estate industry has also entered a period of stable development from the golden age. However, with the continuous promulgation of national policies in recent years, the traditional real estate enterprises that hoarded land and houses in the past also gradually realized that the growth ceiling of the industry was approaching, and as for the real estate enterprises, the main products they sold were not fast-selling products, which were easily affected by the cyclical impact and led to the reduction of cash flow.

The diversification of real estate enterprises cannot be achieved without strong capital backing, but China's real estate enterprises cannot well combine with the future development direction in the choice of financing strategies, resulting in huge centralized repayment risks hidden behind large-scale borrowing. Therefore, real estate enterprises should give full consideration to risk control factors in their financing decisions.

2. LITERATURE REVIEW

2.1 Research on Financing Preference

Fazzari and Hubbard (1988) [1] pointed out that during financing process, the choice of financing methods will have an important impact on the choice of enterprise investment projects. Therefore, many literatures have calculated and analyzed the risks behind corporate financing by different methods, and found that there are certain risks behind the scale of financing, the formulation and selection of financing methods [2]. The most important way of financing is bank loans, and there is also a correlation between the interest rate level of bank loans and the fluctuation of real estate prices [3].

2.2 Diversification and Financing Decision

Pecking order theory pointed out that when internal financing cannot meet the demand for funds, enterprises will turn to external financing to raise funds. Therefore, for enterprises adopting diversified development strategies, debt financing is often used as a way to replenish funds [4]. Many scholars have developed in the research, too much debt financing will lead to enterprises to bear greater repayment pressure and financing costs, increasing the financial risks of enterprises [5].

2.3 Research on Risk of Capital Chain

The financial risk early warning model was first put forward by Altman [6]. Under the inspiration of model, many domestic scholars have constructed the evaluation index of capital chain risk with the help of financial indicators [7] to identify capital chain risks. However, the use of funds is always in a changing process. Therefore, Zhang et al. [7] put forward a combination analysis method of dynamic indicators and static indicators, tested the effectiveness of the selected relevant indicators, and designed a more accurate risk identification scheme for capital chain.

3. CASE INTRODUCTION

3.1 Brief Introduction of R&F Estate Company

As a benchmark enterprise of real estate enterprises, R&F was once called "South China Five Tigers" in Evergrande Real Estate, Country Garden, Agile and Hopson. However, due to many factors, R&F achieved only 81.8 billion sales in 2017, ranking 23rd in the industry and fading out of the first echelon of housing enterprises. According to the time sequence, this article will summarize the key events of R&F and sort out the following development route:

(1) Based in Guangzhou, Consolidate business

In 1994, R&F was established and entered the field of real estate development. It established the development direction of "urban transformation and building livable communities".

(2) Listing in Hong Kong, Arrange the whole country

In 2002, R&F entered Beijing and began to expand in different places;

In 2005, R&F was listed on the main board of the Stock Exchange, landed in the capital market, and officially started its scale expansion;

In 2006, R&F was officially distributed throughout the country. By 2007, it will basically be distributed throughout the country;

(3) Achieved significant results in commercial real estate sector

In 2004, R&F laid out its business, focusing on the development of office buildings, commercial projects and international hotels in the CBD core areas of the first-tier cities in South China, North China and the central region, which opened the prelude to entering business;

In 2007, with its strong financing ability and operation management mode, the group formed a large real estate enterprise with residential industry as the main part and commercial real estate as the auxiliary part;

(4) Become the owner of the world's largest luxury hotel

R&F acquired 77 hotels of Wanda Group in 2017. Chairman of R&F said that in the future, the company's operation will be profit-oriented and will not blindly pursue scale expansion.

3.2 Briefing on Financing

3.2.1 Introduction of R&F's Investment and Merger Projects in Recent Years

As a real estate company, R&F has always adopted diversified land acquisition methods. However, with the domestic real estate market getting more and more strict, R&F has followed the footsteps of other high-quality enterprises in the same industry and accelerated the pace of overseas development. The company's major overseas real estate projects are as follows (Table 1):

Table 1 Some overseas projects of R&F

Project site	Project name	Project overview
Johor Bahru, Malaysia	R&F Princess Cove	Covering 116 acres and 3.5 million square meters
Brisbane, Australia	Brisbane One	Invested in five projects in Brisbane in 2016
Melbourne, Australia	Live City	Includes 1450 residential units and office and retail space
Phnom Penh, Cambodia:	ING Metro	The largest land development project in Cambodia
London, England	Croydon	Developing the first residential apartment project in Croydon

3.2.2 Introduction to Financing Scale of R&F

After large-scale acquisition and project development, R&F obviously felt great pressure on funds. So in recent years R&F began to carry out intensive financing. On February 9, R&F announced that in view of the recent market volatility, the company cancelled the issuance of 1 billion yuan of medium-term notes.

Due to many uncertain factors in the issuance of debt financing, R&F has turned to other financing methods to seek funding sources. According to the data reported by R&F in recent years, the current liabilities of the company from 2016 to 2018 were 87.474 billion yuan, 112.666 billion yuan and 202.829 billion yuan respectively. The annual growth rate of current liabilities in 2018 was as high as 80.13%, and the scale of current liabilities in the third quarter of 2018 exceeded that of 2017. Therefore, debt financing alone can no longer meet the financial needs of R&F.

4. CASE ANALYSIS

4.1 Analysis of Financing Motivation

After 25 years of development, R&F began to rebuild its old site, then developed real estate projects nationwide, slowly entered commercial real estate, and then diversified into overseas markets. All of the above need to consume a large amount of capital. Therefore, during financing channels, it will be limited by rating, resulting in a smaller amount of funds raised.

According to the data in the cash flow statement of the enterprise, the net cash flow from operating activities of R&F has been negative since 2012. In 2016 it was-3.338 billion yuan, but in 2017 it reached-7.287 billion yuan, 1.16 times as much as in 2016, and this trend will continue in 2018. From the change trend in Figure 1, it can be seen that although R&F performed better in cash brought by its business activities in 2015, the situation further deteriorated thereafter. R&F's activities have not only failed to provide funds for the enterprise, but have continued to deteriorate, causing great risks to the internal capital flow of the enterprise. Therefore, the continuous expansion of financing scale is also a necessity.

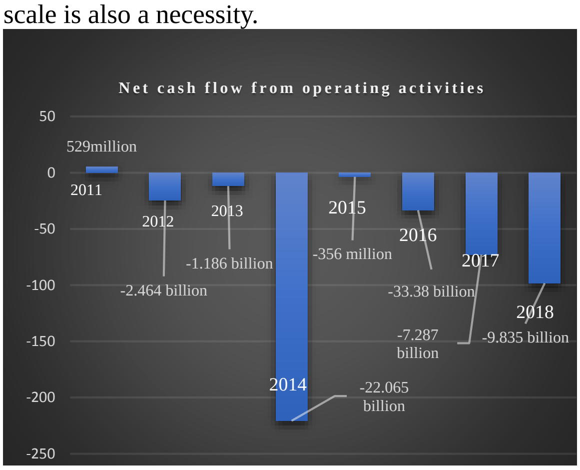

Figure 1 Changes in Net Cash Flow of R&F's Operating Activities

4.2 Financial Risk Caused by Financing Decision

4.2.1 Z-Score model measures the capital chain risk level of R&F

First of all, there are two main reasons why the Z-model is used to measure the capital risk level of R&F in 2018. First, up to now, there is no suitable analysis model to measure the capital chain risk. There is an inclusive relationship between capital chain risk and financial risk, so the use of financial risk identification model can also reveal the risk of capital chain level to a certain extent. Secondly, the "Z-Score" model was put forward by Altman in 1963, which is used to evaluate the financial risk and bankruptcy risk of enterprises. This model considers the influence of five types of financial indicators on financial risks, divides them into five types, and finally weights them. A large number of empirical results prove that the accuracy of the prediction results is related to the development of the company at that time. The accuracy of the prediction one year before the company went bankrupt was as high as 90%, while the accuracy of the prediction was about 70% when the company was analyzed five years before the company went bankrupt. However, as the application scope of the model is increasing, domestic scholars have found that the formula does not conform to the market environment of our country in setting the judgment value, so they have made modifications in the range of critical values. The calculation formula and risk identification critical value are as follows:

(1)$Z=1.2x1+1.4x2+3.3x3+0.6x4+0.999x5$

(2)

Table 2 Z-score critical value

Z Value	Financial Status and Risk Level of Enterprises
$Z<1$	Financial situation deteriorates and the possibility of bankruptcy is high
$1\leq Z\leq 1.7$	The financial situation of the enterprise is unstable and there is a slight possibility of bankruptcy.
$Z>1.7$	The financial situation of the enterprise is relatively good.

According to the above model, the relevant financial data of R&F in 2018 are substituted into the formula to measure the financial risks of the capital chain of R&F. The calculation results are shown in the following table:

Table 3 R&F'S Capital Chain Risk Measurement Results in 2018

Indicator	Computational formula	Calculation result
$x1$	Operating assets/Total assets	0.2549
$x2$	Retained earnings/Total assets	0.0182
$x3$	EBIT/ Total assets	0.0415
$x4$	Equity value / Total assets	0.2530
$x5$	Sales revenue/Total assets	0.2104
Z Value	$Z=1.2x1+1.4x2+3.3x3+0.6x4+0.999x5$	0.8303

As can be seen from the above Table 2, the Z value of R&F in 2018 is as low as 0.8303, which is less than the critical value of 1. If the enterprise does not adjust the scale and mode of financing in time, the enterprise will probably face the risk of breaking the capital chain.

4.2.2 The capital structure deteriorates and the debt paying ability decreases

Due to the particularity of their own business, real estate enterprises will form more pre-sale accounts in their daily business, thus forming part of their liabilities, while the other part mostly comes from corporate loans, bonds, etc. Therefore, real estate enterprises often adopt high debt ratio management mode. As can be seen from the Table 3, in recent years, the debt scale of R&F has been continuously expanding, and the ratio of current liabilities to non-current liabilities still fluctuates slightly. The cost of debt financing is slowly eroding the interests of enterprises. Therefore, behind the financing decision, there are many factors that cause risks in the operation of the capital chain.

Table 3 R&F's Debt Situation from 2015 to 2018

	2015	2016	2017	2018
Current liabilities /total liabilities	60.08%	48.71%	48.31%	59.97%
Non-current liabili-ties/total liabilities	39.12%	51.83%	51.69%	40.30%
Asset-liability ratio	73.21%	79.31%	78.23%	80.92%
Interest coverage ratio	2.55	2.40	4.77	2.37

5. CONCLUSIONS AND RECOMMENDATIONS

Through the above analysis of the case of R&F, the following suggestions are put forward for the financial risks faced by R&F:

(1) Make rational investment decisions and avoid investment risks. R&F made a wrong decision in the investment and financing stage, which caused the risk R&F of capital chain. Under the condition of keeping safety stock, speed up inventory turnover, further reduce enterprise leverage and reduce operating risks. In the choice of investment direction, we should combine the advantages of real estate with investment projects to avoid investment risks brought about by investment in new fields.

(2) Check the sales link and speed up the return of funds. The sales link of real estate is the final link of the whole project. Only in the sales link can an enterprise complete the conversion of commodity value and bring real cash flow to the enterprise. Therefore, speeding up the sale of inventory is helpful for enterprises to increase the financing of their own funds, which can further alleviate the financing needs of enterprises and thus prevent the risks of capital chain. If there are problems in the sales process of real estate enterprises, the inventory will be overstocked, which will not only affect the company's cash flow, but also occupy a large amount of management costs, resulting in greater waste. Therefore, for real estate enterprises, achieving higher revenue and bringing more cash flow to enterprises is a key step to reduce the risk of capital chain.

(3) Enriching financing methods and improving

capital structure. For real estate enterprises, capital demand often comes from external financing, which easily leads to unstable changes in the capital chain during the financing process. Debt financing is the main part of external financing, which easily leads to the deterioration of the capital structure of enterprises, thus leading to the risk of capital chain of enterprises. In this case, R&F borrowed heavily during the financing process, which led to an increase in interest charges year after year and a negative impact on its credit rating, thus affecting the normal operation of the enterprise.

(4) Seize the Opportunity and Actively Seek to Return to A Shares to Raise Financing Level. Since the listing of Hong Kong stocks in 2005, R&F has been affected by under-valuation and liquidity. Since then, R&F has been seeking the opportunity to list A shares. Compared with Hong Kong stocks, A-share listing has the following advantages: First, compared with overseas markets, the mainland listing valuation of housing enterprises is more ideal; Second, the financing environment is improving, and the new policy will be introduced to help housing enterprises return to the ground. Third, reduce financing costs and time costs. Many real estate companies are seeking to list A shares because from a long-term perspective, listing on the mainland can meet the huge financing needs of enterprises, and will also have a positive impact on the value of enterprises, thus driving the share price of enterprises to reach the desired level.

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REFERENCES

[1]Fazzari S, Hubbard R G, Petersen B C, Financing constraints and corporate investment. Brookings Papers on Economic Activity, Vol.1, No.19, pp.141-195, 1988.

[2]Wang Yu, Yu Hui, Robust, Analysis of Principal-Agent Problem in Enterprise Equity Financing under Growth Risk, Systems Engineering Theory and Practi-ce, Vol.5, No.39, pp.1091-1104, 2019.

[3]He Kejia, On the Relationship between Bank Loan and Real Estate Price Fluctuation, Enterprise Economy, Vol.9, pp.147-148, 2005.

[4]Meng Ding, Research on Debt Governance Effect of Diversified Investment of Private Enterprises, Statistics and decision, Vol.16, pp.173-175, 2014.

[5]Man Haizhen, Research on Debt Scale of Enterprises, Research of finance and accounting, Vol.14, pp.62-64, 2009.

[6]Altman, Edward I. Financial Ratios, Discriminate Analysis and the Prediction of Corporate Bankruptcy, Journal of Finance, Vol.4, pp. 589-609, 1968.

[7]Zhang Jinchang, Fan Ruizhen, Hu Tianyu, Research on Risk Measurement Method of Enterprise Capital Chain Fracture, Economic Management, Vol.1, No.37, pp.190-199, 2015.

Children's Games and Maniac War: Appreciation of Morio Kita's Tadpole

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Abstract: In Northoff's works on war, words such as "war", "(neurological) disorder", and "crazy" often appear. In his works, he deeply reveals the evil of war. This is because based on his own war experience, he has his own unique understanding of the characteristics and nature of the war of aggression. In order to clarify the author's view of war and the profound connotation contained in the work, combined with the background of the time, the description of war in the work was extracted and discussed. The results show that the war of aggression is more terrible than insanity; the psychological and spiritual trauma of war is huge. And through war, we can re-examine human culture, civilization, and human reason, and realize the crisis of human existence.
Keywords: Tadpole; Children's game; War

1. INTRODUCTION

A total of 3 Chinese literature records and 10 foreign language literature records were found on the China Knowledge Network through the search keyword "Beidouf". It can be seen that there is very little research on Beidouf in China. The three Chinese documents are the discussion of the humor in Beidoufu's literature, the analysis of the "People of the Yu Family", and the exploration of the rise and fall of the Yu family and the changes of the times and the Introduction of Beidou himself. However, as a prolific, modern and famous Japanese writer, he reflected the theme of war, through the description of the characters in his works *Tadpole*". In the Corner of Night and Fog", "Land of the Divine Spirit" and other works. These works reflect the author's concern and thinking on society, human nature, and human existence. This paper analyzes the short story Tadpole and probes into the author's view of war and the profound ideological connotation contained in his works.

2. ANALYSIS OF *TADPOLE*

2.1 Summry of *Tadpole*

The protagonist of his short story *tadpole* by the famous modern Japanese writer Morio Kita, is a character who has taken away everything, including ideals and life, from the aggression launched by Japanese militarism at the time. Before the war, he felt humiliated and helpless, when he had no independence and had to accompany the children who were too young to know nothing every day. Although he had his own unknown ideals and dreams, his ideals were shattered. Because of the war and the aggression launched by Japanese militarism, he was involuntarily sent to the mainland of China. He was eventually buried as a cannon fodder for Japanese militarism on Chinese soil due to malnutrition.

Even before the war, he had been the unfortunate category. In his early thirties. He didn't get married and had to live with his brother, as the leader of a group of children, accompanying his brother's children to play various games at his brother's house.

Although even his brother's children look down on him, and even if the pocket money is almost empty, he has his own ideals and dreams. He has been conducting rapid breeding experiments of edible frogs. He dreamed that he could catch more and better tadpoles at an early date, and could grow larger and better edible frog breeds at an early date. He dreamed that he could have an independent life early, marry a wife and start a family, and never be left behind others. Although his relatives, including his own mother, elder brother, and uncle, were dismissive of his so-called research and experimentation, he himself, like a child, took the boy as a companion, silently grasping him, and relentlessly carried his experiments.

He could not give up, nor did he dare to give up. That was his only dream and his only hope. If he gave up…he would not even think about it. For this reason, he was willing to be a child's jester, and willing to let the children manipulate and deploy.

However, the war deprived everything. The war of aggression, which brought a severe disaster to the Chinese people, also destroyed his ideals, took his life, and at the same time, it also claimed the life of his brother's child, who had always helped him, who was keen on war games and dictated him.

This is the protagonist of *tadpole* written by the famous modern Japanese writer Hokutofu. This is his miserable life caused by Japan's war of aggression abroad.

2.2 Analysis Method

Draw out the description of the war in the works, and discuss how the works reflect the author's view of war.

2.3 Analysis Result

2.3.1 A war of aggression worse than insanity

From a handful of Japanese militarists invaded the three provinces of Northeast China in 1931 to the Japanese government surrendered in 1945, Japan continued its aggression for more than 14 years. This war not only served the Chinese people, including the people of Taiwan, the Korean people, and the people of Southeast Asian serious disasters, and at the same time, the Japanese people themselves have fallen into the bitter seas of war.

In this war, a handful of militarists forced thousands of Japanese people onto the battlefield, acting as cannon fodder and taking their lives. According to incomplete statistics, during these 14 years, Japanese militarists sent more than 10 million adults and underage men to the battlefield as cannon fodder. This was about one-seventh of Japan's total population at that time, and one-fourth of the total number of Japanese men. In other words, in Japan at that time, one man from every two families was sent to the battlefield [1]. According to Japan's 1940 census, up to the October 1 of that year, the total population of Japan at that time was 73,114,308 [2]. Because the front line was lack of the soldiers and the troops were insufficient, the Japanese military at the time began to force a large number of liberal arts young students to the battlefield while retaining their student status in 1943. The people of other Asian-occupied countries in Asia have described them as "boy soldiers." The exact number of casualties of the Japanese aggressor in this war is no longer accurate. In the Pacific War alone, more than 1.5 million Japanese aggressors were killed, of which more than 1.14 million were in the Army and more than 410,000 were in the Navy. Another 310,000 people were injured or missing, including more than 290,000 in the Army and 10,000 in the Navy. In general, nearly 300,000 civilians died in the fighting, and nearly 370,000 were injured or missing. These are just the official figures published by Japan. In fact, if we add the death tolls in the three northeastern provinces of China and Okinawa in Japan, the total number of deaths of the Japanese aggression army, including its family members, and ordinary civilians is estimated to be more than 3.2 million. One person was killed. In addition, during this war, more than 3 million houses in Japan were dynamited, burned or forcibly demolished, and nearly 15 million people became homeless refugees [3].

At the same time, as they frantically expanded their military preparations year after year, Japan's economy was continuously hit, and it collapsed. More than 14 years of war cost about 755.8 billion yen. At that time, Japan's actual gross national product averaged less than 200 billion yen per year. At that time, Japan's real GNP was 166 billion yen in 1935, 212 billion yen in 1937, 208 billion yen in 1940, and 206 billion yen in 1944. [4] At that time, Japan's national finances could not support such a huge military expenditure, so it had to increase taxes and issue national debt. When Japan surrendered in 1945, the outstanding balance of its national debt reached 143.9 billion yen, more than half of its gross national product in 1944. In this war, Japan lost nearly half of its total national wealth (105.7 billion yen), leaving only 188.9 billion yen (both at August 1945 prices). It was already insolvent and nearly bankrupt. [5] When Japan surrendered, its industrial production equipment had lost 30 to 60%, and it was almost impossible to restart production. The war has hit Japan's agriculture more severely. As most young and old people were sent to the front line during the war, the labor force engaged in agricultural production was seriously inadequate, and at the same time, due to the severe shortage of agricultural tools and fertilizers, their grain output fell year by year. Take Japanese staple food rice as an example. The average annual output from 1934 to 1936 was 57.4 million stones ("stone" is an old Japanese capacity unit with the following relationship: 1 stone=10 bushels =100 liters ≈180.5 kg. As for how to express the weight of rice, different people have different ideas. Some people say that 1stone is about 150 kg, according to Toshio Nishikawa's *History of Japanese economic* (Orient economic news agency, 1996), while others say it is about 140 kg, seen in *The History of Publishing-- the Book of Japan*, (The Mainichi Newspapers Co., 1978), It is taken a median value of 145 kg here), while the annual output from 1945 was only 38.12 million stones, which is about 70% of the average annual output before the Japanese invasion of China. [6] According to Motoki Toyama and other books, the rice production in Japan was 66.78 million stones in 1942; 62.89 million stones in 1943; 58.56 million stones in 1944; 39.15 million stones in 1945. [7]

From this, it can be known that even if the protagonist of *tadpole* described by Morio Kita can return to Japan alive, his frog breeding experiment is rarely possible to continue, and his dream of frog breeding is almost impossible. War changed everything. The long-planned and almost sudden war of foreign aggression not only changed the historical course of the entire human race, but also changed the life direction of everyone who participated in or was involved in the war and did not experience the flames of war. And this change of direction or destiny is a disaster for mankind, but for people like the protagonist of *tadpole*, it means greater misfortune.

The protagonist of *tadpole* had to accompany a young child to play a war game, although he was already tired. As an adult, he hated war and games. He had his own dreams and jobs. He needed to work hard to realize his dreams, otherwise he will have no way to be alive, or even maintain his survival in that society. He wanted to continue his work, but he had to bow down to the child, because he needed the child's help. When playing with children in war games, he was painful and helpless. For a playful and ignorant child, he can only let it go. Because only if the child's requirements were first met, could he get help from the child, and only with the help of the child could he realize his dreams.

However, he never expected that the Japanese militarists who launched the war of aggression were as keen on real war as the children who were keen on war games. He never imagined that those who controlled the state power and the nearly 100 million Japanese were like children, forced the whole country for their own obsession, forced thousands of people, went to war, to the battlefield with them.

This is not a children's game, but an adult's reality. This is not a true fantasy of the children that day, but an delusional and painful delusion of adults. So, about the war, this description appeared in the author's writing:

After 1933, the dark clouds which quickly covered the European continent, caused terrible lightning flashes soon, which we called the violent winds and cold currents of the Second World War, which swept the entire European continent. It was a whirlwind of madness that swept the vast area. What was even more terrifying was that the madness had a crazy, thorough plan and a corresponding sequence from the beginning.

Morio Kita *In the corner of night and dense fog*

Those war madmen should be responsible for the disaster, misfortune was caused by the demon who set off a "crazy whirlwind of the vast area", which is a group of war madmen more terrible than the "Pure Nervous" mental patients, and the misfortune and disaster were just based on their "crazy, thoughtful plans."

The author was clearly provoked. His words were fierce, and the point of resentment was directed at a handful of war madmen who waged war. However, he was relatively calm and sober. Not only did he have a clear understanding of the nature of that war, but at the same time, he had extraordinary and deep insight about that the war of aggression "with mad and thorough plans and the corresponding order" was more than a simple neurological disorder.

2.3.1 A war that traumatizes people's hearts and minds

Innocent lives have been brutally taken away by the war, and disasters and misfortunes have actually happened. Although the handful of war madmen who waged the war can be brought to justice and the homes destroyed by the war can be rebuilt, but the scars left by the war of aggression on people's minds are difficult to heal, and the spiritual wounds left by the war are even more difficult to smooth.

As the author of the *tadpole*, Morio Kita himself did not participate in the war. When Japan surrendered, he was only 17 years old, less than the age of being sent to the battlefield, but he was mobilized to work in the quartermaster factory while he was in high school during World War II. The social atmosphere during the war was also his own experience and fresh memories. He liked insects when he was 3 years old, and learned to start making insect specimens when he was 10 years old studying in the third grade of elementary school. However, during the war, nearly a hundred boxes of insect specimens collected from his childhood were was consumed into ash including his home in Tokyo. He lost his precious insect specimens during the war, and had to suppress this pain in his heart. He lost his home in the war, and he had to turn this sadness into tears. As pointed out by Japanese literary critic Hirano Noma: "War shows that the relationship between man and the surrounding things on which he depends is by no means a static relationship between man and the geographical space in which he lives, nor is it so far the relationship between man and the environment as shown in his literature". [8] As a neurologist who has been active in the forefront of medical treatment, as a medical doctor who has a deep understanding of the pathology and treatment of schizophrenia, he has suffered and sorrowed in the war. He has an understanding and explanation of the human tragedy he experienced. Based on his own experience, he once described the human mind as follows:

Just like every nation has its myth, everyone has his own myth. This myth is gradually forgotten, and it seems that it will soon be buried in the depths of time and disappear. However, those things that are entangled in the hazy past and quietly leave their footprints in the depths of the human heart, it seems that people will continue to ruminate unknowingly, in the new time that is quietly ushered in, and this rumination will continue to the end of his life. Nevertheless, when people perform such rumination completely unconsciously, they sometimes look like the silkworms making holes in mulberry leaves, unconsciously raising their heads and disturbingly when they chew mulberry leaves, waking from a dream.

Morio Kit *Ghost- Story of Infancy and Youth*

He lost his beloved and lost his home in the flames of war. Although he was full of anger, pain and sadness, he didn't know who he should talk to and how to tell him, so he had to suppress his pain and grief into himself. "Myths", and in the days that followed "slowly in the heart" "continuously rumoured" these "myths". However, as Freud said, these "myths" turned into unconsciousness due to artificial repression will appear in artificial repressive sleepless dreams, cannibalizing the already scarred soul.

As Morio Kita said in *The Corner of Dark Night and Dense Fog*: "It was a whirlwind of madness that swept over a large area. What is more terrifying than pure neurological disorder is that the madness has crazy and thorough plan and its corresponding order from the beginning. "He also mentioned in" Land of Divine Deities, at that time, as time passed, war was increasingly producing chaos, inertia, and madness. "War", ("Nervous" disorder and "crazy" are words that often appear in Morio Kita's works about war. This is his conclusion on the war of aggression, his understanding and interpretation of that war of aggression, and his depression and the liberated subconscious monologue in his sleep. Therefore, rather than debating the war madmen who launched the war of aggression through the words “war”, “(neurological) disorder” and “crazy”, Morio Kita looked at the shadow on the hearts of Japan and the people of the world in a deeper psychological structure.

The war was waged by a handful of militarists. They launched a heart-warming war. These people can be described by words like “mad men”. However, they launched the war through “careful planning”, and at the same time, they launched the war in accordance with the “corresponding order.” They were not actually “crazy” or “crazy” in the medical sense. On the contrary, they were very rational and very calm. They knew that they first established a “corresponding order” for the war of aggression and then started the war with the plan. From this point they were more terrible than” mere neurological instability “because they were rational, in some ways, especially in terms of launching wars of aggression and war tactics, they have even more rationality than ordinary people can imagine. However, due to the loss of human conscience and the rationality they possessed, and the kind of rationality beyond their imagination, have not only failed to lead human beings to themselves and to happiness and light, but have also caused humanity into disaster. Of the abyss, they themselves were hanged for a fair trial. It is for this reason that Japanese art critic Noma Hiroshi pointed out sharply:

Human civilization and culture, like human beings, always develop in contradictions, and the more human civilization and culture develops, the more it becomes an extremely cold and tragic thing that does not match the original meaning of civilization and culture. It has been proven by the Second World War. In the long history of humankind, power struggles, physical disability, hostile hostility, and male and female grief and joy have caused countless tragedies. Although all these things are unbearable for people to see, they must be seen. [9]

It is not difficult to see that when Morio Kita saw the “plan”, “order” and “disorder”, “inertia”, and “crazy” of the aggression through his own experience, when he compared these words with people’s “myths, in fact, he is examining human culture and civilization in the same meaning and at the same height as Noma Hiroshi, and examining a handful of war mad men who have lost their conscience and waged war furiously.

3. CONCLUSION

In the story of *Tadpole* Japanese militarists launched the war of aggression for the sake of their obsession. The war caused heavy economic losses in Japan, and had a greater impact on its own industry and agriculture. The war caused a large number of casualties, and its psychological trauma to the people of Japan even the world is incurable. The author himself personally experienced the pain of war. Because of this, he has a keen insight into the war and a clearer understanding of the nature of war. Unlike the children who like to play war games, the militarists who waged wars in madness, are not crazy, but “rational”.

Rationality can bring happiness and light to human beings, and it can also bring destruction and war to human beings. The reflection on human rationality and the awakening of the crisis of human existence are the profound meanings of what Morio Kita called the “unconscious” myth of heart. It was also his alarm bells that struck in the works *tadpole*, *In the Corner of the Night and the Dense Fog*, and *Land of the Divine Land*.

REFERENCES

[1]Toyama Motoki et al. Showa History [M]. (Japan) Iwata Bookstore, 1984: 246.

[2]Nakajima Yuichi. Juvenile Asahi Yearbook 1999 · 2000 Society [Statistics] [M]. Japan Asahi Shimbun, 1999: 41.

[3]Toyama Motoki et al. Showa History [M]. (Japan) Iwata Bookstore, 1984: 246, 241.

[4]Yamazaki Takazo. The History of Modern Japanese Economy [M]. (Japan) You Fei Ge, 1985: 136.

[5]Miyazaki Yuri. Illustration of Japanese Economy [M]. (Japan) Iwawa Book Store, 1985: 7.

[6]Yamazaki Takazo. The History of Modern Japanese Economy [M]. (Japan) You Fei Ge, 1985: 249.

[7]Toyama Motoki et al. Showa History [M]. (Japan) Iwata Bookstore, 1984: 223.

[8]Noma Hiroshi. Regarding Feelings, Desires, and Objects, New Age Literature [M]. (Japan) Iwawa Book, 1982: 5.

[9]Noma Hiroshi. New Age Literature [M]. (Japan) Iwanami Bookstore, 1982: 173.

Research on the Risk of Goodwill Impairment in M & A of Listed Companies: a Case Study of the Great Wall Animation Corporation

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Abstract: In the first half of 2019, the total amount of goodwill disclosed by A-share listed companies reached 1.45 trillion yuan. If there is a large-scale accrual of goodwill impairment, the risk of goodwill impairment seriously reduces the net profit. Therefore, it is urgent to guard against the risk of the huge goodwill explosion. This paper selects Great Wall Animation company as a case. Firstly, the paper introduces the basic situation of M & A cases, then it identifies and evaluates the risk of goodwill impairment and analyzes the factors of affecting the impairment. Finally, the paper puts forward the measures of preventing risk. Through such a systematic risk analysis method, this paper aims to analyze the causes and consequences of this typical case and summarize the related problems in the process of Great Wall Animation's M & A activities, such as generating high goodwill, withdrawing huge goodwill impairment and forming goodwill impairment risk. Also, the paper puts forward relevant optimization suggestions to provide certain decision supports for regulators and the management of listed companies so that Listed companies can prevent the "Thunderbolt" of goodwill in actual M & A activities.
Keywords: Listed companies; goodwill impairment; risk prevention.

1. INTRODUCTION

As of April 30, 2019, the number of goodwill impairment withdrawn by A-share listed companies reached 871 and the total amount of impairment was 165.9 billion yuan in 2018. The impairment amount of the whole A-share market over the years reached 1.45 trillion. The problem of goodwill has broken out in recent years. The main reason is that 2014-2016 is the peak period of A-share market M & A and restructuring. At that time, it is inevitable that the over aggressive high valuation, high performance commitment and high leverage M & A plan make listed companies suffer losses [1]. With Such a high amount of goodwill and the negative information of frequently disclosed by listed companies on the provision of a large amount of goodwill impairment, they not only seriously erodes the net profit of listed companies and affects the current performance level, but also exposes the problem of goodwill impairment treatment under the current accounting standards [2].
The risk of goodwill impairment is the sword of Damocles in A-share market, so it is urgent to prevent the risk of goodwill impairment.
Therefore, this paper identifies the reasons of goodwill impairment and the impacts of impairment risk, explores the optimization of goodwill impairment measurement methods and the systematic measures of preventing risks by analyzing the goodwill impairment of Great Wall Animation in 2018. In addition, through analyzing the cases of listed companies' merger and acquisition goodwill, the paper makes contributions to enrich the accounting treatment of listed companies' goodwill.

2. BASIC INFORMATION OF THE GREAT WALL ANIMATION CORPORATION

Great Wall Animation Game Co., Ltd. (hereinafter referred to as "Great Wall Animation") was formerly a large independent coke enterprise in Sichuan Province-Shengda Group Co., Ltd. In July 2014, Great Wall Film and Television Culture Co., Ltd. acquired Shengda's 21% stock ownership and became the largest shareholder. And then it renamed the company as Great Wall Animation game Co., Ltd. In 2015, in order to develop and transform and find new profit growth points, Great Wall Animation invested 1.016 billion yuan to acquire seven companies, namely Chuzhou Creative Tourism Park, Hongmeng Cartoon, New Entertainment Brother Network Technology, Dongfang Guolong Animation, Xuancheng Technology, Mermaid Animation and Tianrui Economy and Trade. The M & A activities covered pan animation industry chains such as animation R & D and production, animation game design, creative cultural tourism and derivative sales, which aimed to build a large animation industry and became "Oriental Disney". The M & A activity total generated 612 million yuan goodwill.
In 2016, Great Wall Animation carried out an impairment testing on the goodwill of Tianrui equity, which resulted in a decrease of net profit of 34.34 million yuan and the net profit was -80.63 million yuan. However, the total profit was 34.9231 million yuan in 2015. According to the 2018 annual report, the operating revenue of Great Wall Animation was 74.949 million yuan, but the total amount of goodwill was 633 million yuan. After the recoverable amount of goodwill was assessed, the company made a provision for impairment. The impairment amount was 327 million yuan and 4.36 times of the operating

revenue. Also, it caused a significant decline in net profit of -1447.3% so that the net profit was -458 million yuan. The first quarter report of 2019 showed that its goodwill amount was up to 661 million, which accounted for 144.23% of the net profit and 49.01% of the total market value of Great Wall Animation. Therefore, this paper chooses this representative listed company as a case study.

3. AN ANALYSIS OF THE REASONS FOR THE GREAT WALL ANIMATION'S HUGE GOODWILL IMPAIRMENT

Firstly, high premium in M&A. Great Wall Animation determined the transaction price according to the asset quality status and future development potential of seven companies and the asset evaluation of Kunyuan asset evaluation Co., Ltd.

In 2015, the seven M & A activities of Great Wall Animation formed goodwill except Mermaid Animation, Hongmeng Animation and Chuzhou Creative Park. The premiums of Xuancheng Technology, Tianrui Economic and Trade, New Entertainment Brothers and Dongfang Guolong were dozens or even hundreds times. The M & A activities generated 612 million yuan goodwill and it accounted for 43.21% of the total assets of Great Wall Animation. Among them, the book value of New Entertainment Brothers whose purchased price was as high as 500 million yuan and only 3.91 million yuan. Its assessed value-added was as high as 127.8 times, forming 470 million yuan of goodwill. Besides, among the seven companies acquired by Great Wall Animation, except Tianrui Economic and Trade and Dongfang Guolong, the other five were affiliated transactions.

Secondly, after M & A, the performance commitment was not ideal. In 2015, Great Wall Animation signed the performance commitments with Xuancheng Technology, Mermaid Animation, New Entertainment Brothers, Dongfang Guolong and Tianrui Economic and Trade Companies. By the end of 2017, the performance commitments of the above five companies had expired. As shown in Table 2, from 2015 to 2017, five companies' total annual performance commitments was respectively 69.6 million yuan, 89.73 million yuan and 116 million yuan. However, the actual achievement was respectively 72.581 million yuan, 79.3851 million yuan and 123 million yuan. On the surface, it was worth looking forward to the performance growth of M & A companies, but in fact, the above performance commitments were not satisfactory.

According to the operation conditions of five performance commitment companies disclosed in 2015, 2016 and 2017 annual reports of Great Wall Animation, some companies failed to achieve their commitment amount, while some companies completed the commitment, but they were only more than a few tens of thousands or hundreds of thousands of yuan, which was so accurate and suspicious. According to the annual report, in 2016, the actual performance amount of the five M & A companies with performance commitments totaled 79.3851 million yuan. Compared with the promised performance, it was less than 10 million yuan. Among them, Tianrui Economy and Trade, Mermaid Animation, Dongfang Guolong and Xuancheng Technology were all failed to fulfill their promises. Among them, Tianrui Economic and Trade Co., Ltd. was 2.5672 million yuan, which accounted for only 22.82% of the promised performance of 11.25 million yuan. The only New Entertainment Brother who had achieved the performance commitment was only 246000 yuan than the commitment. In addition, from 2015 to 2017, Hongmeng Cartoon and Chuzhou Creative Park which had no performance commitment respectively lost 1.2053 million yuan, 19.0945 million yuan and 30.7921 million yuan.

The high goodwill that Great Wall Animation high premium merger and acquisition formed has brought great financial risks for the company's production and operation, and the huge goodwill impairment seriously drags its performance and deduct non net profit, which has brought great hidden danger for the development of company's future business.

4. RISK PREVENTION MEASURES OF GOODWILL IMPAIRMENT

The risk of goodwill impairment refers to the risk that the company's performance will decline because of the loss of goodwill impairment. In addition, the scale of many enterprises goodwill is very large. Once "thundering", the reduction effect of goodwill impairment on the company's net profit is huge. Therefore, the prevention of goodwill impairment risk is very important [3].

Firstly, prudent M & A and rational valuation. The main reason why most listed companies face the risk of impairment is that the amount of goodwill generated by M & A activities is too large [4]. Therefore, when the listed companies decide to carry out M & A activities, they should fully consider their own development strategies and make clear research preparations in combination with their business conditions to reduce the information asymmetry of the capital market as much as possible and avoid blind M & A.

The M & A premium is mainly based on the future profitability of the acquired party, but the high premium will make companies face greater risk of goodwill impairment. Therefore, while evaluating the asset quality of M & A company, we should carefully and reasonably choose the methods of asset value evaluation according to the industry and business characteristics of the company. Also, we should consider the asset-light characteristics of Great Wall Animation, a cultural game industry, while determining the evaluation parameters. During the evaluation, it is necessary to clarify the production and operation conditions, macro environment, technical strength and market position of the merged company. Also, we need to treat the market reaction rationally and objectively and guard against the unreasonable overestimation caused by the overheated market reaction. Therefore, in order to prevent the risks of goodwill impairment, it is necessary to make rational M & A and scientific decisions. At the same time, we need to guard against the high goodwill brought by high premium M & A.

Secondly, signing a reasonable performance commitment agreement. In fact, the performance commitment agreement is a kind of gambling agreement. When the actual operating performance of the merged company such as Tianrui Economic and Trade Co., Ltd. and Dongfang Guolong Co., Ltd. fails to meet the commitment performance and the profit expectation is not realized, the goodwill is likely to be provided for impairment. So the risk of goodwill impairment is like this. Moreover, M & A companies exaggerate their profitability so that performance commitment is often overrated [5]. Therefore, the acquirer should sign a reasonable performance commitment agreement with the acquire.

A reasonable performance commitment agreement should be based on the actual situation of M & A companies to determine the performance commitment period and protect the interests of listed companies, rather than three years as the same period as most companies in the market. It is also necessary to make clear the specific and reasonable performance commitment. Only when the performance commitment is in line with the actual situation of the company's production and operation, the acquired party can complete in good condition. Otherwise, there will be failure to complete or fraud to complete accurately. We should also strengthen the quantitative constraints of performance commitment period.

When the performance commitment expires, the recoverable amount of the acquirer’s assets value shall be evaluated. If the evaluation result shows that there is impairment, the performance commitment period shall be extended. Moreover, the impairment test is based on the merged companies’ market environment and operating conditions after the performance commitment period. It can also avoid the short-sighted behavior or earnings management of the merged company in order to achieve performance commitment, such as reducing R & D investment and recognizing revenue in advance during the performance commitment period.

Thirdly, paying attention to the performance of the merged company. The risk of goodwill impairment is not only related to the scale of goodwill generated by merger and acquisition activities, but also related to the operating performance of the merged company. Under the current domestic accounting standards, if the performance of the acquiree declines, the enterprise generally needs to withdraw goodwill impairment. Therefore, after M & A activities are completed, the acquirer should first strengthen the governance of the acquiree and strengthen the business integration. The acquirer’s business should be relocated according to the market demand and internal and external environment changes. The acquirer need refinalize the target plan. Then, according to the importance and target plan of the business, the acquirer reallocate internal and external resources. Also, the acquirer need concentrate resources on key businesses.

In addition, the acquirer should appraise and supervise the completion of performance to improve enthusiasm and completion. It is also necessary to strengthen the communication and cooperation among the listed companies and the integration of animation, games, cultural and creative products. At the same time, the acquirer make use of M & A forming the pan animation industry chain to bring a number of profits and give full play to its value to improve the performances of the merged companies. After the M & A is completed, the listed companies integrate the operation, management and finance of the merged companies, which can play a more synergistic effect and improve their performance to prevent the risk of goodwill impairment.

Fourthly, improving the subsequent measurement method of goodwill. Accounting policies deeply affect the financial information of the company. At present, in the subsequent measurement of goodwill, the international and domestic accounting standards both stipulate the impairment test method. However, in practice, the disadvantages of earnings management become more and more obvious.

Therefore, it is more reasonable for goodwill impairment to use the "parallel method of impairment and amortization". This method can avoid the phenomenon of blindly increasing goodwill or suddenly carrying out huge goodwill impairment. Also it can effectively prevent the risk of goodwill impairment. Especially, when the business development of the company is not good, goodwill is regarded as a kind of value wasting asset. As for the amortization period, firstly, the standard of the longest and shortest period shall be stipulated by industry, and then the scientific and reasonable amortization period shall be determined based on the expected benefit period that the goodwill is initially recognized and the operation environment and financial situation of the listed company.

In parallel with systematic amortization, impairment test can reduce the scale of high goodwill by regular amortization every year and alleviate the impact of huge impairment engulfing profits. It also make the company's profit level more stable on the basis of fully considering the impact of impairment loss when the operating performance of listed companies fluctuates dramatically. It also reflects the related information to the subsequent measurement of goodwill and the accounting principle that substance is more important than form. It reflects the economic essence of goodwill and conforms the requirements of accounting prudence. It is good for improving the quality of accounting information and the usefulness of decision-making.

Fifthly, strengthening supervision and detailing information disclosure. CSRC shall require listed companies conduct goodwill impairment test every year and disclose relevant information of goodwill. In the specific operation, first of all, it is necessary to find out the clear amount of goodwill impairment, clarify the goodwill impairment disclosed in the annual report of listed companies, trace the huge impairment back to the previous period, clarify the process of high goodwill from initial recognition to subsequent measurement and pay attention to the changes of impairment amount in the pre disclosure and final disclosure of financial statements. Then off-site verification is performed. For listed companies with large amount impairment, nonstandard information disclosure and defective goodwill accounting, we should use letters, interviews and other methods to find out the specific situation.

At the same time, in the requirements of current information disclosure, the listed company need further specify the related information to goodwill disclosure and mandatory disclosure of related information. In addition, the negative information that may cause the risk of goodwill impairment after the merger and acquisition shall be disclosed independently and risk prompts shall be given.

If the listed company does not fully disclose the information or postpones the disclosure, it is necessary to urge its compliance and reasonable disclosure and formulate corresponding punishment mechanism to improve the quality of information disclosure so that the users of financial information can fully grasp the situation of the listed companies' goodwill impairment. For the risk of listed companies' goodwill impairment, a multi-level and three-dimensional combination of detailed disclosure and supervision is formed.

5. CONCLUSION OF CASE STUDY

In this paper, through a comprehensive analysis of the goodwill impairment of A-share listed company Great Wall Animation and then contacting the current situation of listed companies' goodwill impairment, the following conclusions are drawn:

Firstly, high premium M & A is the source of goodwill impairment risk of listed companies. Therefore, it is necessary to evaluate the value reasonably and merge rationally.

Secondly, when the acquiree can not fulfill the performance commitment or perform poorly in the future, the impairment of goodwill should be withdrawn. Therefore, the acquirer should sign a reasonable performance commitment agreement and pay attention to the performance of the acquiree to improve its production and operation ability.

Thirdly, the subsequent measurement of goodwill using the impairment test method is not suitable for the current situation of trillion goodwill "Thunderstorm". Therefore, it is necessary to improve the subsequent measurement method of goodwill and use the "combination of impairment and amortization method" so that listed companies' M & A activities can be restricted and avoid the centralized explosion of goodwill impairment risk.

Fourthly, the listed companies can not selectively disclose the goodwill information. Regulatory agencies should further refine the relevant information disclosure standards of goodwill and strengthen supervision. In addition, regulatory agencies should implement mandatory disclosure policies to make information more open and promote the sound development of the market.

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REFERENCES

[1]Fu Chao, Wang Jingyi, Fu daiguo. Start from scratch, Do M & A goodwill exaggerate fact? Based on the empirical evidence of A-share listed companies. China's economic problems, 2016 (06): 109-123.

[2]Li Yuju. Accounting standards for Goodwill: existing problems and improvement suggestions. Securities market guide, 2018 (03): 34 - 40.

[3]Knauer and Wohrmann. Market Reaction to Goodwill impairments. Social Science Electronic Publishing, 2016, 25(3): 421-449.

[4]Shroff P, Venkataramn R. Causes and consequences of goodwill impairment losses. Review of Accounting Studies, 2011(16): 745-751.

[5]Zheng Haiying, Liu Zhengyang, Feng Weidong. Can M & a goodwill improve company performance? - Empirical Evidence from A-share listed companies. Accounting research, 2014 (03): 11-17 + 95.

A Survey on the Use of Smart Phones in Vocational College Students' Oral English Learning: Taking Jiaxing University as an Example

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Abstract: Oral English has always been an important part of English learning. With the development and popularization of smart phones, it has become increasingly common and popular for college students to use smart phone APPs for oral English learning. Based on questionnaire, this research tries to survey among Business English majors in a provincial vocational college and attempts to analyze the use of smart phone APPs in vocational college students' oral English learning, so as to comprehensively analyze the effect and influence of smart phones on vocational college students' oral English learning and then put forward some suggestions for improving the current unreasonable situations of vocational college students' oral English learning.
Key words: smart phone; APP; vocational college student; oral English learning

1. INTRODUCTION

As an international language, English has deeply penetrated into people's life. In the field of education, English is a compulsory course for Chinese college students. Besides, oral English learning is an important component of English learning. With the advancement of science and technology, smart phone is the product of the big data era. Users can install various kinds of software according to their own needs and connect to the network through mobile data, thus facilitating all aspects of society. Owing to the convenience and popularity, smart phones are gradually integrated into college students' oral English learning as well [1].

The combination of smart phones and oral English learning is the inevitable trend and result of social development. While smart phones provide vocational college students with great convenience, some disadvantages arise in spite of that. Therefore, this study will conduct a survey among business English majors in Jiaxing University through a questionnaire survey, trying to understand the current unreasonable situation of the use of smart phones in VC students' oral English learning, so as to put forward reasonable improvement suggestions to help train students' oral English learning ability.

2. CURRENT SITUATION OF VC STUDENTS' ORAL ENGLISH LEARNING

Although English is a compulsory course for college students, there are many problems in their autonomous learning. Many students lack the necessary awareness of oral English learning, believing that vocabulary accumulation and mastery of grammar is enough to cope with the course examinations. They attach no importance to oral English learning and application. Thus, it is difficult to speak authentic English. Chinglish expressions, inaccurate pronunciation of words, inappropriate pronunciation and intonation, unreasonable pauses and other problems can be seen everywhere. Even if they vaguely realized the importance of oral English learning, learners did not take effective practice. In addition, some students are too shy to open their mouths to speak. Therefore, problems in spoken English have not been discovered, and no one can help solve the problems or put forward solutions. Spoken English proficiency has remained unchanged and sometimes even regressed due to lack of practice.

As a result, various reasons, such as large student base, limited teaching time and low participation of students in class and so on, have finally resulted in the phenomenon that teacher is the only one who speaks English in English class. In addition, the proportion of oral English learning in the talent cultivation program is quite limited and students do not get enough professional training in oral English. Consequently, their overall oral English ability is weak.

3. A SURVEY ON THE USE OF SMART PHONES IN VC STUDENTS' ORAL ENGLISH LEARNING

In order to better understand the use of smart phones in college students' oral English learning, this study takes business English major students in Jiaxing University as the survey object and conducts a questionnaire survey on them. The questionnaire consists of 19 questions, including single choice questions, multiple choice questions and short answer questions. A total of 120 valid questionnaires were collected from this questionnaire, which has reached the reliability and validity requirements of the questionnaire survey. The survey results will be described and analyzed as follows:

3.1 The Application of smart phones in Oral English Learning

3.1.1 Frequency and duration of use

Smart phones are one of the most frequently used life tools for VC students. According to the questionnaire data, 34.2% of the students use smart phones for 4-6 hours a day, 28.3% of the students even reach 6-8 hours. However, another group of data shows that 69.2% of the students use smart phones to learn spoken English for about only 0-2 hours per week, while only 7.5% spend more than 6 hours.

3.1.2 Use attitudes and habits

60.8% of the students believe that smart phones play an auxiliary role in oral English learning. Secondly, 36.7% of the students think that smart phones have a mediocre effect and have not significantly improved their spoken English after using for a period of time. In addition, 2.5% of the students think that smart phones are not helpful for oral English learning at all.

3.1.3 Use evaluation and questions

The penetration rate of spoken English software in the target is 100%, and their evaluation and praise on the role of smart phones vary. 75% of the students will use smart phones to learn spoken English as an aid to other learning methods. The remaining 14.5% and 9.2% of the students believe that using smart phones for oral English learning can replace other learning methods. 1.3% do not consider smart phone as an effective and useful learning tool.

3.1.4 Use preferences

When using smart phones for oral English learning, 63.6% of the students will open other entertainment software first, and then start learning after meeting their entertainment need; 30.5% of the students' oral English learning progress is extremely slow, and always stays at the initial stage; 28.9% of the students will directly get into the topic of oral English learning, but the whole learning process is quick and inefficient. They have firm ideas on oral English learning at first, but with the increase of learning content, difficulty and time, they begin to lose patience and gradually become perfunctory and cursory. There are also some students who have remained focused on oral English learning from beginning to the end. Compared with the previous students, they are more resistant to smart phones and can realize that learning oral English is their priority. This percentage of students is only 2.2%.

Through the questionnaire, we also learned about the feedback problems reported by effective English learners after learning spoken English with smart phones. 64.2 percent of the students said there were too many charges on their smart phones; 59.2% of the students think that there are too many advertisements which will distract them from their study and finally affect their study efficiency. Smart phones make up the majority of college students' spare time, but learners make no full use of their learning functions, not to mention learning spoken English, but more for entertainment function.

3.2 Ways to Use smart phones in Oral English Learning (Shown in Table 1)

3.2.1 Install spoken English learning software

The development of information technology has spawned a variety of educational learning software, and there are not a few oral English learning software, such as Tutor ABC English, Fluent Speaking-English, English Fun Dubbing, etc. Take Fluent speaking-English as an example to briefly describe the operation process of such software. Fluent speaking-English will update learning resources regularly for users every day. Its most prominent feature is that the speech recognition system in the software will give users real-time scores of spoken English, correct pronunciation, help students consolidate knowledge points, correct problems, and expand new knowledge. Besides, it has the function of punching-in reward, which urges students to keep studying every day in the form of reward.

3.2.2 Use WeChat platform

WeChat official account, as its name implies, is a public account, and users who click on it can access the resources published on the platform. It does not require the same amount of mobile data to download as software, nor does it take up storage space, so it is simple and convenient to use. Many professional organizations and professionals in oral English teaching have applied for official accounts, where they regularly upload information about learning oral English for learners to learn.

Apart from the official account, WeChat's main function, communication, can also provide many conveniences for students to learn spoken English. Many foreigners also apply for WeChat accounts. In this way, students can add them as WeChat friends and conduct voice chat, so that they can feel their pronunciation when chatting with foreign friends, and adjust their accents in daily friends' chat subtly. This will bring real progress in actual practice and application.

3.2.3 Watch British and American TV shows

As Chinese and western cultures fuse more and more, increasing VC students enjoy watching British and American TV shows. The British and American TV shows contain the authentic daily oral expressions. Students learn while watching the plays, thus truly realizing learning through fun.

Table 1: Proportion of smart phones Used in Oral English Learning

List of Ways of Using	Percentage
Watch 57.3% of British and American TV shows	57.3%
Using WeChat platform	48.7%
Install oral English learning software	42.7%
Other ways	31.7%

4. THE INFLUENCE OF SMART PHONES ON ORAL ENGLISH LEARNING

4.1 Positive Influence

4.1.1 Convenience

According to the survey, 89.9% of the students believe that smart phones are convenient, which mainly reflects three aspects, convenient learning places, convenient learning time and convenient learning resources. Compared with personal computers, smart phones are more portable and more capable of fragmented learning.

4.1.2 Timeliness

Smart phones update tens of thousands of messages every minute, giving 25.2 percent of respondents a sense of their timeliness. Oral English learning needs to keep an eye on social trends and accumulate new words. The timeliness of mobile phones just meets the needs of students for accumulating new words, thus improving their spoken English.

4.1.3 Interesting

This option accounts for 63%. The most basic function of smart phones is to serve as entertainment tool. Even if they are used in learning, they still retain this characteristic. Some designers of learning software will enhance their emotional interaction with students from the visual, auditory and other aspects, so as to make students produce psychological pleasure and improve students good impression on the use of software. For example, some oral English learning software will set the mobile phone into the mode of adventure, to stimulate students' desire to win. This not only stimulates students' learning motivation, but also combines learning with pleasure.

4.1.4 Targeted

63% of learners believe that smart phones can record learning progress or style according to their usage records. Before downloading, many software users will be invited to carry out pre-use surveys so as to customize learning courses according to the results, thus meeting learners' personalized learning needs [2].

4.2 Negative Influence

4.2.1 Affect classroom efficiency

Nowadays, it is no longer a strange situation for students to lower their heads and play with mobile phones in front-line teaching class. Instead of listening to the teacher carefully, students habitually play with their mobile phones. When smart phone as a teaching aid appears in classroom teaching, it is also a reason for students to play with mobile phones openly in class. In this way, smart phones not only fail to play the function of class assistant, but also reduce the efficiency of class and bring additional class problems to teachers.

4.2.2 Affect learning autonomy

Due to their limited self-control, many VC students can't put the entertainment function of smart phones aside. Even if it is used as an effective tool in oral English learning, it still has the problem of over-dependence in learning. When confronted with a slightly challenging question, they turned on their mobile phones to search for answers without hesitation, completely skipping the process of independent thinking, which has a great influence on the cultivation of autonomous learning ability in the long run.

5. SUGGESTIONS ON USING SMART PHONES TO LEARN SPOKEN ENGLISH

According to the above survey results, VC students do not fully understand and utilize the software function when using smart phones for oral English learning, and have poor self-control ability in absorbing massive information [3]. It is difficult for them to resist the temptation of entertainment, and easy to generate dependency mentality. In view of the above problems, the following suggestions are proposed.

VC English learners should have independent dialectical consciousness when using smart phone softwares to learn oral English. They are not supposed to rely too much on auxiliary tools without reservation, but to cultivate self-control and self-learning consciousness, and actively explore the functions beneficial to oral English learning. For the entertainment of mobile phone itself, good habits are supposed to be developed, including reducing entertainment function, expanding auxiliary function of learning, combining learning with pleasure and so on. In addition, for the powerful software function, grasp the scale as a learning aid tool, and remember not to have more excessive dependence on it. Think independently first, then learn to sublimate knowledge points through software content and use mobile phone software rationally and dialectically.

6. CONCLUSION

This study takes the business English major students in Jiaxing University as the survey object. Through the questionnaire survey, their use of smart phones to learn oral English and the existing problems are known and analyzed. There are many smart phone oral English learning softwares, but learning oral English through watching American TV shows, WeChat and other platforms is more popular than learning through oral English softwares. The survey results show that most VC students use smart phones for oral English learning with poor autonomy and self-control. Learners' judgments on the pros and cons of smart phones are not clear, and it is difficult for them to resist the temptation of entertainment function. The functions used for oral English learning are not fully played, and their motivation of learning is relatively simple and straight. In addition, the problems that English learners need to pay attention to and suggestions when using smart phones for oral English learning are discussed. However, the relevance of smart phone software to oral learning needs further verification.

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REFERENCES

[1]Peng Yanhong. Investigation and analysis of the current situation and existing problems of college students’ oral English learning. Hunan: University Times Forum, 2006: 62-64.

[2]Xia Zengliang. Application and exploration of mobile learning based on smart phone in college English learning. Hubei: Journal of Hubei Correspondence University, 2013.122-123.

[3]Xu Ling et al. Influence of smart phone popularization on college students’ classroom learning. Hebei: China Adult Education, 2014.61-62.

Research on the Motivation, Proportion and Value Effect of Stock Exchange Merger: Taking the Merger of Midea Group and Little Swan for Example

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Abstract: Stock-for-stock merger refers to a company absorbing another company by exchanging the equity of both sides. Under the background of economic globalization, the merger activities are more and more. Whether the enterprise merger can succeed, and the motivation of merger are the focus of attention. Little swan company is a well-known household appliance enterprise, especially in the field of washing machines and it has a high position in the industry. Midea group which has a wide range of businesses is one of the leaders in China's home appliance industry. Based on the share-for-stock merger of midea group and Little Swan Company, this paper mainly studies three issues: the motivation of share-for-stock merger, whether the share-for-stock ratio is reasonable and the impact of share-for-stock merger on enterprise value. In addition, this paper mainly use the net asset per share method and earnings per share method to verify the rationality of the stock exchange ratio, and selects the financial index method to analyze the value effect. Finally the conclusion is drawn: the exchange ratio is reasonable; In the short term, the effect of stock exchange merger on improving the development speed of midea group is not obvious.

Keywords: Stock exchange merger; Motivation; Stock exchange ratio; Financial index method

1. INTRODUCTION

With the rapid development of China's economy and the completion of the reform of non-tradable shares, the stock market has been increasingly active in equity transactions, and the stock market has gradually ushered in the era of full circulation. According to some relevant data, a total of 5,480 transactions about merger took place in China in 2017 and the total value of the deal reached 368.07 billion dollars. In addition, with the introduction of some documents like"the management measures on acquisition of listed companies", there are more clear behavioral guidance for enterprises to carry out stock exchange mergers, but in the actual stock exchange mergers, there are still behaviors that infringe on the interests of investors In order to further regulate the merger and acquisition behaviors of enterprises, the China Securities Regulatory Commission issued the "management measures on material assets reorganization of listed enterprises" in 2016, strictly curbing the "flickering" reorganization and merger behaviors and it can promote the improvement of transaction transparency.

There are three types of enterprise merger: comprehensive securities acquisition merger, stock exchange merger and cash merger, and among them, the way of stock exchange merger can be divided into three categories stock exchange merger can be divided [1]. But at present, the research on stock exchange merger in China is not perfect, and the previous research is also one-sided. Based on this, this paper selects the case of the merger of midea group and Little swan company, and analyzes the motivation for the merger, the rationality of the ratio of stock exchange and the effect of enterprise value, and puts forward optimization Suggestions, which has important practical significance for the implementation of the merger of Chinese enterprises.

2. BASIC INFORMATION ABOUT THE TWO COMPANIES

2.1 Basic information of midea group

Founded in 1968, midea group has maintained a healthy, stable and rapid growth since its establishment, and was successfully listed on the shenzhen stock exchange in 2013. It is one of the leading home appliance enterprises with the most complete categories of home appliances in China and it has a great influence in the world. In 2018, midea's total revenue was 261.82 billion yuan, up 8.23% year on year. In the 2018 fortune global 500 list, midea group ranked 323 and at the same time, it ranked first in China's home appliance industry.

2.2 Basic information of little swan

Little swan company originated in 1958, the company mainly engaged in the research and development, production and sales of washing machines and dryers, the main products are drum washing machines, automatic washing machines and two-cylinder washing machines and dryers. In addition, the company focuses on the main industry, takes the consumer demand as the orientation, continuously optimizes the product structure, continuously improves the product quality. As a result, its management efficiency is getting higher and higher, its profitability is increasing, and its industry position and market share are continuously improving.

2.3 The process of merger

In February 2008, midea won a battle with sichuan changhong to buy a roughly 24% stake in little swan company. In 2013, midea group merged with midea electric appliance to go public and successively increased its stake in little swan company by about 53%.In October 2018, midea group and its holding subsidiary, little swan, announced that midea group plans to issue 342 million shares in exchange for shares to absorb and merge little swan company, with a transaction value of 14.378 billion yuan. After the completion of the exchange, little swan will terminate the listing and cancel the legal person status. In March 2019, the China securities regulatory commission (CSRC) approved the merger of Little Swan Company with the midea group.

3. ANALYSIS OF MOTIVATION, STOCK EXCHANGE RATIO AND VALUE EFFECT

3.1 Analysis of motivation

3.1.1 It can increase market share

At present, the domestic demand quantity of the washing machine industry tends to be full, and its future profit growth point lies in the structural adjustment and the improvement of market share [2]. Domestic washing machine industry market share of the top three are haier, little swan and midea group. After the merger, midea group will greatly reduce the market share gap with haier group in the washing machine business. In addition, based on midea's diversified development strategy, the merger of midea and little swan can realize resource sharing and optimization among platforms. Little swan's products are positioned in the middle and high-end market. After the merger, it can fully fill the gap of midea in the high-end market and compete with its competitors in the segmented market.

3.1.2 It can reduce transaction costs

The whole category mode with smart home system as the core has become the development trend of the future home appliance industry. Little swan has internationally leading core washing technology, but its profits depend on the main washing machine business, and this single breed model cannot stand out in the international competition. After the merger, relying on the resources of midea group, the washing machine business of little swan will become the absolute trump card of the market segment under the diversification strategy of midea group [3].

Public information shows that most of the sales and procurement channels of little swan are realized through midea group, whose washing machine business is processed and produced by little swan. The amount of related transactions between the two parties is huge. And the enterprise merger can completely solve the related transaction, improve the efficiency of the use of funds.

3.1.3 It can expand synergistic effect

After the merger, midea group acquired the washing machine business of little swan, a high-quality asset, and owned all the patented technologies of little swan, which saved the research cost for midea group. In terms of operation, little swan will continue to use the sales and procurement channels of midea group, reduce marketing expenses, integrate internal resources of the washing machine sector, expand production scale, and rely on brand advantages and technology accumulation to increase its market share in high-end demand for washing machines. In terms of management, merger can eliminate inter-bank competition and related transactions, make it more convenient and flexible to transfer talents within enterprises, and make enterprise systems more reasonable and standardized. In terms of finance, midea group adopted the share-for-share method to acquire little swan, and obtained a large amount of little swan's cash due to dividends. It can enrich their cash flow, reduce tax, reduce financial risk, and enhance the overall value of the enterprise [4].

3.2 Analysis of exchange ratio

3.2.1 The reality of exchange ratio

According to a statement released by midea group in October 2018, the average price of midea group's shares in the 20 trading days prior to the merger was 42.04 yuan per share. The average price of little swan's stock in the 20 trading days before the benchmark was 46.28 yuan per share, and a 10% premium is offered on this basis. Finally, it was determined that their exchange prices were 42.04 yuan/share and 50.91 yuan/share respectively. According to the relevant formula, the exchange ratio between midea group and little swan is 1:1.2110.

3.2.2 Analysis of rationality

In order to verify the rationality of the stock exchange ratio, this paper selects the net asset per share method and the earnings per share method to calculate the stock exchange ratio.

The first method: net assets per share method. In this paper, relevant data of both parties in 2016 and 2017 are selected, and the final calculation results are as follows: the net assets per share of midea group and little swan company in 2017 are 12.8392 and 12.9936 respectively, and the net assets per share in 2016 are 16.1658 and 11.0027 respectively. It can be seen from this that the conversion ratio between midea group and little swan company should be between 0.6806 and 0.9881.

The second method: earnings per share method. According to the financial reports of the merging parties in 2017 and 2016, the earnings per share of midea group and little swan were 2.38 and 2.66 respectively in 2017 and 1.86 and 2.29 respectively in 2016. It can be seen from this that the conversion ratio between midea group and little swan company should be between 1.1176 and 1.2312.

Combined with the above two calculation results and considering that the controlling shareholder of little swan is midea group, this paper believes that the actual exchange ratio of both sides of the transaction is reasonable.

3.3 Analysis of value effect

Based on the rationality analysis of the proportion of stock exchange, this paper uses the analysis method of financial indicators to further analyze the impact of the stock exchange merger on the enterprise value. As one of the main financial indicators, profitability is not only related to the enterprise's ability to repay debt, but also has a direct impact on the owner's return on investment. Therefore, this section mainly studies the impact of stock exchange merger on the profitability of midea group. According to the relevant financial statements of midea group from 2017 to 2019, we draw some of its profit indicators into figure 1 by sorting them out. From figure 1, we can see that the return on equity and profit on total assets of midea group have increased after the merger, but the increase rate is not obvious, which may be related to factors such as the integration of stock-for-stock merger business. The profit margin of main business showed an increasing trend before and after the merger, but its growth rate decreased. Combined with the above analysis, we can find that the stock exchange in the short term to promote the improvement of midea group profitability, but the effect is not very obvious. However, the impact of stock exchange merger on enterprise value should also be seen in the longer term.

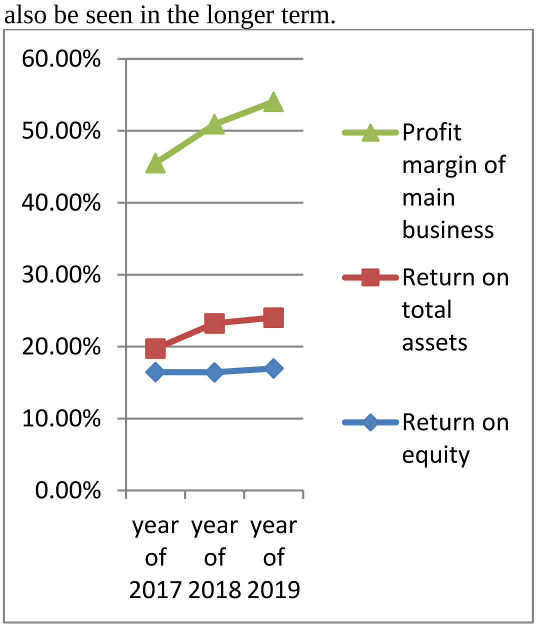

Figure 1. Profitability indicator of midea group

4. CONCLUSIONS AND SUGGESTIONS

4.1 The research conclusion

4.1.1 Exchange ratio is reasonable

In this exchange merger, midea group and little swan exchange ratio is 1:1.2110. According to the results obtained by the two calculation methods, the final conversion ratio range is 0.6806-0.9881 and 1.1176-1.2312, respectively. Among them, the results measured by the earnings per share method are closer to the actual stock exchange ratio, while the range measured by the net asset per share method is relatively small. Since the controlling shareholder of little swan is midea group, a 10% premium is justified. This exchange merger has considered the interests of both sides of the transaction, therefore, the proportion of equity is more reasonable.

4.1.2 The effect of stock exchange merger on promoting group development is not obvious

By carrying out merger activities, midea group can reduce the related party transactions, reduce transaction costs and gain more market share. However, according to the analysis results of financial indicators, although the profitability of midea group has improved after 2018, its growth rate is not obvious. Because the research period is too short, we only think that the merger has not achieved significant effect in the short term, and the impact of stock-for-stock merger on enterprise value should be seen in a longer term.

4.2 Policy Suggestions

4.2.1 The stock exchange ratio measurement method should be improved

In our country, there are four stock exchange ratio measurement methods which are commonly used. The calculation method used above is the most common method used by Chinese enterprises in the calculation of stock exchange ratio. In addition, there are l-g model method and market price per share method. However, each measurement method has its rationality and limitations [5]. Since the ratio of stock exchange is directly related to the interests of the shareholders of both sides of the merger, it is difficult to ensure the rationality of the results calculated by a single method. In addition, enterprises should also actively learn from foreign advanced measurement methods of stock exchange ratio, and at the same time according to the actual situation in China, actively innovate some measurement methods of stock exchange ratio in line with China's national conditions. Midea group is the leading enterprise in home appliance industry, and little swan company is the leading enterprise in home appliance subdivision industry. Their merger is also the result of the deep integration of enterprises. Federations of giants have a whiff of monopoly and at the same time, it is also a guarantee of efficiency. In a word, the merger can help midea group to enhance their diversified development and it will good for the overall development of the group.

4.2.2 Enterprises should pay attention to improve the performance of stock exchange merger

Since the performance after the stock exchange merger directly determines the success or failure of the merger, the enterprise should first fully consider the actual situation of the company when formulating the stock exchange merger plan, and take improving the value and competitiveness of the enterprise as the ultimate goal. Then, according to the above objectives, the enterprise should optimize and allocate the existing resources reasonably, improve the utilization rate of resources and the overall operation and management capacity of the merged enterprise; Finally, the enterprise should pay attention to the integration of the existing business sectors, promote the coordination and cooperation between the sectors, and thus improve the economic benefits of the enterprise. In addition, midea group was the controlling shareholder of little swan before the merger, and the final performance of the enterprises in this relationship was also uncertain. Therefore, enterprises should pay more attention to the quality of the merger in the process of stock exchange merger [6].

4.2.3 The government should strengthened the supervision of the exchange merger

Firs, from the perspective of the government, the government should further improve the relevant laws and regulations of stock exchange merger, and restrict the enterprise's stock exchange merger behavior from the institutional level. At the same time, the securities regulatory authorities should also strengthen the supervision of stock exchange merger, prevent the occurrence of the violation of the interests of investors. In addition, government regulators should increase the punishment of bad restructuring behavior, and effectively protect the interests of minority shareholders.

Second, from the perspective of enterprises, on the one hand, enterprises should constantly optimize their own equity structure, increase the introduction of private investors and large foreign investors, strengthen the checks and balances on major shareholders, try to avoid the abuse of controlling shareholders and other behaviors; On the other hand, enterprises should constantly improve the asset evaluation system, strengthen the supervision of the whole asset injection process, and focus on the follow-up responsibility, effectively safeguard the interests of enterprises and shareholders.

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REFERENCES

[1]Jörgen Hellström, Yuna Liu, Tomas Sjögren. Stock exchange mergers and return co-movement: A flexible dynamic component correlations model. Economics Letters, 2013, 121(3).

[2]Xu Shiguo. Share exchange ratio and value effect in stock exchange merger of listed companies. Finance & accounting communications, 2019(9): 62-66.

[3]Wang Yijun. Motivation analysis of midea group's horizontal merger of little swan. Times finance, 2019(11): 89-90.

[4]Isaac Otchere, Kobana Abukari. Are super stock exchange mergers motivated by efficiency or market power gains? Journal of International Financial Markets, Institutions & Money, 2020, 64.

[5]Li Jindong. Analysis on the ratio of stock exchange in stock exchange merger based on l-g model. Finance & accounting communications, 2017(2):72-75.

[6]Huong N. Higgins. Do stock-for-stock merger acquirers manage earnings? Evidence from Japan. Journal of Accounting and Public Policy, 2013, 32(1).

Research on the Share-Reduction Phenomenon on Listed Companies: Taking Zhongshan Broad-Ocean Motor Company as an Instance

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Abstract: Since the completion of the split share structure reform in China, domestic stock market has entered the era of full circulation, at the same time, the proportion of non-tradable shares has been increased, which further expanded the profitability of major shareholders. At the same time, due to the continuous fluctuation of the stock market, the frequency and quota of major shareholders' reductions in listed companies have increased, which cause huge influence on stakeholders and the whole capital market.
This article takes Zhongshan Broad-Ocean Motor Company as an instance to analyze the factors and effects of the share reductions of the major shareholders. Based on the current situation of this problem, the essay further puts forward suggestions such as improving the information disclosure mechanism of enterprises, improving the protection mechanism for the interests of individual shareholders and strengthening the government supervision mechanism, aiming at to help investors to analyze the situation more rationally and is beneficial for regulating the capital market in order to keep a stable development.
Keywords: Zhongshan Broad-Ocean Motor Company, Major shareholder reduction, Motivation for underweight, Impact of underweight

1. INTRODUCTION OF THE RESEARCH

The risk has increased a lot due to the stock crash in 2015. Under the turmoil of the stock market, the frequency and quota of share-reductions behavior have been increased. In order to solve this problem, on May 27, 2017, the China Securities Regulatory Commission updated the initial regulations "Several Provisions on Listed Company Shareholders, Directors and Supervisors to Reduce Their Share Holding ". The new reduction rules are based on the original expanded the scope of application of the treaty, strictly regulated the transaction behavior as well as imposed many restrictions like time reduction, shareholding ratio on the stakeholders such as shareholders, equity transferees, and fixed-income investors, in order to provide a better environment for the development of the stock market. The most important one is on block transactions, and the new regulations on share-reduction helps to regulate participates' behavior and contributes to form a healthy and stable market. Restricted by the new standards, the scale of reductions in bulk transactions in the second half of 2017 declined rapidly, and the overall reduction in the amount and scale of holdings in the market also declined. However, with the gradual development of the securities market, different kinds of share-reductions have appeared, such as by taking fixed price and using the combination of options and block transactions. Since 2019, more than 1,000 listed companies have issued announcements of share-reductions of major shareholders, and the amount and scale of reductions have increased significantly. The share reduction of major shareholders severely affected the company and investors. Also, it encroached on the interests of small and medium shareholders as well as affect the stable operation of the capital market. Therefore, it is particularly important to fully understand the nature of this phenomenon and to consider the motivations and methods as well as the economic consequences. As a company with the largest amount of share reductions in May 2019, Zhongshan Broad-Ocean Motor Company is very representative to be analyzed.

2. COMPANY INTRODUCYION

2.1 General Situation of Zhongshan Broad-Ocean Motor Company

Zhongshan Broad-Ocean Motor Company, founded in 1994 and listed in 2008, is a high-tech enterprise with products such as "construction and household electrical machinery, new energy vehicle powertrain system, hydrogen fuel cell system, hydrogen engine system and vehicle rotating electrical appliances", which integrates "high-level independent research and development, lean manufacturing and intelligent marketing". Through years of development and a series of mergers and acquisitions, a complete strategic layout of new energy automobile industry chain has been preliminarily formed, ranking among the top 500 private manufacturing industries in China.

2.2 Process of Share Reduction of Major Shareholders

In May 2019, the company disclosed the announcement on the reduction of major shareholders' shares. Lu Chuping, the largest shareholder of the company, Xu Haiming, the shareholder holding more than 5%, and some other share-holding companies plan to reduce their shareholding within the next six months by means of centralized bidding or bulk trading, respectively, and the specific ways and amount proportion of reduction are shown in table 1.

Table 1: The share reduction of major shareholders of Zhongshan Broad-Ocean Motor Company

Name of the shareholder	Number of Shareholding reduction	Time of reduction	proportion
Lu Chuping	66,660,180.00	6.12-9.12	2.82%
Xu Haiming	6,289,500.00	7.19	0.27%
Tibet Sheng'anneng Driving Technology Co., Ltd.	23,710,900.00	5.29-7.17	1.00%
Tibet Ananda Driving Techniques Co., Ltd.	10,222,700.00	5.29-7.3	0.43%

Data source: www.eastmoney.com

3. MOTIVATIONS OF SHARE-REDUCTION OF MAJOR SHARE-HOLDERS

The motivations mainly include concerns about future performance and development of the company, huge external guarantee risks, the company's liquidity needs, and its tunneling behavior [1]. Based on the actual situation the company, this paper analyzes the main reasons for its major shareholders to reduce their holdings, such as fulfilling performance compensation commitments, avoiding equity pledge risks and so on.

3.1 Fulfilling Performance Compensation Commitments

In early 2016, Zhongshan Broad-Ocean Motor Company purchased Shanghai Edrive Co., Ltd for a consideration of 3.5 billion yuan from 10 counterparties, including Shenganeng Industrial and Anida Industrial. In addition, a performance compensation agreement was signed. According to the agreement, Shenganeng Industry, Anida Industry and Lu Chuping promised that after deducting non-recurring profits and losses (excluding government subsidies) in 2015, 2016, 2017, and 2018 of Shanghai Electric Drive, the net profit should be no less than 94 million yuan, 138 million yuan, 189 million yuan, and 277 million yuan, respectively. According to the disclosure of relevant information from Zhongshan Broad-Ocean Motor Company, after 2017, subsidies for new energy vehicles continued to decline, coupled with product structure adjustments, rising costs during the period, and replacement parts. Shanghai Electric Drive deducted non-net profit in 2018 of negative 160 million yuan. Far below its performance commitment. Due to the substandard performance, Shenganeng Industry, Anida Industry, and Lu Chuping will compensate the listed companies for approximately 437 million yuan in cash. Among them, Shenganneng Industry compensated 154 million yuan; Aninada Industry compensated 49.507 million yuan; Lu Chuping compensated 233 million yuan. In order to reach the terms stipulated in the agreement within the time limit, the three major shareholders reduced their holdings.

3.2 Avoiding the Risk of Equity Pledge

The controlling shareholder's equity pledge is one of the main methods for major shareholders of listed companies to increase liquidity. However, due to the continuous fluctuations of the stock market and the redemption of the expiration of the equity pledge period, once the company was underperformance, the shareholders would be lacked in money to redeem when it is due, and would be forced to liquidate, causing huge negative influence on the company and investors. The share pledge that Lu Chuping handled in 2016-2018 needs to be redeemed between June and November 2019 according to the agreement, which is roughly consistent with the period of its reduction plan. Consider the performance compensation commitments, the main purpose of share reduction is to supplement working capital and mitigate its equity pledge risk indirectly. At the same time, the release of equity pledge also will send a positive signal to the market and attract more investors, thereby further supplementing the company's liquidity, ensuring the company's normal operation and strategic development.

3.3 Cash Out of Stocks for Profit

After the split share structure reform, the scale of lifting restricted stocks has been increasing, and more and more large shareholders have reduced their holdings of shares through the circulating stock market. Especially when the company is underperformance, major shareholders will take advantage of the inside information and reduced their holdings in advance for their own benefit, which will damage the interests of stockholder of other shareholders especially individual investors. A critical reason for the major shareholders' reduction is the decline in the company's operating performance. According to the annual report, due to the impairment of goodwill, its non-net profit in 2018 was -2.604 billion yuan, a decrease of about 3 billion yuan year-on-year. The company's overall product structure is also undergoing adjustments, and related main parts have been upgraded, which will cause greater pressure in the future. Prior to this reduction, Lu Sanping, the brother of the company's controlling shareholder, had significantly reduced his holdings of shares through the block trading platform when the stock prices were at the peak. After the reduction, the stock price drop down immediately. According to the related announcement of progress in reducing holdings, it reduced its holdings by approximately 140 million shares and got cash amount of approximately 1.1 billion yuan.

4. ANALYSIS OF THE IMPACT OF THE REDUCTION BY MAJOR SHAREHOLDER

4.1 Frequent Fluctuation of Stock Price

The reduction of shareholdings by major shareholders tends to cause the stock price to fall, and the greater the reduction, the higher the risk of the company's stock price crash [2]. Major shareholders' reduction has undoubtedly further reduced its stock price. Within one week since the announcement of the reduction, its share price has fallen from 5.06 yuan per share to 4.44 yuan per share, with a drop of 12.25%. As early as April, the company's stock price plummeted as a result of a significant impairment of 18 years of goodwill and a sharp decline in performance. By the time of the announcement of the reduction, its stock price had fallen by nearly 30%. Although the majority shareholders reduce their holdings mainly to fulfill their performance commitments, at the same time, they also sent out the negative signals that the company has encountered difficulties in operation, which to a certain extent damages the interests of small and medium shareholders in the short term. Moreover, in a period of time after the subsequent announcement of the specific reduction progress, the stock price fluctuates to different degrees, which shows that the reduction of major shareholders has a great impact on the stock price of the company [3].

4.2 Slight Decline in Company Performance

There is a negative correlation between the behavior of reducing large shareholders and the company's performance, it affects each other. Generally speaking, the decline of the company's performance will lead to the reduction of large shareholders, and the reduction of large shareholders will reverse the effect on the company's performance. It is precisely because of the substantial impairment of goodwill and product upgrading in the early stage that the operating performance of the company has declined significantly. However, in order to make up for the performance reduction, the major shareholders further transmit the bad news to the outside world, which in turn affects the performance of the company. Here mainly analyzes the specific changes of the company before and after the reduction of major shareholders from the two indicators of the net sales interest rate and the return on net assets. See table 2 below.

Table 2: 2018.12.31-2019.9.30 Change profit ability

Time period	2018/12/31	2019/3/31	2019/6/30	2019/9/30
Net profit margin	27.57%	1.16%	5.51%	3.73%
Return on euqity	30.48%	0.34%	4.21%	4.04%

Data source: www.cninfo.com.cn

As can be seen from the table, the company's operating performance showed an overall upward trend from the end of December 18 to June 19, with a slight decline in the third quarter of 19. Through consulting the announcement of large shareholders' reduction and the specific progress of reduction, the reduction is mainly concentrated in the third quarter, which further verifies that large shareholders' reduction will cause a certain degree of decline in the company's performance in the short term.

4.3 Not Conducive to the Stable Development of Enterprises

The reduction of large shareholders will not only deliver negative signals to the market, but also affect the rights and interests of investors badly. Generally speaking, major shareholders are also involved in management of the company. They have the initial information of the company and the right to determine the company's strategy. In this way, it is possible for the major shareholders to maximize their own interests through a series of means by using the absolute information advantage [4]. Many investment behaviors of small and medium-sized shareholders are hugely affected by the large shareholders. The reduction of large shareholders will hurt their investment confidence and affect the stable operation of the company. From the perspective of specific performance, the reduction of the majority shareholders has led to a sharp drop in its shares, which has been in a position for a long time, reducing new investment funds to a certain extent, and the company's operating cash flow has also shown a declining trend. Moreover, Xu Haiming, the major shareholder of the company, was disclosed by the CSRC to reduce his shareholding illegally, which further affected the stable development of the company.

5. SUGGESTIONS TO REGULATE THE BEHAVIOR OF MAJOR SHAREHOLDERS' REDUCTION

5.1 Improve the Information Disclosure Mechanism

Compared with the individual shareholders, the major shareholders has the absolute information advantages. They can insight the performance and other conditions more directly, so as to achieve huge benefits by reducing their holdings at right time, which is unfair and indirectly damages interests of individual shareholders. Therefore, it is necessary to improve the information disclosure system so that the individual investors can be acknowledged the fact operation and development of the company instead of buying and selling stocks blindly due to information asymmetry. On one hand, enterprises need to enhance the timeliness and sufficiency of information disclosure to keep fair for all investors; on the other hand, they need to strengthen the external audition, timely disclose the potential risks of the company's performance, especially for enterprises that have repeatedly reduced the high position of major shareholders, so as to prevent major shareholders from controlling the performance and stock price.

5.2 Improve the Protection Mechanism for the Interests of Individual Shareholders

Share reduction of major shareholders is also conducive to the long-term development of the company. In the context of highly concentrated equity, individual shareholders are relatively in a weak position and generate tiny influence. Therefore, the protection of the interests of individual shareholders is very critical. Enterprises should further standardize the corresponding protection mechanism. Specifically, on the one hand, the company can actively promote the diversification of equity structure, properly introduce state-owned capital to supervise non-state-owned capital, and ensure the basic interests of small and medium-sized shareholders[5]; on the other hand, the company needs to strengthen the internal supervision mechanism, internal power needs to restrict each other, actively encourage the representatives of small shareholders to participate in the company's general meeting and company management, and ensure the independence and professionalism of independent directors To further enhance the role of the board of supervisors, and then effectively avoid the major shareholders in pursuit of personal interests encroach on the interests of small and medium shareholders and affect the long-term development of the company.

5.3 Improve the Government Supervision Mechanism

With the continuous promulgation of relevant regulations on the reduction of large shareholders by CSRC, the scale and quantity of the reduction of large shareholders have declined. However, due to the influence of interests, the phenomenon of the reduction of large shareholders is still happening frequently, and even some large shareholders violate the regulations to reduce their holdings in order to maximize their own interests, which has a great impact on small and medium-sized investors, companies and the whole securities market. Therefore, the government should strengthen the supervision of the behavior of reducing the holding of large shareholders, and punish the behavior of reducing the holding of large shareholders seriously.

Moreover, it is necessary to further improve the relevant provisions on reducing share holdings. For example, the scale of reducing stock holdings needs to be linked with the company's performance. For companies with better capacity and good financial condition, the proportion of reducing holdings can be appropriately lifted .On the contrary, the scale of reducing holdings should be limited to avoid large shareholders' liquidation type of reducing holdings and arbitrage [6]. Secondly, according to the actual development of the company, we can delay the lock-in period of restricted shares of major shareholders properly to avoid damaging the long-term interests of the company for its own interests.

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REFERENCES

[1]Gao Yan, Yang Tong, Zheng Gantian, Long Ziwu, Du Weigong. Research on the Status Quo and Influence Factors of Large Shareholders' Reduction in Full Circulation. Macroeconomic Research, 2016 (08): 107-115.

[2]Shu Jiaxian, Yi Miaomiao. Research on performance forecast, major shareholder reduction and stock price collapse risk. Economic Theory and Economic Management, 2019 (11): 68-81.

[3]Yongjian, S., J. Dequan, and C.Donghua, Large Shareholder Tunneling and Risk of Stock Price Crash: Evidence from China. Frontiers of Business Research in China (Higher Education Press), 2014.8(2):p.154-181.

[4]Ryan, S.G., J. Wu Tucker, and Z. Ying, Securitization and Insider Trading. Accounting Review! 2016, 91(2): 649-675.

[5]Parigi B,and Pelizzon L.Diversification and Ownership Concentration. Journal of Banking and Finance, 2008, 32(9): 1743-1753.

[6]Sun Fei. Current Status, Supervision and Policy Suggestions of China's Major Shareholders Reduction. Development Research, 2018, (06): 47-50.

The credit risk management of small and micro enterprises in the county by Zhejiang Yiwu commercial bank from the perspective of internal control

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Abstract: commercial Banks are the main source of financing for small and micro enterprises. To support the development of small and micro enterprises, the state has continuously introduced measures to expand the financing channels of small and micro enterprises and develop financial innovation. In response to the national policy orientation, commercial Banks have introduced innovative financial products and services to effectively reduce the financing cost of small and micro enterprises and support the sound development of small and micro enterprises. Under the background of increasing downward pressure on the economy, the real economy develops weakly, which brings great risk of bad debts to commercial Banks. From the perspective of yiwu commercial bank of zhejiang province's internal control over credit risks of small and micro enterprises in county areas, this paper re-examines the current situation and existing problems of yiwu commercial bank in credit risks, and proposes a series of measures to strengthen internal control, so as to prevent and dissolve credit risks of small and micro enterprises.
Keywords: commercial bank; Small and micro enterprises; Credit risk; Measures to prevent

1. INTRODUCTION

China's commercial Banks play a crucial role in the entire financial system and are also one of the main financing channels for small and micro enterprises [1]. According to data released by the zhejiang provincial market supervision administration, 408,000 new small and micro businesses were established in 2019, up 12.4 percent year-on-year. By the end of 2019, the number of registered small and micro businesses in zhejiang province had reached 2.22 million, accounting for 87.7 percent of the total, and the number of registered private enterprises had reached 2.34 million. According to the new small and micro enterprises in the region, the new small and micro enterprises in jinhua have a fast year-on-year growth. The benign development of small and micro enterprises plays a great role in promoting local economic development. However, high financing costs, single financing channels and financing difficulties have been important factors hindering the development of small and micro enterprises. Under the background of increasing economic downward pressure, the state has continuously introduced a series of measures to effectively solve the high financing cost and financing difficulties of small and micro enterprises. In response to the call of the state, commercial Banks have also introduced many measures to benefit the development of small and micro enterprises. Is famous for its international business trade city world of jinhua city, zhejiang province, with many small micro enterprise, is primarily a cottage industry and service industry, construction, such as enterprises, individual businesses, in recent years, yiwu local commercial Banks for small micro enterprise business has developed rapidly, but also increased with different degree of credit risk.

2. THE CURRENT SITUATION AND EXISTING PROBLEMS OF ZHEJIANG YIWU COMMERCIAL BANK'S CREDIT BUSINESS TO SMALL AND MICRO ENTERPRISES

With the government vigorously implementing the "new regulations on capital management" and other measures to reduce leverage, county commercial Banks are faced with the difficult situation of scrambling for projects and failing to grasp them [2]. In order to achieve better development, county commercial Banks will inevitably focus on the credit business of small but numerous small and micro enterprises. With the continuous increase of Banks' credit business to small and micro enterprises, corresponding credit risks are also increasing to varying degrees.

2.1. The Credit Risk Management System is not Perfect.

Small and micro enterprises have become an important support for economic evelopment. Commercial Banks, especially county Banks, are also increasing their credit business to small and micro enterprises. Most commercial Banks have a sound control system, customers have a democratic decision-making process, for a small micro enterprises to apply for a loan approval process has more strict approval procedures, but often take access link and despise the tracking management of post-loan [3]. The lack of perfecting credit and post-loan management mechanism, with the increase of small micro enterprise credit business, the potential of credit risk is increasing.

2.2. The Credit Risk Management Team is Weak.

Most of the county commercial Banks have their own specialized departments and teams for credit management of small and micro enterprises. According to the division of yiwu then business division, and equipped with professional account managers and corresponding management members. However, the risk awareness and professional knowledge of these management teams are not enough. In the process of business management, scale is more important than risk prevention. The professional knowledge of grassroots employees is not enough. Some employees have insufficient sense of responsibility, and it is difficult to exert substantial control over credit risk management.

2.3 The Internal Control and Supervision Mechanism of Credit Risk is not Sound Enough.

At present, most county Banks also have regular or irregular internal audit mechanism. However, the involvement of internal audit departments in the whole process of credit risk management and supervision is not high. The main reason is that various departments in the bank may have fluke mentality, and they are reluctant to cooperate with the work of internal audit department [4]. Therefore, it is difficult to carry out internal audit work, which can not really play a supervisory role and can not play a supplementary role in the control of credit risks.

3. CAUSE ANALYSIS OF CREDIT RISKS OF SMALL AND MICRO ENTERPRISES BY COMMERCIAL BANKS IN YIWU, ZHEJIANG PROVINCE

For commercial Banks, due to the existence of credit risks, it is easy to issue loans that cannot be recovered when the principal and interest are due. Risk management is very important and will directly affect the reduction of risk and increase returns. Credit risk is caused by two factors: the bank's own level and the small and micro enterprise level in the duty area.

3.1. The Credit Information of Commercial Banks to Small and Micro Enterprises is not Symmetrical.

According to the relevant provisions of the interim measures for the management of basic database of personal credit information, only personal credit information is targeted, and there is no information report of small and micro enterprises [5]. Owing to the small micro enterprise most yiwu area are family workshops, individual industrial and commercial households and other service industries, such as construction of independent legal entity, can't bear civil liability independently, although can undertake civil activities in the name of the enterprise, so cause the commercial Banks and small micro enterprise information asymmetry, especially after lending supervision and management of the link. Although the bank also has specialized personnel to conduct classification management according to the division, the weak risk awareness and lack of technical strength of the professional personnel cause the supervision of the post-loan link to lag behind, and it is difficult to control the real-time useful information.

3.2. The Examination and Approval Process of Commercial Banks for Small and Micro Enterprises in Compulsory Areas is not Sound Enough.

Although each commercial bank has a sound internal customer control system, which can evaluate the financial and non-financial information of small and micro enterprises through big data, Banks usually require small and micro enterprises to provide guarantees or mortgages. There are few forms of third-party guarantee provided by enterprises, which usually apply for loans with real estate and other collateral. Small and micro enterprises cannot become effective collateral due to their small scale and small amount of fixed assets, but due to their irregular management and lack of effective evaluation on the value of assets. [6]. However, commercial Banks, especially in the second - and third-tier county Banks, generally believe that the real estate mortgage risks are relatively low, so they ignore the post-loan tracking management. Even if relevant staff are arranged to manage the clients in charge, they often relax credit investigation and corresponding risk management due to lack of professional ability.

3.3. Imperfect Internal Management of Small and Micro Enterprises.

There are many small and micro enterprises in yiwu, most of which are family workshop type enterprises, individual industrial and commercial households, and small profit enterprises. Managers of small and micro enterprises have weak awareness of risk control, and there are often risks of decision-making mistakes in the operation process. Tend to demand for money is "short" "quick" the characteristics of the "spirit", this will lead to the demand for money frequency is high, but at present there are relatively fixed most of the commercial Banks internal approval process, small micro enterprise financial data by the big data analysis is often poor evaluation indexes, which can lead to small micro enterprise financing opportunities lost, even get financing, the financing cost is very high, often which increased the operating costs and small business uncertainty. These factors often lead to the failure of small and micro enterprises to repay loans on time, resulting in defaults, and commercial Banks resulting in varying degrees of bad debts.

4. ZHEJIANG YIWU COMMERCIAL BANK CREDIT RISK MANAGEMENT COUNTERMEASURES

4.1. Formulate Flexible Credit Policies for Small and Micro Enterprises according to the Characteristics of Small and Micro Enterprises in Yiwu.

Under normal circumstances, the county Banks of commercial Banks should implement the unified credit policies and business standards set by the head office. However, the development of small and micro enterprises in yiwu and the credit and property status of customers vary greatly, so, as always, the implementation of the headquarters of the unified credit policy, often the numerous small and micro enterprises of the credit business screening out. Banks can only develop the credit business of the larger customers and blindly seek for the larger customers, often ignoring the industry characteristics and risk status of customers. According to the industry characteristics and risk status of small and micro enterprises, Banks conduct classified management, and make flexible credit policies according to the risk status of different industries. For example, for small and micro technology-based enterprises, each commercial bank should establish a technology financial service system separately, and launch special financial bonds for small and micro enterprises and other financial innovation products. Although small and micro enterprises have poor anti-risk capacity and weak sustainable development capacity, commercial Banks should appropriately improve their tolerance of non-performing loans and implement flexible credit policies.

4.2. Strengthen the Training of Technical Ability of Credit Personnel.

Although the commercial Banks have divided the local small and micro enterprises in yiwu according to the region and arranged special account manager counterpart management, the responsibility center has been set up for management. However, the overall quality of business personnel is generally low, especially the lack of credit risk assessment skills, often lead to operational risks. Commercial Banks should introduce corresponding policies to encourage the current staff to study accounting, auditing, statistical methods, management and other related knowledge, so as to improve the overall professional quality; Strengthen special training related to credit risk management, improve the awareness of risk control and business level of business personnel. The professional requirements of Banks are not only solid professional quality, but also good ideological quality, a high sense of responsibility, to strengthen the dynamic tracking of credit business management level.

4.3. Further Improve the Internal Control Mechanism of Credit Business.

At present, most local commercial Banks are strict in implementing the loan access process for customers, and require customers to provide asset mortgage in most cases. In the future, they should conduct classified management based on the industry characteristics and risk status of local small and micro enterprises in yiwu, so as to further improve the prior control of credit. At the same time, the corresponding mechanism should be developed to encourage credit staff to improve their risk awareness, establish a high sense of responsibility, strengthen the tracking management of loans, and reduce the asymmetry of information. In combination with big data, advanced statistical methods are adopted to strengthen the post-loan risk identification and evaluation methods, and the evaluation indicators of customers are adjusted dynamically to reduce the credit risk. At the same time, a complete set of loan risk assessment mechanism should be established, and the balance mechanism of credit business should be established to ensure the standardized and scientific management of the whole process of loans.

5. CONCLUSION

The expansion of commercial Banks' credit business to small and micro enterprises is crucial to the expansion of the scale, so the corresponding credit risk control must be paid enough attention. Based on the problems existing in credit risk control of commercial Banks, this paper puts forward Suggestions on improving the internal control mechanism of credit business, strengthening the team construction and introducing more flexible credit policies for small and micro enterprises. Under the current background of The Times, commercial Banks should actively strengthen internal control from the aspects of controlling environment and business, so as to prevent and defuse credit risks, improve the quality of credit development and better integrate with local economic development.

REFERENCES

[1]Tan Wu, Analysis on credit risk control of rural commercial Banks, Finance and Accounting Study, (2), 2020.

[2]Song Nianjun, Research on credit risk management of commercial Banks based on internal control, Knowledge economy, (12), 2018.

[3]Liu Yaqiong and Jiang Tianci, Research on financing problems of small and micro enterprises under the Internet financial model, Modern marketing, (1), 2020.

[4]Yang Ming, Credit risk management of Chinese commercial Banks, China business review, (20), 2019.

[5]Shen Jiannan, Luo Jianwen, Risk management strategy of small and micro enterprises financing based on P2P network lending platform, Modern scientific management, (5), 2015.

[6]Wang Lian, Analysis on financing difficulties of small and micro enterprises and countermeasures. China market, (3), 2020.

The Impact of Fiscal Incentives on Enterprise Innovation

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Abstract: With the intensification of global competition, China needs to have advanced technical support to gain a foothold in international competition, and innovation is the primary driving force for technological development. This paper first sorts out the research on the impact of financial incentives on technological innovation by domestic and foreign scholars through literature analysis. It uses empirical methods to analyze the way of financial incentives and their specific impact on technological innovation. It also measures the financial incentives currently implemented in China.
Keywords: Financial incentives; Technological innovation; Enterprises

1. INTRODUCTION

Since the reform and opening up, China's economy has achieved rapid growth, which is closely related to national policies. Fiscal incentives are also an important means of industrial policy. At the 2012 China Innovation and Technology Conference, the state proposed to support policy to the maximum extent possible, establish and improve a stable growth mechanism for fiscal investment in science and technology, and improve policies such as financial aid, discounts and tax reductions, and encourage and support enterprises to increase investment in research and development. Since innovative products are quasi-public products, and there is a strong externality in innovation behavior, can fiscal incentives effectively promote technological innovation? This is still a question worth exploring.

2. STATUS DESCRIPTION OF TECHNOLOGICAL INNOVATION AND FINANCIAL INCENTIVES

(1)Different stages of enterprise technology innovation

Enterprise technological innovation can be divided into the following three stages:

The first stage: the research and development stage. The research and development stage is the first step for enterprises to innovate. At this stage, companies need to invest a lot of money, such as buying new equipment, and there is no output at this stage. Due to the inherent risks of technology and the constantly changing market environment, companies face higher risks during the R & D stage, and it is difficult to obtain financing without R & D results. So at this time, the government's financial incentives can solve the problem of research and development funds to a large extent, and the government's protection of enterprises can also more easily obtain bank loans.

The second stage: the transformation stage. When an enterprise's R & D progresses to the transformation stage, the biggest difficulty that an enterprise faces is the issue of market demand. The technological innovation of an enterprise generally takes a long time. The market survey conducted before the start of research and development may not be applicable to the current environment. The uncertainty of the market may cause the innovative products to be unable to be commercialized. Without corresponding policy support, some SMEs may be afraid to try to innovate. Therefore, at this stage, the government needs to provide a relatively stable environment for innovative enterprises, that is, the enterprises are confident that they can sell innovative products.

The third stage: mass production stage. In this stage of production, enterprises will face more difficulties. First, they need to invest a lot of manpower and material resources in batches, which will require a lot of capital. Second, changes in market demand, companies need to judge the market demand more accurately, to avoid blindly expanding production. This is the last step of corporate innovation and a key step in transforming innovation into corporate revenue. Fiscal incentive policies can correctly guide social funds at this stage and help enterprises overcome financial difficulties. Government procurement can increase the confidence of enterprises in production to a certain extent, and ultimately urge enterprises to complete innovative activities.

(2)Main forms of financial incentives

The government's financial incentives are mainly in the following four ways:

First, financial subsidies and appropriations. The most direct way for the government to provide financial support to enterprises that meet the application requirements is directly. In the process of technology research and development, enterprises need to invest a lot of funds, and there is no output in the process of re-development, and no revenue can be generated. Once the funds in one of the links are not in place, it may cause the entire research and development plan to fail. Especially for some SMEs in emerging industries, lack of scientific research funds is one of the main reasons hindering their innovation. Financial subsidies and appropriations can alleviate the financial pressure on enterprises' R&D. In this way, they can mobilize the innovation power of enterprises.

Second, the government's targeted procurement measures refer to the government's centralized procurement of innovative products of certain innovative enterprises, increasing the market's demand for such innovative products. When companies are developing new products, they will estimate the market demand of new products in advance, but this estimate does not represent the actual market demand. Due to the long time period of technological innovation, the market demand may be after the new products are produced. Changes have taken place, so product innovation comes with high risks. However, through the government's targeted procurement to make innovations in the enterprise, enterprises can reduce their concerns about unsalable products, so that enterprises can safely innovate and produce new products.

The third is to provide preferential loan conditions, which means that the government grants certain preferential policies to bank loans of innovative enterprises. For some innovative enterprises, if insufficient liquid funds cannot support corporate innovation, then they need the support of bank loans. The preferential loan policies provided by the Chinese government have solved many difficult problems for innovative enterprise loans, such as financial discounts, which are borne by enterprises themselves. Interest has been reduced, and capitalization of interest during the re-innovation period has been included in the cost of the product, thus reducing the cost of innovative products.

The fourth is to establish a fund for SMEs, which is a special fund provided by the government for innovation of SMEs. Compared with large enterprises, it is more difficult for SMEs to innovate, and the risks are higher. Special funds can meet the liquidity needs of SMEs' innovation and development. At the same time, when the external market environment is unstable, special funds provided by the government can be used as emergency response for SMEs. Capital, alleviate the market risks and pressures it faces, and increase the enthusiasm of SMEs for innovation.

3. LITERATURE REVIEWL

In the existing literature, there are relatively many scholars who study the relationship between fiscal subsidies, tax incentives and corporate innovation, and discussions about the innovative effects of fiscal and tax policies have been controversial. From the perspective of the role of innovation, some scholars believe that financial subsidies and tax incentives have a positive incentive effect on corporate innovation [1-2]; Bronzini and Piselli pointed out when studying the impact of financial subsidies on the innovation of SMEs in northern Italy, Fiscal R &D subsidies will strengthen the patent application of enterprises and effectively stimulate the innovation vitality of enterprises [3]. Koehler used German fiscal R & D subsidy data from 1994 to 2011 to construct the structural equation of fiscal subsidy. Empirical research shows that fiscal R&D subsidy is not only conducive to private sector innovation, but also helps to expand social benefits and promote economic growth [4]. Another group of scholars hold the opposite view, arguing that fiscal subsidies and tax incentives have a relatively limited effect on corporate innovation, and even hinder corporate innovation to a certain extent [5-7]; there are still a few scholars who hold innovation incentive effects on fiscal subsidies and tax incentives Uncertainty perspective [8-9]. Some scholars have conducted in-depth analysis of the corporate innovation effects of the two from the perspective of the "moderation" of fiscal subsidies and tax incentives. Studies have found that moderate financial subsidies can effectively stimulate corporate innovation, while high financial subsidies can inhibit corporate innovation under specific circumstances [10], and strict intellectual property protection will strengthen the innovation incentive effect of financial subsidies and tax incentives [11]. Li and Zheng divided the corporate innovation behavior into substantial innovation and strategic innovation, and studied the impact of industrial policies and fiscal and tax preferential policies on the substantial innovation activities of enterprises, but the study did not analyze the effect of innovative heterogeneous enterprises in depth [12].

4. ANALYSIS OF EMPIRICAL RESULTS

According to the theoretical analysis above, we believe that fiscal incentive policies have a significant impact on technological innovation. Therefore, the research proposed in this article assumes that fiscal subsidy policies can promote enterprises to increase innovative behavior.

(1)Model Design

This paper constructs a dynamic regression model with a lag period of explanatory variables to measure the impact of environmental regulation implementation on industrial green growth. The specific econometric model is:

$$\mathrm{ZL}_{it} = \beta_0 + \beta_1 \mathrm{CJ}_{it} + \beta_2 \mathrm{ZL}_{i,t-1} + \psi \mathrm{X}_{it} + \tilde{\varepsilon}_{it} \quad (1)$$

$$\mathrm{X}_{it} = \zeta_1 \mathrm{GZ}_{it} + \zeta_2 \mathrm{YZ}_{it} + \zeta_3 \mathrm{HR}_{it} \quad (2)$$

Among them, ZL_it indicates the technological innovation in period t of region i, and CJ_it indicates the fiscal incentives in period t of region. A larger value indicates greater intensity. The X variable is composed of human capital level, fixed asset investment, and enterprise R & D investment.

(2)Variable selection and data description

This paper selects the "patent application number" of an enterprise as the explanatory variable to represent the innovation ability of the enterprise, the financial subsidy obtained by the enterprise as the explanatory variable, and the scale of enterprise R&D and enterprise assets as the reference variables to establish a linear regression model. Because the factors that affect corporate innovation are not limited to financial incentives, this article will set three control variables, namely "total fixed assets", "investment in research and development funds", and "average employees in the enterprise". Table 1 shows the Main variables and their measurement methods.

Table 1 Main variables and their measurement methods

Type	Variable name	Measurement	Symbol
Explained variable	Technological innovation	Patent applications	ZL
Explanatory variable	Financial incentives	R&D funding from government subsidies	CJ
Control variable	Investment in fixed assets	Enterprise fixed asset scale	GZ
	R & D investment	Investment of R&D funds by enterprises	YZ
	Human resources scale	Enterprise employees	HR

(3)Model inspection and result analysis

Table 2 Impact of financial incentives on technological innovation

	Model 1	Model 2	Model 3
L.SUB	0.207** (0.629)	0.161*** (1.178)	0.172* (0.299)
CJ	0.575* 0.115	0. 301* (0.809)	0.485** (1.29)
GZ	0.083* (0.312)	0.082* (0.604)	0.240* (0.43)
YZ	0.174** (2.556)	0.168* (3.429)	1.397** (2.03)
HR	0.084* (0.067)	0.109* (0.197)	0.053* (0.152)
N	1810	1810	1810
R2	0.686	0.303	-
AR(2)-test P	-	-	0.148
Hansen-test P	-	-	0.525
Estimation model	Mixed least squares	Fixed effect	Generalized moment of panel system

Note: The values in parentheses are standard errors, * represents P <0.1, ** represents P <0.05, and *** represents P <0.01.

Table 2 shows the impact of financial incentives on technological innovation. The empirical results validate the research hypothesis that financial incentives promote technological innovation. The coefficient of GMM is between dynamic POLS and dynamic FE, indicating that the empirical results are reliable and robust. From Model 3, it can be seen that the coefficient of financial incentives (CJ) is 0.485, which is positive and significant at the level of 5%, indicating that financial incentives have significantly promoted technological innovation, while fixed asset investment, R&D investment and human capital The level is an important factor affecting technological innovation, and all show positive and significant results. It can be seen that the fixed asset investment of enterprises, the level of research and development of enterprises themselves, and the level of human capital are positively promoting technological innovation of enterprises.

5 POLICY SUGGESTIONS

The empirical analysis of the impact of fiscal incentives on technological innovation above, in this article, the following suggestions are made:

(1)Improve the level of financial incentives and promote technological innovation in enterprises. On the one hand, it is necessary to enrich the methods and forms of financial research and development subsidies, and break through the traditional forms of pre-subsidy subsidies that are approved before appropriation, and a large amount of subsidies are paid; Evaluation system to improve the efficiency of the use of financial subsidy funds and ensure the effectiveness of substantial innovation of enterprises. In addition to the use of cash and in-kind subsidies, the government should also fund related scientific research institutions to strengthen technical support for innovative enterprises, form a "government-scientific research institution-enterprise" linkage mechanism, and further stimulate the substantial innovation potential of enterprises.

(2)Improve the level of enterprise development. The ability to effectively promote technological innovation lies not only in the government's financial incentives, but also in the level of development of the enterprise itself, such as increasing investment in fixed assets, increasing R&D investment and human capital levels, which are of great significance to technological innovation. In this regard, it is necessary to improve the talent management system, give play to the fundamental role of human capital in corporate technological innovation, increase efforts to cultivate scarce R&D talents, improve the scientific quality and efficiency of workers, and improve salary management systems and equity incentives. Long-term incentive system to accelerate the professionalization and marketization of enterprise management talents. On this basis, further create a favorable environment for the development of talents, improve the innovative ability of professional and technical talents, give play to the fundamental role of human capital in technological innovation of enterprises, and appropriately increase the company's own R&D investment while increasing the scale of the enterprise to The goal of sustainable development is to increase the productivity of enterprises through technological innovation.

(3)Increase government supervision. The government should properly supervise fiscal incentive policies, implement the actual use of fiscal funds, and at the same time supervise the correct and reasonable use of fiscal preferential policies by enterprises. As an example, the government supports the innovation and development of enterprises, and achieves its purpose through a series of financial means. To implement financial appropriations when companies conduct research and development, it is necessary to ensure that funds flow to the enterprises that really need them, and that they can ensure the rational use of funds. This requires effective government supervision to prevent other companies from crowding out special funds to change the use without authorization, and to improve the effectiveness of financial incentives.

REFERENCES

[1]Li Linmu, Guo Cunzhi. Comparison and selection of VAT levy models for small and micro enterprises. Tax Research, 2014, (3): 25-30.

[2]Li Yanlong. Tax preferential policies and innovation efficiency of high-tech industries. Journal of Quantitative & Technical Economics, 2018, (1): 60-76.

[3]Bronzini, R., Piselli, P. The Impact of R & D subsidies on firm innovation. Research Policy, 2016, 45 (2): 442-457.

[4]Koehler, M. Estimating the Benefits of R & D subsidies for germany. ZEW Discussion Papers, No. 18-002, 2018.

[5]So, B.W.Y. Reassessment of the state role in the development of high-tech industry: A case study of taiwan's hsinchu science park. East Asia, 2006, 23 (2): 61-86.

[6]Zhang Tongbin, Gao Tiemei. Fiscal and taxation policy incentives, high-tech industry development and industrial structure adjustment. Economic Research, 2012, (5): 58-70.

[7]Zhang Jie, Zhai Fuxin, Zhou Xiaoyan. Government subsidies, market competition and quality of export products. Journal of Quantitative & Technical Economics, 2015, (4): 71-87.

[8]Jiang Ning, Huang Wan. The impact of government subsidies on RD investment of enterprises——Empirical research based on china's high-tech industry. Science of Science and Management of Science and Technology, 2010, 31 (7): 28-33.

[9]Zhang Xiaoying, Dong Lirui. Impact of financial support on the development of China's high-tech industry. Journal of Chongqing University of Technology (Social Science), 2017, 31 (5): 21-27.

[10]Mao Qilin, Xu Jiayun. The Impact of government subsidies on the innovation of new products of enterprises——based on the perspective of the "moderate range" of subsidies. China Industrial Economy, 2015, (6): 94-107.

[11]Bao Zongke. Intellectual property protection, innovation policy and survival risk of chinese r & d enterprises: an event history analysis method. Finance and Trade Economy, 2017, 38 (5): 147-160.

[12]Li Wenjing and Zheng Manni. Substantive innovation or strategic innovation? ——the impact of macro industrial policy on micro enterprise innovation. Economic Research, 2016, (4): 60-73.

Research on Green Supply Chain Performance Evaluation of Retail Enterprises Based on DEA

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Abstract: The green concept has gradually been commonly-pursued by the public. The supply chain of various industries gradually pays attention to and requires going green, with no exception of the one in the retail industry. This paper seeks for a proper method to evaluate the green supply chain performance of retail enterprises in order to find whether the resources in retail enterprises are rationally utilized. With the purpose to establish a performance evaluation indicator system, this paper has constructed a Balanced Score Card (BSC) model applied to the green supply chain of retail enterprises. Taking the instance of the New Century Department Store, we have appraised the performance of the retail enterprises green supply chain by employing the Data Envelopment Analysis (DEA) method, and according to the research findings, we have located the inefficient decision-making units and put forward corresponding countermeasures.

Keywords: Green supply chain; Retail industry; Performance Evaluation; Data envelopment analysis.

1. INTRODUCTION

As people's income keeps rising, they have paid more attention to their living quality, so that they take more environmental factors into consideration when shopping. Meanwhile, all business sectors have also begun setting the green idea as a significant index to measure development. And therefore, the green supply chain is born from the changes responding to consumers' green need in the supply chain field.

Currently, it is the traditional manufacturing industries that mainly develop the strategy of green supply chain, and therefore most performance evaluation systems of supply chain are targeting traditional manufacturing industries rather than retail enterprises. In the current cut-throat market competition, the market scale of retail enterprises continues enlarging, which gives substantial impetus to both upstream suppliers as well as manufacturers and downstream customers since it is closely linked with people's living standard. In recent years, the market competitiveness of Chinese retail enterprises keeps strengthening, and has reached a rather higher level. However, what should not be ignorant is that problems, such as waste of resources and environmentally unfriendly production patterns, are accompanied with the progress consequently, the going green practice of China's retail enterprises is still dogged down in the preliminary stage. Thus, only the effect of a green supply chain established by enterprises is objectively assessed, can the comprehensive market competitiveness of retail enterprises be further improved.

This paper intends to establish an appraisal index system to comprehensively reflect the performance of the green supply chain, and determine the technical and scale efficiency of the decision-making unit by constructing a performance evaluation model of retail enterprises green supply chain, which uses DEA. Based on the analysis on the result, it has put forward improvement suggestions to enhance the effect of the green supply chain implemented by enterprises.

2. LITERATURE REVIEW

2.1 Basic Theoretical Research on the Green Supply Chain

The idea of green supply chain was put forward during the research titled "Environmentally Responsible Manufacturing" (ERM) by the Manufacturing Research Center (MRC) of the University of Michigan in 1996. Handfield Robert. B and others underlined that the birth of green supply chain was on the basis of the green manufacturing theory and supply chain management theory, adding that green supply chain was a management model that can balance the environmental protection and the economic benefits of supply chain at the same time. Helen Walker and others (2011) analyzed the influencing factors of green supply chain strategy which enterprises planned to carry out. Using some relative researches, Pietro De Giovanni (2012) has shown that the implementation of green supply chain management can better improve and protect the environment. However, these are all qualitative description, and they lack quantitative study.

2.2 Research on the Performance Evaluation of Green Supply Chain

In foreign countries, the evaluation of a green supply chain is mostly focused on the performance evaluation indicator system of a green supply chain and the evaluation method. Through the empirical analysis on the economy of various enterprises and environmental performance, Lee S-Y (2013) made a brief appraisement on the performance evaluation of green supply chain by using Analytic Network Process (ANP); researchers such as Stepan Vcho and Ottar Michelsen evaluated the performance evaluation of green supply chain by means of fuzzy comprehensive evaluation as well as the combination of qualitative and quantitative analysis; Lin (2013) studied the relationship between the indexes of performance evaluation and assessed the green supply chain performance evaluation by applying the fuzzy model of DEMATEL; Sanjay Kumaretal (2013) established a performance evaluation indicator system on the foundation of customers' participation and put forward the Interpretive Structure Model (ISM) which was conducive to the implementation of green supply chain. Chia-WeiHsu (2013) estimated the performance of green supply chain by making use of DEMATEL in order to select qualified core suppliers; Suresh (2014) incorporated Structural Equation Modeling (SEM), Analytical Hierarchy Process (AHP) and Multi Objective Linear Programming (MOLP) into the model and evaluated the result of the implementation of green supply chain by combining the qualitative and quantitative analysis. People like Rostamzadeh (2015) constructed an index system of green chain supply performance evaluation from such greening perspectives as design, procurement, processing, packaging, storage, transportation and recycling.

2.3 Review of Existing Studies

On the base of researches on the green supply chain and its performance evaluation both at home and abroad, we can know that some progress has been made in this research field, but there are still some limitations. Most studies remain at the qualitative research stage. Despite that the researches have expounded a green supply chain as well as its performance evaluation system, and put forward lots of novel opinions and methods, they lack empirical analysis, which means those research results are not put into practice of enterprises. And therefore, this paper has tentatively analyzed and designed an objective and practical performance evaluation indicator system of a green supply chain tailed to retail enterprises, and put forward some suggestions to improve the green supply of retail enterprises according to corresponding analysis.

3. CONSTRUCTION OF GREEN SUPPLY CHAIN BSC FOR RETAIL ENTERPRISES

3.1 Retail Enterprise Green Supply Chain

This paper defines the retail enterprise green supply chain as: incorporating the "green" concept into the modern management model of the whole retail enterprise supply chain process and minimizing the negative influence on environment from every link of the supply chain while maximizing the resource utilization in order to realize the common development of environmental protection, resource conservation, customers' welfare as well as the cooperators' interests. During the implementation of a green supply chain, besides the five fundamental participators of the chain, communication and exchanges on information, capital and cargo between retail enterprises as well as between retail enterprises and headquarters should also be taken into account. In addition, its procurement and supply systems are also different from the supply chain in other industries.

3.2 BSC of Retail Enterprise Green Supply Chain

According to relative theories on BSC, the performance of an enterprise can be appraised from the perspectives of finance, customers, business procedures as well as learning and growth. The green index is added in original BSC to more accurately evaluate the performance of a retail enterprise green supply chain. The financial index reflects that the ultimate goal of enterprises is obtaining the greatest economic benefits; a high satisfaction of customer service means that companies need to meet customers' needs as much as possible, which motivates them to improve their operational efficiency; learning and growth is the best way for enterprises to strengthen the strength of them; the green idea runs through all aspects of the supply chain as an important prerequisite for enterprises to achieve sustainable development. Relative theories of a green supply chain are significant foundations to construct the performance evaluation index system in this paper, and this model embodies the unification between environmental interests and environmental interests as well as the balance between short-term benefits and long-term benefits. The BSC model of a green supply chain is shown as in Figure 1:

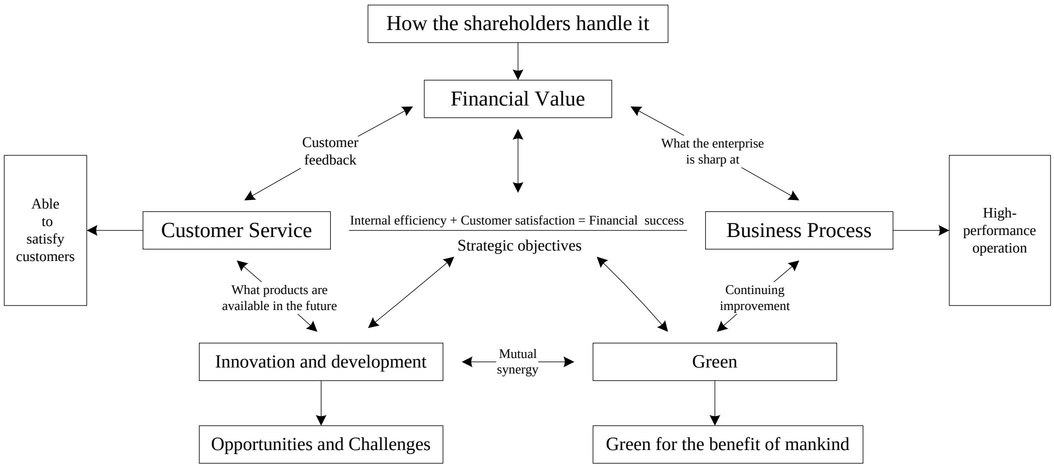

Figure 1 BSC model of green supply chain

4. PERFORMANCE EVALUATION INDICATOR SYSTEM OF GREEN SUPPLY CHAIN OF RETAIL ENTERPRISES

4.1 Conception

The second part of this paper details the definition of a green supply chain in retail enterprises as well as the BSC model. In accordance with the green supply chain of retail enterprises, this paper has established the evaluation indicator system from the perspective of finance and non-finance, and combined the qualitative analysis with quantitative analysis when selecting indexes.

4.2 Indicator Selection Principle

(1) The principle of comprehensiveness. The green supply chain management of retail enterprises is very complicated, and therefore, the indicator selection should not be restricted to certain aspects but considered from all perspectives.

(2) The principle of key indicator. During the construction process of evaluation indicator system, it is crucial to locate the decisive indicator to maximize the performance of green supply chain in retail enterprises.

(3) The principle of operability. Firstly, the design of an indicator should be closely related with green supply chain management, and can be understood by others; secondly, it should accord with practical conditions, be able to be put into practice and can obtain relative data through endeavors so as to be spread and utilized among similar industries.

(4) The principle of the combining complementarity with independence. First of all, we should make sure that the selected indexes are bound up with the performance of a supply chain; in addition, avoiding repeated or similar indexes to ensure the independence between them; last of all, the selected indexes should cover all aspects of the green supply chain in retail enterprises, namely, they should be complementary to reflect the overall condition of retail enterprises.

4.3 The Determination of Performance Evaluation Indicator System

The indexes, selected by the appraisal index system constructed in this paper, include financial ones and non-financial ones from five dimensions as follows:

(1) Financial value. The financial value index can show the economic benefit born form the green supply chain of enterprises. Through the analysis of corporate finance, one can understand the capital gains, asset operations, solvency and development capacity of the retail enterprise green supply chain. Thus, this paper has selected the total return on assets, the total asset turnover, return on pure assets, and asset-liability ratio to evaluate the performance supply chain in the financial sense.

(2) Customer service. The ultimate goal of retail enterprises supply chain management is making the products and service satisfy customer’s needs, which puts the customer service high on the index agenda. This paper evaluates the performance of a supply chain in terms of customer service from the following five aspects: products out of stock, number of customer complaints, customer satisfaction, market size and recognition of green products.

(3) Business process. The prerequisite of satisfactory customer feedback and good financial performance are high-efficient business processes. The business process runs through all links of the supply chain with widespread coverage, which substantially increases the difficulty in evaluating performance. With the availability of indexes, this paper measures the efficiency of business process from aspects such as inventory turnover rate, on-time transport rate, retail enterprise information sharing rate.

(4) Environmental benefits. Performance evaluation should not only consider how to reduce business costs and improve product quality to enhance the economic efficiency of the entire supply chain, but also should take into account to protect the environment and save resources in the various aspects of the supply chain. This paper assesses the performance of a supply chain in terms of green concept from the aspects of resource recycling rate, green product increase rate, environmental protection efficiency, environmental

investment rate, environmental impact degree, environmental cost, green technology R&D ratio as well as pollution cost ratio.

(5) Innovation and development. Science is the first productive force. Whether a company can achieve healthy and long-term development largely depends on if it is constantly improving its ability to innovate, which is also a key indicator in green supply chain performance evaluation since the advanced green technology can improve the green level of the supply chain. Therefore, this paper evaluates the performance of a supply chain in innovation, and development from such proportions as technical researchers, patent technology, R&D investment and income generated by innovative products.

According to the above analysis of the performance evaluation indicator system and its construction basis, this paper has divided index systems of the retail enterprise green supply chain performance evaluation. The first layer is the research target: performance evaluation of retail enterprise green chain supply; the second layer is about the principles from five dimensions: financial value, customer service, business process, innovation and development as well as environmental benefits; the third layer is the second-class index level which includes 24 indexes on performance evaluation. The specific index system is demonstrated in Table 1:

Table 1. Performance Evaluation indicator system of Green Supply Chain in Retail Enterprises

Target layer	First class indicator	Second class indicator	Types of indicator	
			Input indicator	Output indicator
Research on Green Supply Chain Performance Evaluation of Retail Enterprises	Financial Value M1	Return to total asset ratio Y11		√
		Total asset turnover ratio Y12		√
		Net asset returns ratio Y13		√
		Asset-liability ratio X11	√	
	Customer Service M2	Rate of products out of stock X21	√	
		Customer complaint rate X22	√	
		Customer satisfaction rate Y21		√
		Market share Y22		√
		Customer acceptance of green products Y23		√
	Business Service M3	Response time X31	√	
		Inventory turnover Y31		√
		On-time transport rate Y32		√
		Information sharing degree X32	√	
	Innovation and Development M4	R&D ratio X41	√	
		R&D staff ratioY41		√
		New product revenue ratio Y42		√
		Patented technology ownership ratio Y43		√
	Environmental Benefit M5	Resource recycling rate Y51		√
		Green product growth rate Y52		√
		Environmental efficiency Y53		√
		Green investment rate X51	√	
		Ambient severity X52	√	
		Environmental cost X53	√	
		Green technology R&D ratio X54	√	
		Pollution cost rate X55	√	

5. CONSRTUCTION OF DEA – BASED GREEN SUPPLY CHAIN PERFORMENCE EVELUATION MODEL FOR RETAIL ENTERPRISES

Data Envelopment Analysis is an efficiency evaluation method proposed by Charnes, Cooper and Rhodes in 1978 based on the concept of relative efficiency. The development of DEA evaluation method has tended to be diversified. Up until now, there have been such evaluation methods as CCR, BCC, CCWH, C2GS2 and so on. The comparisons between multiple models are shown in Table 2.

Table 2. DEA model attribute table

Model	Attributes
CCR	The overall efficiency both targeted at scale efficiency and technological efficiency; given that the returns to scale is unchanged
BCC	Reflect the returns to scale: targeted at the overall efficiency, technical efficiency and scale efficiency at the same time

CCWH	More input and output indicators; the significance of indicators are defined (restriction, preference)
C2GS2	Can only evaluate the technical efficiency in terms of variable returns to scale

Table 2 has summarized the attributes and applicability of each model. Firstly, the study on performance evaluation of the retail enterprises green supply chain should consider both the scale efficiency and technical efficiency of decision-making units, while the C2GS2 model can only reflect the change of returns to scale; secondly, this research does not determine the comparative significance between input index and output index and therefore, CCWH is not applicable, either; while based on the traits and influencing factors of retail enterprises green supply chain performance evaluation, we should take into consideration not only the technical efficiency of this industry, but also the efficiency of pure technology and scale. Thus, we have adopted the DEA and obtained the enterprise technical efficiency by CCR model; and then using BCC model to figure out the pure technology efficiency and finally get the scale efficiency of decision-making units; and therefore, this paper has employed CCR model and BCC model from DEA evaluation models to appraise the performance.

6. EMPIRICAL ANALYSIS

6.1 Evaluation of Green Supply Chain Performance based on DEA in Retail Enterprises

6.1.1 Determine the evaluation object: The evaluation subject of this paper is the green supply chain performance of retail enterprises. Then, according to the characteristics of DEA evaluation method and the selection principle of decision-making unit, the selected decision-making unit should be in the same internal and external environment. Since this paper aims to study the performance evaluation of a green supply chain in retail enterprises, we have chosen New World Department Store as the sample.

6.1.2 Collect evaluation data: This paper examines the green supply chain performance evaluation of the New World Department Store in 2015. The data are collected from the Green Paper on Energy Conservation and Environmental Protection in China’s Retail Industry in 2015, The Yearbook of China Chain Management in 2015 and the annual report from the Company’s official websites, and other references are the Sohu Finance Network, Sina Finance, Yahoo Finance, Phoenix Financial Web site and relative financial data from securities trading software with several variables collected and collated from multiple financial data.

6.1.3 Calculation and result analysis of DEA evaluation: Using the CCR model and BCC model from DEA evaluation methods, this paper has calculated data from the New Century Department Store (hereinafter referred to as XSJ) by means of DEAP2.1 software under the conditions of constant return to scale (CRS) and variable return to scale (VRS). The result is shown in Table 3:

Table 3. Solutions of XSJ CCR model

CCR	S_1^-	S_2^-	S_3^-	S_4^-	S_5^-	S_1^+	S_2^+	S_3^+	θ
M1	0	-	-	-	-	0	0	0	1
M2	0	0	-	-	-	18.317	2.143	0	0.797
M3	0	-	-	-	-	24.994	0	-	0.947
M4	0	0	-	-	-	0	0	-	1
M5	2.544	8.362	0	0	7.051	0	2.788	2.684	0.817

Table 4. Solutions of XSJ BCC model

BCC	Technical efficiency	Pure technical efficiency	Scale efficiency	Returns to scale
M1	1	1	1	Unchanged
M2	0.797	1	0.797	Decreased
M3	0.947	1	0.947	Decreased
M4	1	1	1	Unchanged
M5	0.817	1	0.817	Increased

Among them: technical efficiency = pure technical efficiency × scale efficiency

(1) Technical efficiency analysis

Technical efficiency is used to evaluate the level of production process in industry in order to find whether the input and output portfolios of an enterprise are in the best condition. If the technical efficiency is 1, it means that the input and output portfolio of this decision-making unit has reached the optimal proportion; if the technical efficiency is less than 1, it shows that the input and output of this decision-making unit has not reached the optimal proportion, which means that the resources are not properly utilized. As we can see from Table 3, XSJ has obtained the optimal proportion in terms of finance as well as innovation and development, while it failed to achieve the optimal proportion of input and output in terms of customer service, business process as well as environmental performance index, manifesting that there exists resource redundancy in the above aspects and further adjustment should be made to obtain the optimal proportion between input and output.

On the base of analysis on the above results, if this enterprise intends to improve its green supply chain performance, firstly, it should not only maintain all financial indicators are in the healthy level, but also attaches equal importance to its development in non-financial aspects; secondly, as a B2C enterprises, it should give priority to customer satisfaction which is a significant indicator; lastly, as for green supply chain, the most important index is the one in environmental performance. And therefore, it should enhance the environmental awareness of the enterprise, plunge more money in environmental protection and emphasize the development as well as application of environmental technologies.

(2) Analysis on scale efficiency and pure technical efficiency

Returns to scale refer to the output alteration, resulting from the changes of all production factors in the same proportion within an enterprise when other conditions remain unchanged, and they analyze the relation between the changes of input and output. Increasing returns to scale means that the output proportion should be more than that of the input which enterprises have invested; constant returns to scale means the proportion of output is the same with that of the input which enterprises have invested, and the scale in this phase is reasonable; decreasing returns to scale refers to the proportion of input is more than that of the output.

From the perspective of scale efficiency, if it is close to 1, then the performance of the retail enterprise green supply chain is better. The values of scale efficiency of XHJ are 1 in terms of financial value as well as innovation and development, which shows that the return to scale in these two aspects are constant; it is also the best phase of return to scale since both input and output have achieved the optimal proportion; while the scale efficiency of XSJ in such aspects as customer service and business process are less than 1, that is to say, there are decreasing returns to scale in this two factors, manifesting there are problems of resource utilization in this two aspects. When the overall efficiency also known as the technical efficiency is less than 1, we need to find whether it is due to the influence of scale efficiency or technical efficiency. And thus, this paper figures out the pure technical efficiency of decision-making units by means of the BCC model based on DEA evaluation methods. As seen from table 4, although XSJ is inefficient in terms of business process, customer service as well as environmental protection, their pure technical efficiency are all 1, and therefore, they all belong to pure technical efficiency. As for XSJ, as long as it enlarges its scale, it can be able to achieve overall sale efficiency.

(3) Projection analysis

According to Table 4, we can find that the green supply chain of XSJ is inefficient in business process, customer service as well as environmental protection, while the projection of inefficient decision-making units based on DEA is efficient. And thus, we can make the green supply chain efficient on the base of DEA by means of adjusting the input and output of enterprises. Firstly, calculate the projection on the base of formula 9, then make adjustments to customer service (M2), business process (M3) as well as environmental performance (M5) and finally find the target value of the three above factors of XSJ. The calculation result after improvement is as follows.

Table 5: XSJ input and output adjustment plan

		Input indicator			Output indicator	
		Current input	Target input		Current output	Target output
M2	X_{21}	9.67	7.703	Y_{21}	75.88	94.197
	X_{22}	7.1	5.656	Y_{22}	2.8	4.943
				Y_{23}	50.18	50.18
M3	X_{31}	48.3	45.72	Y_{31}	11.5	36.495
				Y_{32}	85.9	85.9
M5	X_{51}	19.7	13.551	Y_{51}	8.75	8.75
	X_{52}	23.41	10.764	Y_{52}	7.56	10.348
	X_{53}	14.43	11.789	Y_{53}	9.48	12.164
	X_{54}	5.68	4.64			
	X_{55}	18.76	8.275			

As seen from Table 5, as for the green supply chain of XSJ, a higher output can be obtained by adjusting the amount of resource input. In terms of customer service, the rate of products out of stock should reduce from 9.67% to 7.703%, and the rate of customer complaint from 7.1% to 5.656%; in terms of business process, a high information sharing should be maintained to enhance the communication efficiency between enterprises. Eventually, according to data in table 5 and analysis on the current input as well as output, a higher output can be achieved through adjusting the amount of resource input, which means to adjust the green investment rate from 19.7% to 13.551%, control the total emission of "three wastes" under 10.764 tons, reduce the environmental cost from 144,3000 yuan to 117,89 yuan, cut down the green technology R&D ratio to 10.348%, raise the environmental efficiency from 9.48% to 12.164% and maintain the resource recovery and utilization rate. The projection method can be helpful in improving the weak aspects of a retail enterprise green supply chain, and provide more specific groundings when retail enterprises are establishing green supply strategies and eventually to make them better implemented.

7. CONCLUSION

First of all, this research is far from full-scale since it lacks the vertical analysis on the green supply chains of XSJ in different time periods. In addition, the DEA method employed in this paper has only evaluated the relative efficiency of decision-making units rather than their absolute efficiency, and therefore, the absolute efficiency of the decision-making unit cannot be achieved. In view of these limitations, we look forward to more effective methods that can be applied to the future study on the performance evaluation of a retail enterprise green supply chain in order to obtain more accurate results.

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REFERENCES

[1]Purba Rao, Diane Holt D. Green Supply Chains Lead to Competitiveness and Economic Performance? J. International Journal of Operations & Production Management, 9 (2015): 264-273.

[2]Walker H, Di Sisto L, Mcbain D. Drivers and Barriers to Environmental Supply Chain Management Practices: Lessons from the Public and Private Sectors, J. Journal of Purchasing and Supply Management, 14 (2011): 69-85.

[3]Pietro De Giovanni, Vincenzo Vinzi. Covariance versus Component-based Estimations of Performance in Green Management, J. International Journal of Production Economics, 2 (2012): 907-916.

[4]Klassen R, Mclaughin C. The Impact of Environment Management on Firm Performance, J. Management Science, 42 (2016): 1199-1214.

[5]Kristie Mcintyre. Logisitics. Performance Measurement and Greening Supply Chains: Diverging Mindset, J. International Journal of logistics Management, 9 (2008): 57-67.

[6]Steven A Melnyk, Robert P Sroufe, Roger Calantone. Assessing Environmental Management Systems on Corporate and the Impact of Environmental Performance, J. Journal of Operations Management, 3 (2008): 329-351.

[7]Yasutaka Kainumaa, Nobuhiko Tawara. A Multiple Attribute Utility Theory Approach to Lean and Green Supply Chain Management, J. Production Economics, 101 (2009): 99-108.

[8]Amy H I Lee, He-Yau Kang, Chang-Fu Hau, Hsiso-Chu Hung. A Green Supplier Selection Model for High-tech Industry, J. Expert Systems with Application, 36 (2009): 7917-7927.

[9]Lee S-Y, Rhee S-K. The Change in Corporate Environmental Strategies: a Longitudinal Empirical Study, J. Management Decision, 45 (2013): 196-216.

[10]Stepan Vchon, Robert D Klassen. Green Project Partnership in the Supply Chain: The Case of the Package Printing Industry, J. Journal of Cleaner Production, 14 (2013): 661-671.

[11]Ottar Michelsen. Investigation of Relationships in a Supply Chain in Order to Improve Environmental Performance, J. Clean Technology Environment Policy, 9 (2012): 115-123.

[12]Lin R J. Using Fuzzy DEMATEL to Evaluate the Green Supply Chain Management Practices, J. Journal of Cleaner Production, 40 (2013): 32-39.

[13]Sanjay Kumar, Sunil Luthra, Abid Haleem. Customer Involvement in Greening the Supply Chain: an Interpretive Structural Modeling Methodology, J. International Journal of Industrial Engineering, 27 (2013): 115-130.

[14]Chia-Wei Hsu, Tsai-Chi Kuo. Using DEMATEL to Develop a Carbon Management Model of Supplier Selection in Green Supply Chain Management, J. Journal of Cleaner Production, 56 (2013): 164-172.

[15]Suresh Kumar Jakhar. Designing the Green Supply Chain Performance Optimization Model, J. Global Journal of Flexible Systems Management, 15 (2014): 235-259.

[16]Rostamzadeh R, Govindan K, Esmaeili A. Application of Fuzzy VIKOR for Evaluation of Green Supply Chain Management Practices, J. Ecological Indicator, 49 (2015): 188-203.

[17]Zhang Bixi, Zhang Mingzhu, Han Zhengtao. Green Supply Chain Performance Evaluation Based on Fuzzy TOPSIS, J. Journal of Tianjin Polytechnic University, 04 (2014): 76-79.

[18]Yan Bo, Shi Ping. Supplier Evaluation and Selection in Green Supply Chain Environment Based on Super Efficiency DEA Model, J. Statistics & Decision, 13 (2013): 37-40.

[19]Ministry of Commerce Issued the Green Book on China's Retail Energy Conservation and Environmental Protection in 2015, J. China Journal of Commerce, 35 (2015): 2-14.

Application of Production-oriented Approach to an Oral English Class

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Abstract: The paper is a detailed analysis of how production-oriented approach is applied to the learning and teaching practice through a case study. After introducing the principles and procedures of production-oriented approach, the paper continues to illustrate how POA theory is applied to a unit featuring movies and music of an oral English class.
Keywords: production-oriented approach, oral English class, application

1. INTRODUCTION

Production-oriented approach (POA) [1] is proposed by professor Wen Qiufang. According to Wen, POA is mainly targeted at English learners of medium or advanced levels. Also, Production-oriented approach differs from output-driven hypothesis in that POA lays emphasis on the production process as well as the production result. In this paper, I will explore the rich connotations of Wen's POA through a case study. The major principles and procedures will be illustrated by focusing on a unit featuring "movies and music" of an oral English course.

2. BODY

2.1 Major Principles and Procedures of POA

Wen abandons the popular student-centered teaching principle, and advocates the learning-centered principle. That is, under this theory, the teaching objectives must be well realized and students' real and effective learning must take place. Therefore, the teaching design for any teaching procedure or any designed task should first show concern about what students can learn from the design and how can students benefit.

In the current traditional English class, students receive a lot of "inert knowledge" [2] from class, but the knowledge acquired cannot automatically turn into production abilities in real-situation communications [3]. To cope with the "dumb" English phenomenon, Wen puts forward learning-using integrated principle. "Learning" here refers to the input-driven activities such as listening and reading, while "using" as output driven activities means "production", including writing, translation and oral interpretation.

Also, Wen supports whole-person education principle. English courses should not only attain the tool goal of improving students' language abilities, but also the humanity goal of cultivating students' comprehensive abilities such as critical thinking, self-learning and cultural awareness. Teachers shoulder the responsibility of sensibly choosing appropriate topics and raw materials, and cleverly design various activities.

According to Wen, the procedures of POA undergo three stages: motivating, enabling and assessing. As a medium in the three stages, teachers can guide, design and offer scaffold. To Wen's understanding, the motivating stage can be subdivided into three steps: 1. Teachers visualize the communicative situation. 2. Students try to produce. 3. Teachers clarify the teaching objectives and production tasks. The enabling stage can be equally subdivided into three steps: 1. Teachers describe the production tasks. 2. Students study selectively and teachers give their guidance and checkout. 3. Students practice giving the production and teachers guide and check. Assessing consists of instant assessing and deferred assessing. Instant assessing is used in the "enabling" stage, while deferred assessing includes review assessing and transfer assessing [1].

2.2 Application of Wen's POA to Learning and Teaching Practice

In the following paragraphs, I will explain in detail how the production-oriented approach can be successfully applied to the learning and teaching practice. I will choose an oral English course as a case study because students' oral English practice is more closely related to the process and result of students' production than many other courses. To be specific, I will choose a very appealing and practical unit talking about movies and music. The oral course is targeted at all second-year university students who have intermediate English level or above.

To apply the learning-centered principle, I design a lot of tasks to make sure that students' real and effective learning is taking place. I provide students with the necessary scaffolding to ensure students' selective learning and effective input and output. Various activities such as dialogue, repetition, role-play, dubbing, individual presentation, group presentation, group discussion etc are conducted and assessed to ensure the effectiveness of students' learning.

To apply learning-using integrated principle to my teaching practice, I design one of my tasks as follows. I ask my students to watch a video clip about 1995 Oscar awards ceremony. Then I encourage my students to play the role of Tom Hanks and deliver a speech before his classmates with the help of the script. I also give my students the following tips.

1. Watch the clip several times to get a general idea.
2. Read the script and look up any new word in a dictionary to ensure understanding and accurate pronunciation.
3. Listen to Tom Hanks' speech sentence by sentence, and try to imitate.
4. Rehearse your speech with the help of the script within your group before you show to the whole class.

Step 1 and 2 involve viewing listening and reading, all of which are typical input-driven activities. Step 3 is a mixture of both input and output activities. In step 4, output-driven production predominates. Through many rounds of input and output practice, students' language abilities are greatly improved.

To apply whole-person education principle, I design one of my tasks as follows. After a brief introduction of a Chinese folk song, "China's second national anthem", Jasmine Flower, I invite students to listen to the song in the English version, and ask them to do either of the following tasks.

Option 1: Get yourself familiar with the song in the English version, and sing at least two lines in the presence of your classmates.

Option 2: Get yourself familiar with the song in the English version, and do a recording of the whole song beforehand and share it with your classmates in class next time.

By choosing appropriate topics and raw materials and by designing the task this way, I have succeeded in helping students achieve their humanity goal of learning apart from the language goal. Students have to learn the song after class within their groups, which greatly enhanced their autonomous learning abilities. The special task facilitates students' healthy mental growth. Also, the task inspires students to develop their patriotic feelings and their responsibility of transmitting Chinese culture to foreign countries.

I will continue to explain the roles (guide, design and offer scaffold) teachers can play in the three procedures (motivating, enabling and assessing) of POA by using another example from the same unit. For this part, my focus will be put on the motivating and enabling stages. To visualize the communicative situation for the motivating stage, I assign this task.

An American couple took their 6-year-old kid to the cinema. They found that 10 hot movies were on. But they were at a loss as to which movies would be fit for the couple and which ones for the kid, as they didn't know anything about movie ratings. Suppose you are studying in the U. S. and doing a part-time job in the cinema as a customer service clerk. Now you are required to give a presentation about movie ratings to several customers and give the couple proper advice in private.

After visualizing the communicative situation, I ask students try to show their production result based on their casual accumulated knowledge about movie ratings. Then I clarify the teaching objectives: to master the words related to movie ratings and get familiar with the movie-rating culture.

Then I describe the production task for the enabling stage by giving my students the specific learning steps: 1. Search the Internet for information about movie ratings. 2. Try to give ratings to the ten movies being shown in the cinema. 3. Give comprehensive advice to the parents on how to choose proper movies for their kid and for themselves. The scaffold, based on three tasks, is offered as follows:

Task 1: Look at the above rating symbols and discuss within your group what they possibly mean.

Task 2: Discuss the film rating descriptions within your group and together fill in the blanks to check your understanding of movie ratings.

G, PG, PG-13, R, or NC-17

The violence in a ___1___ rated film will not be intense, while violence that is both intense and persistent will generally require at least a (n) ___2___ rating. Profanity may be present in ___3___ rated films, and use of one of the harsher sexually-derived expletives will initially incur at least a ___4___ rating. Multiple occurrences will usually incur a (n) ___5____ rating as will the usage of such an expletive in a sexual context. Drug use content is restricted to ___6___ and above. Nudity is restricted to ___7___ and above. Nudity that is sexually oriented will generally require a (n)___8___ rating.

Task 3: Search the plot and review of the following movies from the Internet, and then try to rate each of them.

1. The King's Speech
2. Bad Education
3. Avatar
4. Toy Story
5. The Hunger Games
6. Lust, Caution
7. Star Wars
8. Potter and the Goblet of Fire
9. The Revenant
10. The Lion King

By offering the above three tasks, students realize the steps that need to be taken in order to give a decent production. That is, they should first understand the rating symbols and their respective connotations. Then they are supposed to use the general knowledge of movie ratings to rate a certain movie and give explanations. Students then study selectively based on these contents by searching the information themselves from the Internet. Finally, with the input absorbed, they try to give the production with the teacher's guidance and checking.

3. CONCLUSION

The paper first introduces Production-oriented approach put forward by Wen Qiufang. Wen's learning-centered principle, learning-using integrated principle and whole-person education principle are explained in detail. And the motivating, enabling and assessing procedures of POA are also summarized. After introducing POA theory, the paper proceeds to explain in detail how the production-oriented approach can be successfully applied to the learning and teaching practice through a case study. It is concluded that POA serves as a very enlightening guide for specific teaching design in the teaching practice.

REFERENCES

[1]Wen Qiufang. Developing a Theoretical System of Production-oriented Approach in Language Teaching. Foreign Language Teaching and Research, 2015(4).

[2]Larsen-Freeman, D. Teaching Language: From Grammar to Grammaring. Boston, MA: Thomson Heinle, 2005.

[3]Wen Qiufang. Debate between General English and ESP in College English Teaching. Foreign Languages and Their Teaching, 2014(1).

Research on the Innovation of Teaching Mode in Colleges and Universities under the Guidance of Teaching Ecology

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Abstract:The innovation of teaching mode in Colleges and universities has been attached great importance to by people all the time. It is of great significance to explore the teaching mode under the guidance of teaching ecological concept. The guiding principles of educational ecology include the following points: principle of scientificity, multidimensional Principle, openness Principle, principle of Practice. In the innovation of teaching mode, we can adopt these modes: ecological teaching curriculum system, school-enterprise joint training mode, focusing on the cultivation of students' innovative ability, and ecological teaching effect evaluation method. I believe that through continuous exploration, we can find a more suitable new teaching mode in Colleges and universities.

Keywords: Innovation; Teaching Mode; Teaching Ecology

1. INTRODUCTION

Since Lawrence Cramming, Dean of Columbia Normal College, formally put forward the term "Ecology of Education" in his book Public Education in 1976, people have become more and more interested in the study of educational ecology. In our country, the phenomenon of educational ecology concept research has been increasing and flourishing in recent years. So far, many books and papers related to educational ecology have been published and become an important treasure house for people to continue to study the concept of educational ecology. The so-called educational ecology refers to the science that studies the law and mechanism of interaction between education and its surrounding ecological environment (including natural, social, normative, physiological and psychological). Education and ecology are its two important theoretical bases. The concept of educational ecology links education with ecological environment, and hopes to find a systematic educational method by using ecological methods. Educational ecology, with its new vision, new ideas and new methods, has important guiding significance for the reform and development of education, and plays an active role in opening up fields and enlightening thinking in the study of educational theory and experiment.[1]

The ecological teaching concept conforms to the relevant theory of "natural growth" and meets the needs of the life growth of teachers and students in Colleges and universities. In order to create a teaching environment suitable for teaching and life. The teaching system under the concept of ecological teaching has distinct characteristics: autonomy, interaction and adaptation to the life stage. This is an ecological and sustainable development of teaching philosophy.

Teaching mode is a relatively stable framework and procedure of teaching activities under the guidance of certain teaching ideas or theories. As a structural framework, the emphasis of teaching mode is to grasp the whole of teaching activities and the internal relations and functions between the various elements from a macro perspective. With the help of the research results of educational ecology, this paper aims at promoting the individual development of teachers and students in Colleges and universities, examines the teaching in Colleges and universities from the perspective of educational ecology, optimizes the ecological environment of teaching, and implements ecological classroom teaching.

2. CURRENT SITUATIONANG PROBLEMSOF TEACHING MODEIN COLLEGESANDUNIVERSITIES

At present, there are still many problems in the teaching mode of colleges and universities, which are embodied in the following aspects.

First, the knowledge structure of the teaching discipline system is not reasonable enough. Generally speaking, a complete teaching discipline system should include two parts: basic theory teaching and practical skills teaching, and both of them should be equally important. This is the combination of theory and practice, and a reasonable way of collocation. However, in the discipline system of most colleges and universities in China, the teaching hours of theoretical knowledge are much higher than those of practical teaching. As a result, students learn too much theoretical knowledge, but do not know how to use theoretical knowledge embarrassing situation. Secondly, there are too many repetitions in the teaching curriculum. At present, our colleges and universities pay more and more attention to the education of students' basic theory. Under this background, many professional courses are very meticulous. However, for general education undergraduates, it is not necessarily a good thing to study too carefully, because it will affect the expansion of his knowledge to a certain extent. Objectively, the knowledge of the course is narrow, which will restrict students' insights, and also affect students' judgment of the future and career orientation. Thirdly, the teaching methods are too backward. Most of the teaching methods in Colleges and universities are single and rigid. The common teaching methods are only classroom teaching. This way is different from vocational colleges, lacking of very interactive and experiential. In most cases, college teachers teach theoretical knowledge in class, while students play mobile phones, sleep and so on under the classroom.[2]This way is very dull and rigid, which is not conducive to improving students' cultural knowledge level. In addition to these problems, there are other problems, such as the overall low level of teachers, the need to comprehensively improve the academic and cultural level of teachers and staff; the arrangement of teaching materials is not reasonable enough, many contents are just accumulation of knowledge, lack of logic and training pertinence.

3. GUIDING PRINCIPLES OF ECOLOGICAL TEACHING CONCEPT

3.1. Principle of scientificity

In the concept of ecological teaching, scientific principle is a particularly important principle. This principle emphasizes that ecological teaching should be guided by scientific theory, follow the objective laws of pedagogy, and deal with problems with scientific attitude and methods. Only by adopting scientific principles can advanced teaching ideology and achievements be accumulated in the process of long-term exploration, and research results can be truly applied in the practice of education and teaching. In the teaching ecology of colleges and universities, we must follow the principles of ecology and design the corresponding teaching system according to the requirements of different majors, teaching contents and teaching strategies, so as to ensure the scientificity of the teaching ecology of colleges and universities.[3]

3.2. Multidimensional Principle

Eco-teaching is a multi-element teaching system, which is the sum of all the elements. Among them, there are many elements, such as teaching objectives, methods, contents, strategies and evaluation. The diversity of teaching ecological elements determines the multidimensional nature of teaching ecological strategies. In the process of carrying out the reform of ecological teaching mode in Colleges and universities, we need to fully consider many factors in teaching and adjust the teaching mode according to the actual situation of each college.[4] For example, we must respect the characteristics of College Students' widespread interests and low enthusiasm for learning, and choose and design teaching strategies from multiple perspectives. Guided by the principle of multi-dimensionality, the teaching ecology involved not only pays attention to the study and cultivation of students' professional knowledge, but also to the cultivation of students' character and the growth of their lives.

3.3. Openness Principle

In some guiding documents, it is required that the teaching mode of colleges and universities should pay attention to the construction of the times, openness and diversity in order to meet the diverse needs and expectations of the society for talents. In this context, in the process of reform, institutions of higher learning must maintain the openness of the curriculum system and ensure that students can learn all kinds of knowledge courses to expand their learning scope. The implementation of curriculum should move from classroom to society and give full play to students' interest and potential in learning.

3.4. Principle of Practice

The principle of practicality stresses that "practice is the only criterion for testing truth". At present, there are many articles on how to carry out ecological teaching construction. However, no matter how profound the knowledge is, it is still a guiding concept, which has not yet been put into practice. Therefore, in the process of teaching ecological research, we should follow the principle of practicality and always focus on students' learning for practical use and practical ability training. Therefore, we should focus on the strategy of ecological classroom teaching and the education of off-campus practice, and explore a feasible way to combine theory with practice.

Generally speaking, among the many principles, we should always observe the problems from the perspective of development, and devote ourselves to solving the problems with the idea of development, so as to promote the development of students, teachers and schools as an important goal. Under the support of the theory between the new ecological education idea and the traditional education classical idea, we should learn from the experience of predecessors boldly and strive for new breakthroughs.

（See in Figure 1）

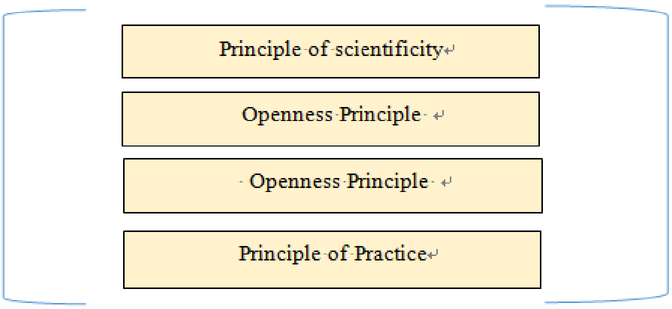

Figure 1. Guiding Principles of Ecological Teaching Concept

4. INNOVATION OF TEACHING MODEL IN COLLEGES AND UNIVERSITIES

When innovating the teaching mode of colleges and universities, we should give full play to the relevant theories in the ecological teaching concept, so as to innovate the ecological teaching mode. In the process of teaching mode innovation, we should first understand the following important basic conditions. Firstly, the elements of ecological classroom teaching are teachers' teaching and students' learning. [5]Therefore, how to innovate the mode and optimize the teaching process should always focus on "teaching" and "learning". Secondly, the psychological factors of teachers and students have an important impact on the construction of ecological classroom. Therefore, how to keep teachers and students in a harmonious and healthy mental state in the process of learning is also a problem that should be considered in the innovation of the whole ecological teaching mode. Thirdly, the relationship between teachers and students in ecological classroom. Teachers and students are two equal ecological elements. [6]They should be based on a harmonious relationship of mutual learning and mutual promotion. Teachers are the leader of classroom teaching, the guide of learning and the developer of potential, so they are very important. Students are the main body of classroom teaching, the autonomous learners of learning, and the potential players. They should be trained to be learners of independent learning, cooperative learning and inquiry learning. The innovations of teaching modes in Colleges and universities are as follows(See in Table 1):

Table 1.Innovation of Teaching Model in Colleges and Universities

Four Innovative Teaching Modes	Eco-teaching curriculum system
	Joint Training Model of School and Enterprise
	Focus on the Cultivation of Students' Innovative Ability
	Evaluation method of ecological teaching effect

4.1 Eco-teaching curriculum system

Based on the principle of multi-dimensionality, we should pay attention to the ecological construction of curriculum system when carrying out the innovation of teaching mode. In terms of curriculum system setting, we should fully combine the different attributes of different majors and make clear innovations. In terms of public basic knowledge and skills, we should vigorously carry out curriculum reform, delete unrelated courses from the system, and not let too much basic theoretical knowledge occupy the arrangement of class hours. For example, in terms of English knowledge, if it is for college students majoring in ancient Chinese, they can set up a very simple English course for them to learn, but it can not improve the students'English language comprehensive ability and learning difficulty. Because for the students majoring in ancient Chinese, they can hardly need English level. If they are set up in the classroom, the disadvantages will undoubtedly outweigh the advantages. On the other hand, we should pay attention to strengthening the curriculum of practical courses. Such curriculum reform can enable students to grasp a certain theoretical and practical preliminary knowledge before participating in off-campus work. It may play a certain role when we really go to the post to participate in internship or formal work. If we use "trunk" to describe the teaching system. So "Big Trunk" is a basic course, so it is necessary to select basic courses to play this role, but not many. "Small Branches" is the curriculum content of different majors, which pays attention to science and refinement. On the whole, the construction of ecological teaching system should be adjusted according to the different needs of occupational posts, and the trend, trend and flexibility of major and minor directions should be combined as accurately as possible in order to cultivate professionals matching social needs.

4.2 Joint Training Model of School and Enterprise

Guided by the principle of practicality, the reform of teaching mode in Colleges and universities can adopt the mode of school-enterprise joint training. The mode of school-enterprise joint training has been developed for many years in foreign countries, and has many fruitful experiences. For example, the "school-enterprise alliance" in France is already very mature. Their institutions of higher learning are closely linked with corporate companies in society and often have in-depth cooperation in various fields. During the period of students' study in Colleges and universities, cooperative enterprises will send representatives to give lectures and introduce practical experience in Colleges and universities. Students can take precautions so that they can thoroughly and meticulously understand the latest development of the industry during their study in school. During the training period, students can interact with teachers in school in time to supplement their basic knowledge. Students trained in the mode of school-enterprise cooperation will be able to obtain a certificate of professional qualification matching their work upon graduation. We can learn from the experience of running schools in France, cooperate with relevant government departments, enterprise platforms and universities, and actively carry out the ecological teaching program of school-enterprise alliance. If combined with such training methods, I believe that students in Institutions of higher learning are more able to learn and learn useful. Therefore, actively starting the ecological teaching mode of "school-enterprise alliance" will be conducive to the cultivation of national talents.[7]

4.3 Focus on the Cultivation of Students' Innovative Ability

In a survey of College students, more than 70% of them expressed their lack of creativity, which indicates that most of the students in Colleges and universities are lack of creativity. This means that the Cultivators - schools, enterprises and governments - are obliged to train students' creativity. If we can improve students' innovative ability, it is a national and social good fortune. This requires us to adopt appropriate methods. Firstly, heuristic teaching method is adopted. This method requires teachers to actively change their thinking, constantly learn new teaching concepts and methods, and then use heuristic teaching methods in the classroom to guide students' innovative thinking. For example, the theory course visualizes and visualizes the theoretical knowledge with the help of relevant data such as digital images, pictures and three-dimensional entities, so as to enhance the students' acceptance and understanding of the theoretical knowledge. Secondly, teachers in higher vocational colleges can make students participate in the practice of innovative ability training through ingenious ways. Combining theory with practice, students are encouraged to create, find and solve problems. This process can cultivate students' initiative and creativity. Third, improve creativity through various competitions. The type of competition can start with more hobbies, characteristics, professional orientation and so on. Different competition methods are adopted for different students and different majors. For example, students majoring in computer science can improve their creativity through programming competitions. For example, students majoring in architecture can design the contest content by means of model building. No matter what the major is, the aim of the competition is the same: to improve students' professional knowledge accumulation, practical ability and creativity.[8]

4.4 Evaluation method of ecological teaching effect

The evaluation method of ecological teaching effect has a certain evaluation effect on the success of teaching mode innovation. Specifically, we can adopt a variety of methods, including classroom observation, experience summary, action research, data analysis. Classroom observation method refers to the method of collecting data directly or indirectly from classroom situations and studying data from the perspective of educational ecology around promoting students' life growth. Through this method, we can timely grasp the latest classroom teaching effect information. Experience summary method: This method is to collect teaching effect data in the process of research, and then analyze it. On the basis of the analysis, it summarizes and combines again, so as to obtain more profound and systematic research results. Action research method: This method focuses on applied research. Researchers must go deep into schools, classrooms, students' learning and life, and grasp the latest teaching effect in action. Through the innovation of teaching methods and the improvement of teaching behavior, we can promote the growth of teachers' and students' lives and realize the high quality of teaching. Data analysis: Focusing on promoting students' life growth, this paper analyses the components of classroom teaching and studies its causality. Through these methods, we can effectively evaluate the effect of ecological teaching, which is conducive to timely understanding, mastering and adjusting teaching methods.

5. CONCLUSION

The innovation of teaching mode in Institutions of higher learning has always been attached great importance to by our educational institutions. It is of great practical significance to explore the teaching mode under the guidance of teaching ecological concept. At present, there are the following problems in the teaching mode of higher education institutions in China: the knowledge structure of the teaching discipline system is not reasonable enough, there are too many repetitions in the teaching curriculum, and the teaching methods of most colleges and universities are single and rigid. Therefore, in the process of exploration, it is of practical significance to adopt the guiding concept of teaching ecology to learn relevant courses. In the innovation of teaching mode, the following are worthy of praise: ecological teaching curriculum system, school-enterprise joint training mode, focusing on the cultivation of students' innovative ability, ecological evaluation method of teaching effect. I believe that through continuous exploration, we can find a more suitable new teaching mode in Colleges and universities.

6. ACKNOWLEDGEMENT

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REFERENCES

[1]Shu X. An Empirical Study on a Flipped Classroom in Open University Teaching Based on an Ecological Perspective: A Case Study on a Translation Theory and Practice Course. 2015.

[2]Yun W U. Research on the Innovation of the Mode of Chemistry Experiment Teaching in Colleges and Universities. Management & Technology of SME, 2018.

[3]Hill H C, Ball D L, Blunk M, et al. Validating the Ecological Assumption: The Relationship of Measure Scores to Classroom Teaching and Student Learning. Measurement Interdisciplinary Research & Perspectives, 2007, 5(2-3):107-118.

[4]Min Y , Chun-Xiang R , Xi-Na C . Innovation of aerobics teaching mode in colleges and universities. Shandong Sports Science & Technology, 2016.

[5]Blenkinsop S. In Search of the Eco-Teacher: Public School Edition. Canadian Journal of Environmental Education, 2014, 19.

[6]Zak K M, Munson B H. An Exploratory Study of Elementary Preservice Teachers' Understanding of Ecology Using Concept Maps. Journal of Environmental Education, 2008, 39(3):32-46.

[7]Cervantes G. A methodology for teaching industrial ecology. International Journal of Sustainability in Higher Education, 2007, 8(2):131-141.

[8]D'Avanzo C. Research on Learning: Potential for Improving College Ecology Teaching. Frontiers in Ecology & the Environment, 2003, 1(10):533-540.

The Measurement of China's Higher Education Development and Spatial Spillover Effect

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Abstract: The development of China's higher education is an important cornerstone for realizing national rejuvenation and the Chinese dream, so deep exploration of its driving mechanism will help to enhance the connotative development of regional education. On the basis of measuring the development level of China's higher education by means of widening vertical and horizontal levels, we examined the spatial pattern and related influencing factors of higher education development in 30 provinces and cities in China from 2005 to 2017, excluding Hong Kong, Macao and Taiwan. The study indicated that the development of higher education in China is extremely imbalance; regional higher education development demonstrates significant spatial positive correlation; economic development, urbanization and technological innovation play on direct effects on development of higher education are significantly positive; the direct effect of opening up to the outside and the income level of urban residents on it is negative; economic development plays significantly negative effects on spatial spillover effects of higher education development; the urbanization process and the income level of urban residents have a significant positive effect on the spatial spillover effect of higher education development.

Keywords: Higher education development; Spatial spillover effect; Influencing factors

1. INTRODUCTION

Education is a cornerstone of national rejuvenation and social progress, and the development level of higher education is a significant indicator of development level and potential of a country. The headway direction of China's higher education is closely linked to the realistic goals and future path of national development. The National Medium- and Long-Term Education Reform and Development Plan (2010-2020) clearly proposes to comprehensively improve the quality of higher education [1]. However, affected by economic, cultural and geographical factors, higher education still has phenomena of development imbalance, inequitable fund allocation and admission rates in different regions, which greatly decreases the economic development momentum and jeopardize social stability and unity [2]. Therefore, studying on what development level and influencing factors for higher education and how to heighten the level are the new challenges and new missions facing China's higher education in the 21st century.

2. LITERATURE REVIEW

In recent years, a large number of experts and scholars have obtained many research results in the study on the development level of higher education and its influencing factors.

In terms of measurement of development of higher education, Qiu Junping [3] set up an index system for higher education quality development to analyze the quality development of higher education at home and abroad; Wang Zhanjun et al [4] analyzed the quality of postgraduate education from five dimensions: input, output, structure, internationalization and satisfaction; Wang Chuanyi et al [5] analyzed the quality of research education from four levels: conditional support, international competitiveness, social contribution and master training; Ding Jing et al [6] built a comprehensive evaluation matrix of input and output of higher education to analyze its development in China; Xiang Lijun et al [7] researhed the development of regional higher education by using factor and cluster analyses; Zhang Xingnan et al [8] used the PLS structural equation model to measure the comprehensive development of higher education in various provinces and cities in China in 2010.

Some scholars have conducted in-depth research on the factors affecting higher education. Zhao Chunlei et al [9] believed that the allocation of resources for higher education is restricted and guided by the level of regional economic, cultural and scientific development, and gradient discrepancies of economic development in the eastern, central and western China reveals the economic attributes of the elements of higher education resources more; Yan Libing [10] believed that the imbalanced regional distribution of high-quality higher education resources has caused inter-regional education unfairness; Zhang Yingqiang [11] indicated that local government competition is an important driver for the development of higher education.

The existing research on measurement of China's higher education development and its influencing factors demonstrated that the there are few studies on the development of higher education based on the spatial information system method, let alone involving in spatial spillover effects. Most adopted subjective methods to measure the development, without combining subjective and objective ones. Therefore, in the paper, we took the 30 provinces and cities except Hong Kong, Macao and Taiwan of China in 2005～2017 as research objects to build a comprehensive measurement model for China's higher education development, as well as adopted the measuring method of widening vertical and horizontal levels, and then used the spatial Dubin model to identify the major factors impacting on the development of China's higher education, with a view to improving the development of regional higher education, thereby empowering the country by higher education.

3. MEASUREMENT OF HIGHER EDUCATION DEVELOPMENT

3.1 Building of Higher Education Development Index

In the paper, with reference to research methods of He Yiqing [12], Dai Jinhui [13], Zhao Jun [14] we adopted the development index to measure the development level of higher education from 6 dimensions: talent training, faculty, scientific research input and output, infrastructure and social services. Talent training: the number of postgraduates at school, graduates with master’s degree, students in ordinary higher education institutions (undergraduates / specialists), graduates (undergraduates / specialists), foreign students at school and foreign graduates in each province. Faculty: the number of ordinary higher institutions, the number of full-time teachers, the ratio between faculty and staff in colleges and universities, the number of faculties with middle and high professional titles, and the number of faculty and staff in the colleges and universities. Scientific research input: education funds, personnel for basic research, basic research expenditures for the current year, personnel for application research, annual expenditure for application research, personnel and annual expenditure for experimental development research and the number of R&D projects. Scientific research output: Publication of scientific papers at home and in foreign journal, publication of scientific and technical works, the number of patent applications and patent licensing, and acceptance check of international projects. Infrastructure: Total fixed assets, number of books, teaching, scientific research equipment resources and land area. Social services: the number of R&D results applied by higher education institutions, graduates of non-degree education and training in higher education, contracts on technology transfer and patent sales.

3.2 Research Methods

There are all kinds of comprehensive evaluation methods. Compared with other evaluation methods, widening vertical and horizontal levels can underlie the dynamic evaluation of panel data [15]. The calculation process is as follows: nondimensionalize all time of the unified index - form a symmetric matrix – form a comprehensive symmetric matrix – solve the eigenvector value - measure the composite index.

3.3 Calculation Results

We measured the development level of China's higher education in China from 2005 to 2017 through the method of widening vertical and horizontal levels. Due to space limitations, the paper only demonstrates data for 2005, 2007, 2009, 2011, 2013, 2015 and 2017, as shown in Table 1, which indicate that the development of higher education in the eastern China: Beijing, Jiangsu, Shanghai, Hebei and Guangdong ranks in the forefront of the country, while that in western regions such as Qinghai and Ningxia stays in the hindmost position; The regional development of higher education is extremely uneven.

4. EMPIRICAL STUDY ON THE INFLUENCING FACTORS OF THE DEVELOPMENT OF HIGHER EDUCATION

4.1 Model Building and Variable Selection

4.1.1 Model building

The spatial econometric analysis technology has become increasingly mature. Currently, it mainly includes a spatial autoregressive (SAR) model, a spatial error (SEM) model and a spatial Dubin (SDM) model, which have different expression ways and whose economic meanings are diverse. The SAR model assumes that the explanatory variables will have an impact on the economic development of other regions through spatial effects. The SEM model adds a spatial structure to the error term, assuming that the space overflow is the result of a random impact. LeSage [17] built a SDM model, which takes into account spatial interaction.

General spatial measurement model building

$$Y_{i,t} = \alpha_1 + \gamma_t + \kappa Y_{i,t-1} + \mu w_i^{'} Y_{t-1} + X_{i,t}^{'} \beta + d_i^{'} X_t \theta + \delta_{i,t} \quad (1)$$

where, i = 1, 2, ... N, t = 2, 3, ... N, β and θ are column vectors with k-dimension.

$$Y_{it} = \alpha_i + \gamma_t + \rho w_i^{'} Y_t + X_{it}^{'} \beta + d_i^{'} X_t \theta + u_{it} \quad (2)$$

$$Y_{it} = \alpha_i + \gamma_t + X_{it}^{'} \beta + \lambda m_i^{'} v_t + u_{it} \quad (3)$$

$$Y_{i,t} = \alpha_i + \gamma_t + \rho w_i^{'} Y_t + X_{it}^{'} \beta + u_{it} \quad (4)$$

The formulas (2), (3) and (4) are the general forms of the SDM model, the SEM model, and the SAR model, respectively.

4.1.2 Variables Selection of Higher Education Development

We conducted empirical analysis on factors affecting the higher education development by taking above-mentioned part of the higher education development index as the dependent variable, and selecting the economic development level, the degree of openness, urbanization, residents' living standards and technological innovation as independent variables. Among them, the economic development level was measured by per capita GDP; the degree of openness by the proportion of total imports and exports to the regional GDP; the urbanization by the proportion of urban residents to the total population; residents' living standards by urban per capita disposable income and technological innovation by the number of patent grants per 100,000 people. The data required in this paper mainly comes from the “China Statistical Yearbook” and the “Compilation of Science and Technology Statistics of Chinese Colleges and Universities”.

Table 1 Calculation results of China's higher education development level

Province	2005	2007	2009	2011	2013	2015	2017	Mean	Rank
anhui	0.2680	0.2667	0.2920	0.2924	0.3062	0.2982	0.2769	0.2876	15
beijing	0.8229	0.7834	0.7692	0.7585	0.7409	0.7339	0.6875	0.7518	1
chongqing	0.1728	0.1848	0.2218	0.2075	0.2004	0.2095	0.2254	0.2027	20
fujian	0.1912	0.1997	0.2098	0.2136	0.2155	0.2281	0.2310	0.2116	19
gansu	0.1042	0.1257	0.1055	0.1092	0.1065	0.1108	0.1108	0.1092	25
guangdong	0.4613	0.4615	0.4926	0.4848	0.4769	0.4940	0.5429	0.4850	5
guangxi	0.1611	0.1687	0.1887	0.1889	0.1946	0.1836	0.1920	0.1833	21
guizhou	0.0798	0.0812	0.0936	0.0960	0.1057	0.1199	0.1383	0.1009	26
hainan	0.0225	0.0220	0.0242	0.0278	0.0293	0.0277	0.0307	0.0275	28
hebei	0.2926	0.2947	0.2969	0.2908	0.2860	0.2820	0.2828	0.2882	14
heilongjiang	0.3417	0.3454	0.3380	0.3358	0.3271	0.3129	0.2723	0.3256	13
henan	0.3110	0.3263	0.3530	0.3504	0.3492	0.3567	0.3836	0.3454	11
hubei	0.5182	0.5040	0.5037	0.4934	0.4583	0.4618	0.4663	0.4869	4
hunan	0.3341	0.3368	0.3422	0.3340	0.3427	0.3227	0.3260	0.3324	12
jiangsu	0.6409	0.6430	0.6757	0.6821	0.6958	0.7039	0.7174	0.6798	2
jiangxi	0.2304	0.2382	0.2311	0.2210	0.2152	0.2224	0.2117	0.2240	17
jilin	0.2429	0.2499	0.2488	0.2626	0.2195	0.2225	0.2126	0.2362	16
liaoning	0.4045	0.3928	0.4043	0.3881	0.3897	0.3625	0.3536	0.3844	10
neimeng	0.0903	0.0976	0.1101	0.1162	0.1135	0.1168	0.1123	0.1098	24
ningxia	0.0330	0.0262	0.0235	0.0222	0.0224	0.0243	0.0282	0.0255	29
qinghai	0.0228	0.0262	0.0297	0.0250	0.0221	0.0200	0.0192	0.0239	30
shaanxi	0.4117	0.4013	0.3998	0.3968	0.3868	0.3898	0.3812	0.3940	9
shandong	0.4733	0.4703	0.4917	0.4732	0.4584	0.4755	0.4769	0.4699	6
shanghai	0.5629	0.5160	0.5260	0.5023	0.4787	0.4801	0.4485	0.5024	3
shanxi	0.1765	0.1778	0.1740	0.1647	0.1631	0.1625	0.1603	0.1668	22
sichuan	0.4008	0.4209	0.4273	0.4060	0.4087	0.4171	0.4168	0.4137	8
tianjin	0.2307	0.2286	0.2326	0.2162	0.2202	0.2086	0.2303	0.2207	18
xinjiang	0.0784	0.0780	0.0830	0.0819	0.0842	0.0864	0.0862	0.0824	27
xizang	0.1286	0.1368	0.1504	0.1517	0.1580	0.1703	0.1653	0.1511	23
yunnan	0.4630	0.4269	0.4353	0.4232	0.4020	0.4114	0.4210	0.4210	7

4.2 Empirical Results and Analysis

4.2.1 Global spatial autocorrelation of the development level of higher education

The development level index of higher education in 30 provinces and cities of China from 2005 to 2017 are adopted to measure Moran'I and Geary's C indexes. The calculation results are shown in Table 2, from which it could be seen that Moran'I and Geary's C indexes over the years are all positive. Except 2007 and 2016, all the other years are all significant at 105 confidence level, indicating that the spatial distribution of the development level of Chinese higher education are not completely random, but with powerful spatial agglomeration, that is, with significant characteristic of "Matthew effect". So, the influences of spatial factors cannot be neglected. Seen from the changes of Moran'I index and Geary's C index, the spatial distribution of regional development of Chinese higher education has certain agglomeration trend.

Table 2 Moran'I and Geary's C indexes of China's higher education development level from 2005 to 2017

Year	Moran'I	Geary’s C

	I	E(I)	sd(I)	z	p-value*	c	E(c)	sd(c)	z	p-value*
2005	0.137	-0.034	0.122	1.404	0.080	0.761	1	0.137	-1.751	0.040
2006	0.139	-0.034	0.123	1.418	0.078	0.758	1	0.135	-1.795	0.036
2007	0.117	-0.034	0.122	1.236	0.108	0.781	1	0.136	-1.607	0.054
2008	0.130	-0.034	0.123	1.343	0.090	0.772	1	0.135	-1.692	0.045
2009	0.136	-0.034	0.123	1.390	0.082	0.77	1	0.135	-1.708	0.044
2010	0.133	-0.034	0.122	1.369	0.086	0.774	1	0.136	-1.669	0.048
2011	0.131	-0.034	0.122	1.352	0.088	0.775	1	0.136	-1.658	0.049
2012	0.132	-0.034	0.122	1.365	0.086	0.78	1	0.136	-1.615	0.053
2013	0.132	-0.034	0.122	1.366	0.086	0.778	1	0.137	-1.625	0.052
2014	0.135	-0.034	0.122	1.390	0.082	0.774	1	0.136	-1.657	0.049
2015	0.128	-0.034	0.122	1.334	0.091	0.786	1	0.136	-1.566	0.059
2016	0.104	-0.034	0.122	1.136	0.128	0.823	1	0.137	-1.295	0.098
2017	0.123	-0.034	0.122	1.288	0.099	0.815	1	0.135	-1.368	0.086

To investigate further the spatial correlation of the development level of China's regional higher education, taking 2017 as an example, partial autocorrelation LISA scatter plot to is adopted for description. The sample provinces and cities are divided into four quadrants, corresponding respectively four types of different spatial correlation modes, that is, first quadrant (high-high combination), second quadrant (low-high combination), third quadrant (low-low combination) and fourth quadrant (high-low combination), the result of which is shown in Fig. 1. Specifically, provinces and cities in the first quadrant include Henan, Hubei, Hunan, Jiangsu, Shandong, Shanghai and Zhejiang, indicating that these provinces and cities have higher development level of higher education and neighbor to other regions with similar higher level. Provinces and cities in the second quadrant include Anhui, Chongqing, Fujian, Hainan, Hebei, Jiangxi, and Tianjin, indicating that these provinces and cities have lower development level of higher education, but neighboring regions with higher development levels of higher education. Provinces and cities in the third quadrant include Gansu, Guangxi, Guizhou, Heilongjiang, Jilin, Inner Mongolia, Ningxia, Qinghai, Shanxi, Xinjiang, and Yunnan, indicating that these provinces and cities have lower development level of higher education and neighbor other regions with similar lower level. Provinces and cities in the fourth quadrant include Beijing, Guangdong, Liaoning, Shaanxi and Sichuan, indicating these provinces and cities have higher development level of higher education, but surrounded by regions with lower development level of higher education.

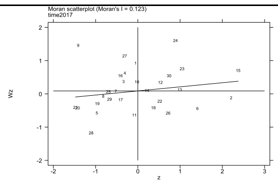

Figure 1 Partial scatter diagram of China's regional higher education development level in 2017

Notes：1-anhui 2-beijing 3-chongqing 4-fujian 5-gansu 6-guangdong 7-guangxi 8-guizhou 9-hainan 10-hebei 11-heilongjiang 12-henan 13-hubei 14-hunan 15-jiangsu 16-jiangxi 17-jilin 18-liaoning 19-neimenggu 20-ningxia 21-qinghai 22-shaanxi 23-shandong 24-shanghai 25-shanxi 26-sichuan 27-tianjin 28-xinjiang 29-yunnan 30-zhejiang

4.2.2 Model test

From the results of the above partial test, it can be seen that it is more appropriate to adopt spatial econometric model for research. Since there are various spatial panel measuring models, which require to be selected further. To improve the accuracy of the estimated results, SDM, SAR and SEM models are selected for estimation. The results are shown in Table 3. Compared with SAR and SEM, the model effect of SDM has the characteristics of high R2, more significant regression coefficients, and small AIC and BIC. To judge further whether SDM model is suitable, it is tested whether there is spatial interactions in SDM model, that is, whether there is only unidirectional spatial correlation between the adjoining regions. Traditional OLS estimation model is adopted to test whether all the spatial coefficients of SDM model are 0. The test results are shown in Table 4, from which it could be seen that the estimated value of SDM degrading to SAR is 39.78 and is significant at 1% level, indicating that the null hypothesis of SDM degrading into SAR is rejected. Similarly, the estimation values of whether SDM degrading to SEM and SLM are 30.21 and 45.81, respectively, and SDM model is selected finally. So fixed effect SDM model is adopted in this study.

Table 3 Regression results of space panel measurement

variable	SDM	SAR	SEM
lnpgdp	0.0323***[0.0087]	0.00879[0.0071]	0.0205**[0.0083]
urb	0.0759**[0.0358]	0.101***[0.0371]	0.0670*[0.0375]
open	-0.00907***[0.0029]	-0.00663**[0.0030]	-0.00852***[0.0030]
lninc	-0.0254*[0.0142]	-0.0347***[0.0067]	-0.0469***[0.0081]
lninno1	0.00877**[0.0040]	0.00674*[0.0038]	0.00883**[0.0040]
*W*lnpgdp*	-0.0427***[0.0115]	/	/
*W*urb*	0.169***[0.0610]	/	/
*W*open*	0.0147**[0.0062]	/	/
*W*lninc*	0.0105[0.0164]	/	/
*W*lninno*	-0.0108*[0.0063]	/	/
δ / λ	0.313***[0.0641]	0.313***[0.0650]	0.394***[0.0641]
adj. R^2	0.4047	0.2950	0.3113
AIC	-2183.6	-1955.2	-1964.8
BIC	-2136.0	-1928.0	-1937.6

Note: *, **, ***, respectively represent significant levels of 10%, 5%, and 1%; Standard errors in brackets.

Table 4 Inspection results of space panel model

Test model	Whether degrade to SAR	Whether degrade to SEM	Whether degrade to SLM
Method	wald	LR	wald
Test value	39.78	30.21	45.81
P value	0.0000	0.0000	0.0000

It could be seen from the regression results in Table 5 that all the variables in dual fixed effect model pass significance test of the coefficients, and according to AIC and BIC minimum principle, two-way fixed effect model is selected, in which δ value is 0.313 and significant at 10% level, indicating that two-way fixed effect model has better estimation results.

4.2.3 Spatial econometric analysis results

Table 5 Estimation results of spatial panel Doberman model

variable	individual fixed effectspanel data model	Double fixed effect model of individual time point
lnpgdp	0.0323***[0.0083]	0.0313***[0.0088]
urb	0.0759**[0.0344]	0.103***[0.0342]
open	-0.00907***[0.0028]	-0.00746***[0.0028]
lninc	-0.0254*[0.0136]	-0.0389**[0.0155]
lninno1	0.00877**[0.0038]	0.0109***[0.0037]
*W*lnpgdp*	-0.0427***[0.0111]	-0.0486***[0.0157]
*W*urb*	0.169***[0.0586]	0.284***[0.0651]
*W*open*	0.0147**[0.0059]	0.0225***[0.0065]
*W*lninc*	0.0105[0.0157]	-0.0429[0.0322]
*W*lninno*	-0.0108*[0.0061]	0.00252[0.0080]
δ	0.313***[0.0616]	0.127*[0.0710]
adj. R^2	0.4047	0.3443
AIC	-2183.6	-2225.5
BIC	-2136.0	-2177.9

Note: *, **, ***, respectively represent significant levels of 10%, 5%, and 1%; Standard errors in brackets.

4.2.4 Direct effect and overflow effect

The regression coefficients in SDM model cannot reflect directly the explanation of the dependent variable by the independent variable, so, it is necessary to be divided into direct effect, spatial overflow effect and total effect. Specific results are shown in Table 6.

Table 6 Direct effect, spatial spillover effect and total effect of SDM model

Effect category	variable	coefficient	Std. Err.	T statistical value	P value
Direct effect	*lnpgdp*	0.0303***	0.0090	3.36	0.001
	urb	0.110***	0.0330	3.33	0.001
	open	-0.00657**	0.0027	-2.42	0.016
	lninc	-0.0406***	0.0156	-2.61	0.009
	lninno	0.0110***	0.0035	3.15	0.002
Indirect effect (spatial spillover effects)	*lnpgdp*	-0.0487***	0.0174	-2.80	0.005
	urb	0.329***	0.0728	4.52	0.000

	open	0.0239^{***}	0.0072	3.29	0.001
	lninc	-0.0516	0.0365	-1.42	0.157
	lninno	0.00468	0.0087	0.54	0.590
	lnpgdp	-0.0183	0.0206	-0.89	0.375
	urb	0.439^{***}	0.0838	5.23	0.000
Total effect	*open*	0.0173^{**}	0.0082	2.10	0.036
	lninc	-0.0923^{**}	0.0437	-2.11	0.035
	lninno	0.0157^{*}	0.0093	1.68	0.093

Note: *, **, ***, respectively represent significant levels of 10%, 5%, and 1%; Standard errors in brackets.

It can be seen from Table 6 that the direct effect of GDP per capita is significantly positive and the spatial overflow effect is significantly negative, that is, development of local economy could promote the development of local higher education and could inhibit the development of higher education in neighboring provinces and cities. The possible reason is that development of local economy could help improve the wages and treatment of higher education teachers and provinces and cities with higher economic development level have advantages in attracting well-educated teachers; and educational competition between neighboring provinces and cities is intense, which could cause waste of education resources to some degree and is to the disadvantage of the development of higher education in the peripheral provinces and cities.

The direct effect and spatial overflow effect of urbanization on the development of higher education are positive, both passing 1% significance level test. Urbanization has promoted economic development, making more and more rural population rushing into the cities and quality of population increased highly. Industrial upgrading eliminates backward population-intensive industries, which are replaced by technology-intensive industries with strong demands for talents. Industry-university-research cooperation has motivated the enhancement of the quality of higher education. Cultivation of innovative talents and new urbanization in turn force the residents accept higher education, thus forming virtuous cycle.

The direct effect of opening to the outside world shall be negative and the indirect effect should be positive, that is, increase of the degree of opening to the outside world has negative effect on the development of local higher education, but could promote the development of higher education in the peripheral provinces and cities. Openness of an area represents to some degree its chances to contact advanced scientific technology of the outside world, while economic, cultural and technological exchanges between neighboring regions could help reform of higher education, which could in turn help the development of higher education in perimeter zones.

The direct effect of residents' income level shall be negative and pass the significance test, while the spatial overflow effect does not pass the significance test. At present, per capita disposable income in China is still low and expenses for higher education has become heavy burden for many families, which goes against benign development of higher education [18].

The direct effect of technological innovation shall be significantly positive and the indirect effect fails the test. Technological innovation has provided advanced educational methods for higher education, which could help stimulate the innovative awareness of institutions of higher education, activate the development vitality of higher education, enhance the enthusiasm of the students to learn and innovate actively, and accelerate the modernization process of higher education [19].

5. CONCLUSION AND COUNTERMEASURES

With gradual advancement of China's strategy of rejuvenating the country through science and education, all regions have increased their investment in higher education, and actively attract resources such as talents and funds to flow into their regions. First, this essay uses the vertical and horizontal scatter degree method to measure the development level of higher education in China, focusing on the free flow of various influencing factors between the regions, and whether higher education in China could be promoted through spatial spillover effects, based on which the spatial spillover effects are studied. The main research conclusions include:

First, as a whole, development of regional higher education in China shows significant positive spatial correlation. Development of higher education between regions does not exist independently, but dependent on one another and affected by the developmental behaviors of higher education in other regions. The test results of Moran'I index and Geary'C index have proved that higher education of the peripheral regions could promote the development of local higher education. Therefore, when guiding and promoting the development of higher education, governmental of all regions not only should focus on the development environment of local region but should also take integrated development of regional higher education and construct actively platforms for regional cooperative development. Only in this way, could the peripheral resources could be deployed actively to promote the development level of the regional and even the overall higher education in China.

Second, the direct effects of economic development, urbanization and technological innovation are significantly positive; the direct effect of opening to the outside world and the income level of urban residents on the development level of higher education is negative; the spatial overflow effect of economic development on the development level of higher education is significantly negative; and the spatial overflow effect of urbanization and the income level of urban residents on the development level of higher education is significantly positive.

The enlightenment of such conclusion is to promote the development of higher education in economically backward areas. First, to improve regional higher education. On one hand, we should increase resource investment of government funds for higher education, and on the other hand, we should actively guide the entry of private capital to improve the dependence of higher education on national financial input. Second, to strengthen reasonable allocation of higher education resources between neighboring regions to improve inconsistency of distribution of higher education resources between regions. Finally, with continuous development of the internet technology, application of internet in higher education should be strengthened.

When making relevant policies, relevant governmental departments of China not only should take full consideration of the development of regional higher education, but also should consider the influences on the development of higher education of the surrounding provinces and cities, so as to promote flow of resource factors at the provincial level, safeguarding integration of resources of higher education, meanwhile avoiding siphonic effect generated by the surrounding regions.

REFERENCES

[1]Shi Jinghuan. Towards 2030: the road of China's higher education modernization. Tribune of Education Culture, 2017, 9(5): 139-139.

[2]Li Jing, he Shengsheng. A study of regional differences in Higher Education in China at the provincial level. Journal of Changchun University, 2018, 28(01), 7-12.

[3]Qiu Junping, song Bo, Wang Chuanyi. Comparative study on quality development index of higher education at home and abroad. Education & Economy, 2019, (04): 45-51.

[4]Wang Zhanjun, Tang Guangjun. Research on the construction of graduate education quality index. Academic Degrees & Graduate Education, 2017, (12), 44-49.

[5]Wang Chuanyi, Xu yeqiong, Cheng Zhe.Graduate education quality index: Academic Degrees & Graduate Education, 2018, (12): 56-62.

[6]Ding Jing, Zhu Jing, Lu Yan. The development level differences and classification comparison of higher education in China's provinces based on panel data of 31 provinces (regions) and cities in 2004-2011. Journal of Hunan Agricultural University (Social Sciences, 2015, 16 (1): 96-102.

[7] Xiang Lijun, Xu Xin. Regional differences in the development level of higher education in China. Statistics & Decision, 2008, (14), 94-96.

[8]Zhang Nanxing, Wang Shu, sun Jihong. Evaluation of China's comprehensive development level of higher education and Research on regional differences. Educational Research, 2014, 35 (5), 28-36.

[9]Zhao Chunlei. An analysis of the unbalanced characteristics of higher education resources from the perspective of regional economy. Journal of Northeast Normal University (Philosophy and Social Sciences), 2011, (06): 184-186.

[10]Yan libing. Research on regional equity of higher education resources. Higher Education Exploration, 2005, (5), 33-36.

[11]Zhang Yingqiang, Peng Hongyu. Competition of local governments and development of higher education in the period of popularization of higher education. Abstract of Education Science, 2010, 29 (3), 14-17.

[12]Zhao Jun, Jia Jingjing. Spatial differentiation and analysis of China's higher education development level. Modern Education Management, 2019, (05): 64-70.

[13]He Yiqing, Wu zhengbo. The development of higher education, the level of technological innovation and the upgrading of industrial structure -- A Study on the spatial effect of the Yangtze River economic belt. Journal of Higher Education Management, 2019, 13 (03): 79-88 + 96.

[14]Dai Jinhui. Analysis of the coordination between the development level of higher education and the development level of science and technology. Statistics & Decision, 2017, (01): 114-116.

[15]Guo Yajun. A new dynamic comprehensive evaluation method. Journal of Management Sciences in China, 2002, 5 (2), 49-54.

[16]Bai Junhong, Wang Yue, Jiang Fuxin, & Li Jing. R & D factor flow, spatial knowledge spillover and economic growth. Economic Research Journal, 2017, 52 (7), 109-123.

[17]LeSage, J., Pace, R. K. Introduction to spatial econometrics. Chapman and Hall/CRC.2009.

[18]Zhou Xiongfei. The choice of financing mode of higher education in China under the double constraints of Finance and residents' income. Academic Journal of Zhongzhou, 2008, (04): 107-110.

[19]Song meizhe, Li mengsu. Measurement of the coupling and coordination relationship between higher education, scientific and technological innovation and economic development and analysis of its influencing factors. Modern Education Management, 2019, (03): 19-25.

Research on the Influence of Dual-Class Share Structure on MI Company: From the Perspective of Control Rights Allocation

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Abstract: With the rapid development of Internet technology, the scale of Internet technology companies is also growing. There is a contradiction between equity financing and maintaining entrepreneurial control, and it is crucial for Internet technology companies to balance the relationship between the two. This paper finds that MI company faces the threat of dilution of control rights of the founders and teams in the process of equity financing through describing the financing situation and control rights allocation of MI company in different stages. Further, we focus on the analysis of the important role of dual-class share structure in the allocation of control rights. Finally, combined with the case analysis, some enlightenment is obtained on the application of dual-class share structure and the allocation of control rights of China's listed companies.
Keywords: Dual-class Share Structure, Control Rights, MI Company

1. BACKGROUND OF THE RESEARCH

The setting up of the share structure has long been a core issue for scholars in the field of financial management, and there is a close relationship between the design innovation of share structure and control rights [1]. They not only play a significant role in the decision-making operation mechanism of the company, but also affect the overall operation and development of the company. Since Jack Ma used the innovative "Lakeside Partner" system to transfer the failure of Alibaba's listing in Hong Kong stocks to the New York Stock Exchange, it has led to discussions about the dual-class share structure in China.

All along, China's mainland capital market has only accepted the "one share, one right" equity system, and because of this, many Internet technology companies chose overseas listing in the past, such as Alibaba and JD. In 2018, the Hong Kong Stock Exchange revised the IPO (initial public offerings) rules again and began to allow the listing of dual-class share structure companies. In July 2018, the Hong Kong Stock Exchange welcomed MI Company, the first listed company with a dual-class share structure after the formal implementation of "different rights with the same shares". This paper takes MI's dual-class share structure as the research object, focusing on analyzing its impact on control rights, which can not only enrich the existing theoretical knowledge, but also provide new ideas for the innovation of the shareholding structure of mainland enterprises.

2. INTRODUCTION OF MI COMPANY'S APPLICATION OF DUAL-CLASS SHARE STRUCTURE

2.1 Introduction of MI Company

2.1.1 Company profile

MI Company Corporation (01810.HK) was formally established in 2010 by Lei Jun and others, with a registered capital of 1.85 billion yuan. The full name is "MI Company Technology Co., Ltd.". It is an Internet company that mainly develops and manufactures mobile phones, Internet of things platforms and intelligent hardware. The enterprise quickly occupied the market with its unique triathlon layout and received multiple rounds of investment.

The business model of MI Company has pioneered the Internet mobile phone model of domestic enterprises. In August 2011, MI Company released the first mobile phone "MI 1", which had won the market praise for its ultra-high cost performance. In 2013, MI Company was rated as "the most innovative company in the industry in 2013" by Fast Company. After the ups and downs of 2016-2017, on July 9, 2018, Lei Jun led MI Company to the Hong Kong Stock Exchange on July 9, 2018, ringing the first IPO bell in Hong Kong ’s history and the world ’s third largest technology stock. MI Company became the first listed company dual-class share structure on the Hong Kong Stock Exchange.

2.1.2 Financing situation

The initial authorized share capital of MI Company was US $ 50,000. During the subsequent development, MI raised financing amount of $1.58 billion in nine rounds of financing. The financing situation of MI Company is shown in Table 1.

Table 1 MI Company 9 rounds of financing

Serial number	Rounds	Date of first share purchase agreement	Date of last payment	Raised funds (USD)	Investors
1	A	2010.09.28	2011.05.17	10.25 million	Founding team、Morningside、Qiming Ventures

2	B	2010.12.21	2010.12.24	27.5 million	Morningside 、 Qiming Ventures、IDG
3	B+	2011..04.11	2011.04.21	2.75 million	Qualcomm、Temasek
4	B++	2011.08.24	2011.09.16	0.6 million	Shunwei Capital
5	C	2011.09.30	2012.04.16	88million	DST、Temasek
6	C+	2011.11.10	2011.11.29	2.1 million	Qiming Ventures
7	D	2012.06.22	2012.12.21	0.216 billion	DST 、 Temasek 、 Qiming Ventures
8	E	2013.08.05	2013.08.06	0.1 billion	DST
9	F	2014.12.23	2017.08.24	1.134 billion	All-stars、DST、GIC、Hopu Investment、Yunfeng fund, etc.

Source: Based on MI Company's prospectus and Internet data

As of July 9, 2018 when MI Company was listed, its prospectus showed that all 9 rounds of financing had been completed, including a $10.25 million series A round in September 2010. By the last round of financing, it had raised more than $ 1.5 billion. While MI Company’s valuation has reached $45 billion, which is 180 times that of its founding. The share capital of MI Company includes Class A shares and Class B shares, because investors are granted preferred shares in the nine rounds of financing, which can be converted into "Class B" shares upon completion of the national offering.

2.2 The allocation of control rights of MI Company after listing

The dual-class share structure of MI Company is in the form of two common classes of AB shares. Among the voting rights of the board of directors, the voting power of "class A" common shares is 10 times that of "class B". However, there are some reservations in the corporate articles of association, and the two classes of common shares have the same voting power. The characteristics of MI Company's AB shares are shown in Table 2.

Table 2 Characteristics of AB shares of MI Company

	Holder	Voting rights	Conversion ability
Class A common shares	Held by the entrepreneurial team	10 votes	Can be converted into Class B ordinary shares at a 1:1 rate
Class B common shares	Jointly held by investors and common shareholders	1 votes	Conversion prohibited

Source: The author sorted out according to the MI Company prospectus

Since the listing of MI Company, the issuance of 201,486,000 class B ordinary shares has enabled Lei Jun and Lin Bin to hold all the class A ordinary shares issued by the company under the same share structure with different rights. Lei Jun also holds 18.7% of Class A common shares and 9.9% of Class B shares through Smart Mobile Holdings Limited and other companies, accounting for 28.6% of the total shares.

After MI Company's IPO, the corporate total share capital was approximately 2.1 billion shares, 670 million "Class A" shares and 1.43 billion "Class B" shares. "Class A" shares are held by Lei Jun and Lin Bin, start-up entrepreneurs. According to the results of this IPO, Lei Jun has become the actual controller of MI Company. This is because each "Class A" share enjoys ten votes, Lei Jun can legally hold 55.7% voting power of MI based on his 28.6% equity. According to the "voting delegation resolution" signed by Lei Jun and other investors of MI Company, Lei Jun, as the trustee, could collectively hold 57.9% of MI Company's total voting rights. At the same time, Lin Bin holds 13.3% of the shares, including 1.9% of the "class B" shares and 11.5% of the "class A" shares, which together account for 30% of the voting rights through MI's dual-class share structure. Morningside owns 17.2% of the shares and 4.4% of the voting rights, venture capital firm Apoletto has 7% of the shares and 1.8% of the voting rights. After the listing of MI Company, the equity and voting rights are as shown in Table 3.

Table 3 The equity and voting rights of MI Company after listing

After listing	Lei Jun	Lin Bin	Morningside	Apolette
Equity	28.60%	13.33%	17.19%	7.01%
Voting rights	57.90%	30%	4.40%	1.80%

Source: The author sorted out according to the MI Company prospectus

The MI Company Group is registered in the Cayman Islands, where the company laws and associations laws and associations stipulate that there is any major matter that requires a shareholder vote, it needs the consent of at least three-quarters of the voting shareholders, while other matters require the consent of more than half of the voting shareholders. Therefore, on the whole, Lei Jun has 57.9% of the voting rights and can decide on general other matters; Lei Jun and Lin Bin jointly hold 87.9% of the voting rights, which can decide major issues of the company.

3 ANALYSIS OF THE IMPACT OF MI COMPANY'S APPLICATION OF DUAL-CLASS SHARE STRUCTURE

The dual-class share structure adopted by MI Company in its successful IPO has a significant impact on its own development. This paper mainly analyzes the aspects of ensuring the control rights of founding team, public shareholders and long-term value.

3.1 Impact on control

3.1.1 Take control of the company

The implementation of the dual-class share structure can avoid the dilution of the founding team 's shareholding and hold the corporate control, laying a foundation for the implementation of the corporate long-term development strategy. The arrangement of AB's shareholding structure makes the founding team of Lei Jun, despite holding only 41.93% of MI Company's equity, but owning more than 87.9% of the corporate voting rights, can decide on major matters and general matters, and has strong control over MI Company. Under the AB share system, the founding team dominates of MI Company's management by holding super shares, leading MI Company's operations. Through such a way to go public, Lei Jun and other original founding teams can exert their own wisdom, shield the interference of other bad shareholders, and firm their company philosophy. For example, MI has promised to achieve at least 5% of its consolidated net interest rate after tax, which will affect the earnings and dividends of other shareholders. This is exactly the kind of decision that requires Lei Jun and others to have control. Otherwise, the 5% consolidated net after-tax interest rate red line would be nonsense.

3.1.2 Maintain the coexistence of financing and control

The establishment and development of the company often requires a large amount of capital investment, and MI Company's expansion strategy has increased its demand for capital. Introducing external investors is one of MI Company's main financing channels, but it often reduces the shareholding ratio of the original shareholders and also further affects the actual controller's status [2]. The dual-share structure IPO of MI Company not only guarantees the rights of Lei Jun 's actual controller, but also strengthens the development capital of the company, cleverly avoids the conflict between raising funds and maintaining control, which further promotes the rapid and efficient development of MI company.

3.1.3 Ensure the independence of management decision

The introduction of external capital will not only reduce the equity ratio of the original shareholders, but also affect relevant management decisions. The general public shareholders are relatively speculative, and they value the proportional relationship between costs and benefits. Compared with the long-term development of the company, they pay more attention to short-term returns, which will affect the corporate continuous operation to a certain extent. The implementation of the dual-class share structure can guarantee the rights and interests of founders and teams, enable the founders to better control the company, effectively prevent some public shareholders from interfering too much with the corporate daily management and development decisions, improve the efficiency of decision-making, and further prevent public shareholders from forcing the company into crisis by pursuing short-term interests.

3.1.4 Prevent hostile holding

After the establishment of MI Company, the company has a good development momentum. As the company grows, there are more and more competitors, and the risk of being acquired gradually increases. However, the dual-class share structure restricts the voting rights attached to the equity other than the founding team. Even if the malicious acquirer holds more shares than the founding team, it will not be able to replace the actual controller, thus making the acquirer lose the acquisition power. The establishment of a dual-class share structure actually guarantees the absolute interests of the founders. As long as the shares held by the founders are not lost, the control power of MI Company will not change, which effectively reduces the operability of malicious acquisitions, and to a certain extent provides a guarantee for the sound and stable development of MI Company in the future.

3.2 Impact on public shareholders

3.2.1 The problem of entrusted agency and connected transaction

The application of a dual-class share structure makes original shareholders with a smaller shareholding have actual control of the company, while shareholders with a larger shareholding only have more property rights and cannot control the corporate business decisions, which in turn leads to entrusted agency problems [3]. The large shareholders lack sufficient decision-making power and supervision power to protect their own rights and interests. When the original shareholders deviate from the interests of the major shareholders, the original shareholders, as rational controllers, may disregard the economic interests of the major shareholders and use their absolute control to make decisions in favor of their own interests, which will harm the overall interests of the company to some extent.

Under the shareholding structure of the same shares same rights, according to the entrusted agency theory, the results of managers' hard work must often be shared with shareholders, so they have the opportunity to use a series of means such as connected transactions to empty the company. However, the shareholding structure with different rights with the same shares provides managers who hold Class A shares with a "channel" to realize the motivation. On the one hand, MI Company adopts the structure of "AB shares", on the other hand, MI Company has the nature of an overseas entity, and the two provide supporting conditions for MI Company to conduct connected transaction. Managers can better distinguish the investment of different companies based on having sufficient internal information of the company. However, due to the asymmetric information of regulators and external investors, it is often difficult to identify MI Company's existing investment content. As the founder of the company, the management has higher voting rights, and damages the interests of the shareholders holding class B shares by means of inefficient investment.

3.2.2 Imperfect information disclosure and supervision mechanism

The existing information disclosure system of MI Company does not have sufficient restrictions on "Class A" shareholders. It focuses more on the disclosure of information about external shareholders who hold a large number of shares, but neglects to disclose information about the corporate actual management. As an Internet company, the strategic decision of MI often gets lots of attention. However, if MI Company does not voluntarily disclose management information, it will be difficult for corporate public shareholders to obtain the specific information they need. Therefore, "class B" shareholders' right to know the development of the invested company cannot be satisfied. Over time, "class A" shareholders may ignore the rights and interests of other shareholders and only pursue their own interest planning, which makes the company in a dilemma.

Under the system of the same shares same rights, the corporate control market can restrain managers and supervise their efforts to operate the company. However, the dual-class share structure has super voting rights to fix the corporate control market, which makes managers lose their constraints to a certain extent. The parallel "AB shares" model of dual-class share structure is inherently unequal. The holders of super shares have the decision-making right over the company, but the board of directors or the holders of common shares cannot influence the decisions and lack effective supervision.

3.3 Impact on corporate value

3.3.1 Company value based on ROE indicators

In the dual-class share structure, shareholders holding Class A shares influence the decision-making activities such as investment and operation of the enterprise by controlling the decision-making right of the enterprise, thus affecting corporate value. The return on equity (ROE) is an indicator that is not affected by the share price but also reflects the operation status of the company, which reflects the ability to use its own funds to obtain net income, and can evaluate the corporate value from the side.

According to the MI Company’s IPO declaration and the 2018 financial report, the ROE of Xiaomi is shown in Table 4 below:

Table 4 The ROE value of MI in four years

Years	2015	2016	2017	2018
ROE	0.35%	-2.06%	-4.21%	12.01%

Source: The author calculated based on MI Company’s financial report

The higher the ROE indicator value, the higher the income brought by the investment, and the negative value indicates that the performance of the company is in a loss state. The continuous expansion of MI Company's business and enterprise scale inevitably requires continuous financing to support its rapid development, which is also consistent with the changing trend of ROE.

3.3.2 Impact on long-term value

According to MI Company's prospectus and 2018 financial report, its various development capability indicators are shown in Table 5 below:

Table 5 Development capacity Indicator of MI Group from 2016 to 2018

Years	2016	2017	2018
Increase rate of main business revenue	2.43%	67.50%	52.60%
Net assets growth rate	6.26%	38.19%	-156.01%
Adjusted net profit growth rate	-117.11%	1,225.09%	465.72%
Total Assets Growth Rate	29.71%	77.03%	61.60%

Source: The author calculated based on MI Company’s financial report

Table 5 reflects the overall upward trend of various indicators of MI Company. It should be noted that because of the relatively short listing time of MI Company in Hong Kong, the impact of the dual-class share structure on the long-term corporate value of MI Company was insufficiently verified by the report data. But in terms of contribution to net profit, It's correct for founding team to develop the Internet of things and related businesses. It can be seen that the decision-making application of innovative enterprises still benefits from the adoption of a dual-class share structure to achieve long-term value. The specific impact path is as follows:

The dual-class share structure allows the founding team to have absolute control over the company, and a high degree of control is conducive to the corporate long-term development and precise investment in labor costs to maintain and protect the corporate unique culture. A highly centralized control right can also reduce the cost of information transmission and improve the efficiency of decision-making. From a long-term perspective, the above effects will make the business operating efficiency continue to increase, the share price rises steadily, the dividends and bonus distributed to shareholders increase, and the corporate value continue to grow.

4 THE ENLIGHTENMENT OF MI COMPANY'S APPLICATION OF DUAL EQUITY STRUCTURE

(1) Innovate shareholding structure and broaden listing channels

After the innovative use of dual-class share structure of MI company, the corporate business strategy has been continuously implemented, and the corporate governance results have been significantly improved. Therefore, other new Internet companies should take the initiative to broaden their horizons and take measures to innovate the shareholding structure according to their own situation [4]. Specifically, the shares with super-voting rights can be transferred to the corporate startup team, core technical staff or executives; the shares with sub-voting rights can be granted to public shareholders, while retaining some veto rights; the transfer of preferred shares to risk-averse members of public shareholders. In the context of world globalization, companies must explore new governance structures. Although the mainland's capital market has hindered the listing of companies with different governance structures to a certain extent, companies still have to strive to develop innovations. When necessary, they can choose to list on Hong Kong or foreign stock exchanges to expand their listing channels [5].

(2) Improve the public shareholder system

The dual-class share structure is not conducive to public shareholders protecting their legitimate rights and interests and the risk of infringement of public shareholders' rights and interests is much higher than that of companies that adopt a single shareholding structure [6]. Therefore, to protect the legitimate rights Under the dual share structure, the founding team has control rights, so its management has a great impact on the value increment of the company. To implement a dual-class share structure, companies should strengthen management capabilities, especially the innovation capabilities. Since the dual-class share structure is more widely used in Internet companies, it is also important for companies to keep up with the times, so as to continuously the operating performance of company. Efforts to improve the internal management mechanism and restrain earnings management can effectively enhance the long-term value of dual-class share structure company.

5 SUMMARY

According to the above analysis, the proper use of the dual-class share structure can make MI Company's listing in Hong Kong a good start, which not only guarantees sufficient returns to public shareholders, and interests of public shareholders, first of all, the rights and obligations of shareholders should be balanced. When planning and classifying shares, according to the difference in shares and voting rights, the order of income distribution should be arranged. The right of earnings of "B shares" can be regarded as preferred share. Shares, that is, holders of "B shares" the priority of dividends. Secondly, it is necessary to develop a set of public shareholder representative litigation system, and establish a new shareholder supervision authority under the general meeting of shareholders to supervise the business operation and other affairs, and regularly disclose major information, so as to make the public shareholders understand the status of the company. For the shareholders who exercise their "B share" rights at will, the supervisory authority can take back their corresponding powers.

(3) Strengthen the investment supervision of A-share holders

The dual-class share structure can be supervised by the board of directors to a certain extent, but the management holding A-shares is given greater control, and it is possible to implement earnings management to occupy the interests of public shareholders [7]. To effectively protect the legitimate interests of the corporate public shareholders and stop the phenomenon of earnings management, when the company makes decisions, the owner of the "A-share" should strictly guarantee the corporate overall interests, strictly follow the process of corporate strategy formulation, and make the strategy consistent with the corporate resources. When implementing the plan, it should strictly follow the scheduled plan and strategic time. When strengthening the voting power restriction, the public shareholders can be legally protected by restricting the voting rights of different types of shares on fixed issues, so as to prevent the occurrence of infringement, so as to improve the performance of the company.

(4) Improve management capabilities and improve internal management mechanisms

but also grasps the original control of the founding team. However, if not used properly, it may cause huge damage to investors and even devastating to the company. Specifically, the dual-class share structure allows the founding team of MI Company to control the company, and also creates an environment for long-term value growth of MI Company, but it can easily lead to the infringement of the interests of public shareholders. In short, dual-class share structure is a kind of shareholding structure with characteristics and risk.

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REFERENCES

[1] Howell, W Jason , The survival of the U.S. dual class share structure[J]. Journal of Corporate Finance, 2014:S0929119914000790.. The Survival of the U.S. Dual Class Share Structure. Journal of Corporate Finance, 2014:104-110.

[2] Chen Jiaqi, “Research on the dual-class share structure of listed companies——Taking Alibaba Group ’s “partner system” as an example,” Communication of Finance and Accounting, 2017 (31): 5-10 + 4.

[3] Li Haiying, Li Shuanghai, Bi Xiaofang, “The protection of the interests of small and medium investors under the dual ownership structure: a case study based on Facebook ’s acquisition of WhatsApp,” China Industrial Economics, 2017 (01): 174-192.

[4] Wei Liangyi, “Research on the introduction of dual equity structure system in China's innovative enterprises——Based on the perspective of shareholder heterogeneity. Reform of Economic System,” 2019 (03): 102-108.

[5] Gao Fei, “Double-layer shareholding structure in dispute: international experience and its enlightenment to China,” Theory Monthly, 2018 (08): 130-137.

[6] S Nueesch, Dual-class shares, external financing needs, and firm performance. Journal of Management & Governance, 2016, 20(3):525-551.

[7] Zhang Yan, Deng Feng, “Founder control, dual ownership structure and investor interest protection: a multi-case study based on the perspective of shareholder heterogeneity,” Communication of Finance and Accounting, 2019 (27): 96-101 +111.

An Evaluation Method of Department Key Work based on Analytic Hierarchy Process

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Abstract: Due to the outbreak of COVID-19, strict prevention and control measures have inevitably affected the progress of daily work of many companies. In this context, how to minimize the impact of the outbreak on working time is of great significance. For many companies, tedious routine work occupies most of the department's manpower and time resources, and restricts the in-depth development of strategic and innovative work. In this paper, a work importance evaluation model based on analytic hierarchy process is designed, an index system is established based on five dimensions, and the weight of each index is calculated by using the method of expert scoring, and finally a score is given for each work.

Keywords: Department key work; Work efficiency; Score by expert; Analytic hierarchy process

1. INTRODUCTION

Since the outbreak of COVID-19, many countries have taken strict prevention and control measures, such as strict restrictions on employees' time to work in the office, resulting in a substantial reduction in effective working hours of employees, which inevitably affects the progress of daily work in all units. Under such a background, it is of great significance to minimize the impact of the epidemic on working time and give priority to urgent, necessary and strategic work from the limited working time.

Generally speaking, when it comes to a specific department, the leader of the department will arrange various tasks subjectively. For example, some leaders do not distinguish between the importance of each work and just assign tasks to the staff. Other leaders let their employees schedule their work, without measuring the importance of the work from the perspective of the company's development. However, for many companies, more tedious routine work occupies most of the department's manpower and time resources, and restricts the in-depth development of strategic and innovative work. Considering the importance, difficulty, time and other factors of the work, we think it is necessary to carry out a scientific and reasonable quantitative evaluation on the work of a department as a whole. It is of great significance to define the strategic positioning of the department and all teams within the department and optimize the overall resource allocation of the department by selecting the key work, so as to make the annual plan targeted.

Therefore, we designed a work importance evaluation model based on analytic hierarchy process (AHP) [1,2], established an index system based on six dimensions, and calculated the weight of each index by using the method of expert scoring, and finally gave a score for each work [3].

2. EVALUATION METHOD

The overall departmental critical work assessment consists of five steps, which are Rating indicator setting, Determine the weight of each indicator, Comprehensive score for a single task, Comprehensive rating of a type of work, and Determine the importance of the work. Figure 1 shows the whole process of the evaluation method.

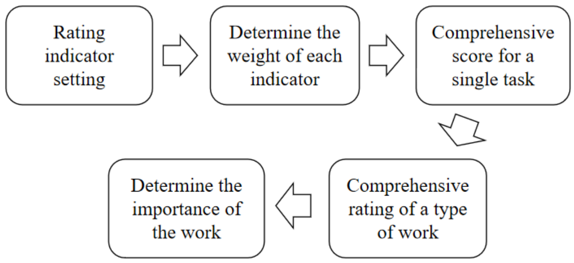

Figure 1 The flow chart of department key work evaluation

(1) Rating indicator setting

In order to achieve scientific evaluation and ensure that the rating work truly reflects the proportion of each work, that is, the necessary time to spend in this work, it is proposed to set six rating indicators, and score the long-term impact of each work according to each indicator, with the lowest score of 1 and the highest score of 5, which are used to calculate the final score of each work. The setting of indicators is defined with the company's strategic development as the goal, as follows:

a. Strategic significance: the more the work closely related to company's long-term strategic development, the higher the score of this index will be.

b. Innovativeness: compared with traditional work, an innovative way of working with the strategic target. The higher the novelty, the higher the score will be.

c. Necessity: the company's operation is indispensable, the work that must be completed or arranged by the superior, the work that requires feedback to be implemented. The more fixed the workflow and content are, and the more difficult it is to replace, the

higher the score of this index will be.
d. Importance: this indicator reflects the expected value that can be created by carrying out a task. The higher the expected value created by completing a task, the higher the score of this indicator will be.
e. Time limit: a work is measured by a deadline, the closer the deadline, the higher the score will be.
f. Writing quality: the score is determined according to whether the official report is clear in point of view, thinking depth, originality and foresight, reference value, etc.
(2) Determine the weight of each indicator
In this paper, the 1-9 ratio scale method of AHP method proposed by Saaty et al. was used to determine the weight of each indicator in the rating model by constructing a judgment matrix [4].
After the department leader determines the indicators to measure the importance of work, it is necessary to measure the relative importance of each indicator in pairs to comprehensively determine the weight of each indicator in the rating model. Table 1 shows an example of the judgment matrix of 1-9 ratio scale method.

Table 1 An Example of the Judgment Matrix of 1-9 Ratio Scale Method

	Indicator1	Indicator2	Indicator3	Indicator4	Indicator5
Indicator1	1	1/2	4	3	3
Indicator2	2	1	7	5	5
Indicator3	1/4	1/7	1	1/2	1/3
Indicator4	1/3	1/5	2	1	1
Indicator5	1/3	1/5	3	1	1

The principle of 1-9 ratio scale method is as follows:
a. If the former indicator is as important as the latter, the score is 1;
b. If the former indicator is slightly more important than the latter, the score is 3;
c. If the former indicator is more important than the latter, the score is 5;
d. If the former indicator is significantly important than the latter, the score is 7;
e. If the former indicator is extremely important than the latter, the score is 9.
f. 2, 4, 6, 8 represent the intermediate value of the above adjacent judgment.
After the above steps, the corresponding weight of each indicator could be obtained by mathematical operation of judgment matrix.
(3) Comprehensive score for a single task
As shown in Table 2, relative weight is obtained according to the evaluation of department leaders. When the comprehensive score of a single task is calculated, the work is first scored under six different indicators, and then the comprehensive score of a single task is calculated based on the weight of each indicator.

Table 2 An Example of the Computation of the Comprehensive Score for a Single Task

	Strategic significance	Innovativeness	Necessity	Importance	Time limit	Writing quality
Weight	w_1	w_2	w_3	w_4	w_5	w_6
	26.4%	16.3%	13.5%	13.2%	21.2%	9.4%
Scores in different indicators for a single task	S_1	S_2	S_3	S_4	S_5	S_6
	The score ranges from 1 to 5, from low to high					
Comprehensive score for a single task	$\mathrm{R} = w_1S_1 + w_2S_2 + w_3S_3 + w_4S_4 + w_5S_5 + w_6S_6$					

(4) Comprehensive rating of a type of work
In order to measure the corresponding strategic level of the same type of work more intuitively, and facilitate the overall arrangement of all kinds of work, the following method is proposed to calculate the comprehensive score of the same type of work after obtaining the comprehensive score of individual work.
Considering that the contribution of individual work at different strategic levels to the overall strategic level of the work in which it is located varies from place to place, it is necessary to multiply the score of each individual work by the corresponding weight when calculating the comprehensive score of a certain type of work. Assuming that the weights corresponding to the five different strategic levels from 5 stars to 1 star, which are 1, 0.8, 0.6, 0.4 and 0.2, respectively. The following formula can be used to calculate the comprehensive score of a certain type of work,

$$\mathrm{R}' = \frac{R_1w_1+R_2w_2+\cdots+R_nw_n}{w_1+w_2+\cdots+w_n} \quad (1)$$

where this kind of work contains n single works altogether. The calculation in this way can avoid the work of lower strategic level in one kind of work from excessively lowering the overall strategic level of this kind of work.
(5) Determine the importance of the work
According to the comprehensive score of each work and its category, the work is divided into 5 stars according to the rating range.
5 stars (★★★★★):
The focus of the work of the department that requires the assistance of all the teams in the department to jointly complete, communicate, discuss and research. This kind of work requires the efforts of all departments to build together.
4 stars (★★★★):
Each team, as well as the work that requires teamwork, requires a lot of effort from each team, including the development of planning, standards and implementation plans.
3 stars (★★★):
It is the routine work of a certain team. In the future, the workflow and content can be optimized to ensure the smooth implementation of the work.

2 stars (★★):

In the future, it is necessary to simplify the content and reduce the process, standardize the work execution procedures through templating and standardization, and improve the work efficiency at this level.

1 star (★):

It stands for the work that has no practical significance for the development of the department or company, and the work that needs to be combined or deleted. In the future, company need to highly template and standardize the work that needs to be reserved at this level, and then use the spare time of the work to complete it.

3. A CASE STUDY

In order to reflect the process of rating work more intuitively, we adopted the six indicators selected. The implementation process of the whole rating work is as follows (the relevant data are all simulated data, which can be used as a reference for the whole rating work process).

First of all, the department leaders sorted six indicators based on the relative importance of them. Based on the matrix calculations, we got the final weight vectors, which are (0.264, 0.163, 0.135, 0.132, 0.212, 0.094). Among them, the weight of strategic significance is 0.264, the weight of innovation is 0.163, the weight of necessity is 0.135, the weight of importance is 0.132, the weight of time limit is 0.212 and the weight of writing quality is 0.094.

Based on the results of previous research and interviews, the future work of the department as a whole is determined, as shown in Table 3. The experts rated the relevant work in groups according to different indicators. The comprehensive score and corresponding strategic grade of each work are calculated by considering several rating scales. For simplicity, in the table, we replace the name of the job with a number.

Table 3 Results of the Comprehensive Grading of the Works

Name	Indicators						Score	Strategic level
	1	2	3	4	5	6		
Work1	4	3	4	4	4	4	3.84	★★★★
Work2	3	3	3	3	3	3	3.00	★★★
Work3	3	3	3	3	3	2	2.91	★★
Work4	2	2	3	2	3	1	2.25	★★
Work5	2	2	3	2	3	1	2.25	★★
Work6	1	1	2	2	3	1	1.69	★
Work7	1	1	2	1	3	1	1.56	★

4. CONCLUSIONS

In this paper, an evaluation method of department key work based on analytic hierarchy process was proposed, which could improve the work efficiency of the company and its employees, thereby promoting the growth of the company's performance. In terms of innovation, this paper proposes a framework that can increase or decrease indicators according to the actual situation in specific applications, so it has a strong portability. In the application of the model, it is suggested that the index weight of the model should be re-evaluated over a period of time to ensure that it is consistent with the company's development strategy.

REFERENCES

[1]Cheng, E. W. L., Li, H., and Ho, D. C. K., "Analytic hierarchy process (AHP)". Measuring Business Excellence, 2002: 33-37.

[2]Kurttila, M. et al., "Utilizing the analytic hierarchy process (AHP) in SWOT analysis -- a hybrid method and its application to a forest-certification case". Forest Policy & Economics, 2000, 1(1): 41-52.

[3]Orencio, P. M. and Fujii, M., "A localized disaster-resilience index to assess coastal communities based on an analytic hierarchy process (AHP)". International Journal of Disaster Risk Reduction, 2013, 3: 62-75.

[4]Saaty, T. L., "Analytic hierarchy process". Encyclopedia of Biostatistics. John Wiley & Sons, Ltd, 2005.

Analysis on the Mechanism of Regional Central City Promoting Economic Cooperation in Economic Circle

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Abstract: With the rapid economic development and continuous social progress, the administrative concepts of central city governments have also changed significantly, new ideas, new perspectives, and new methods have emerged continuously. The functions of regional central cities and their impact on social and economic development the role is huge and incomparable to ordinary cities. Judging from the successful experiences of urban development in the world, the central city plays a leading role in economic development. Therefore, the supporting role and optimization of the central city government is important for the development of the central city significance. The metropolitan area with Changchun City, the provincial capital of Jilin Province as the regional center, has rapidly risen in the Northeast, becoming the most noticeable bright spot in China's regional economy. Regional economic integration with its own characteristics.
Keywords: Regional trade; Central city; Economic circle; Economic cooperation

1. INTRODUCTION

Economic circle is a form of geographical combination of production layout. Based on the natural resources of the region, economic and technological conditions, and the government's macro management, it forms a certain type of regional industrial allocation circle with internal connections. The formation of economic circles is centered on cities. Large-area economic circles generally have raw material production areas, energy production areas, processing areas, and agricultural bases, forming a comprehensive industrial circle. Organizing economic activities according to the economic circle is conducive to giving full play to the role of the central city, to giving full play to the comprehensive advantages of the region, and to helping enterprises to implement professional cooperation across regions and industries, so that the overall function of the entire region can be brought into play. [1]

The urban economic circle is an epoch-making concept in modern economy. It was pioneered by French geographer Guttmann. Domestic scholars began to study and popularize the theory of urban economic circles in the 1990s. Scholars define the metropolitan economic circle as taking one or more central cities with more developed economies and strong urban functions as the core, including a number of neighboring towns with which the economy is intrinsically connected. The ability of economic attraction and economic radiation can reach and be able to promote the largest geographical scope of economic development in the corresponding area. The basic characteristics of the urban economic circle are high concentration, high energy level, and openness. [2] People generally refer to the economic area formed by several dense cities as "urban economic circle", or "urban economic cluster" and "urban economic belt".

For a long time, there have been many debates about the definition of the Northeast Asian economic circle, but in general, they are divided from a regional perspective. As a region of Northeast Asia, if it is defined by the countries it contains, it is composed of China, Russia, North Korea, Japan, South Korea, and Mongolia. From the perspective of the Sea of Japan region, Russia is the Russian Far East and China Refers to the three northeastern provinces even including Shandong, Hebei, Inner Mongolia, Tianjin, Beijing and other regions, but Japan, South Korea and the eastern part of China are the center of economic development in the region. Based on the regional division, we can summarize the indicators of the economic relations of various parties and other specific Northeast Asian economic circles. At the Northeast Asia Expo, Jilin Province proposed a new economic development strategy concept for the Northeast Asian economic circle, and it is extremely important to realize this concept as the central city. Therefore, the development of cities, especially regional central cities, must be strengthened.

2. THE STATUS AND ROLE OF REGIONAL CENTRAL CITIES IN ECONOMIC AND SOCIAL DEVELOPMENT

Under the conditions of a market economy, central cities have a more important role than ordinary cities. From the overall perspective, the central city has a supporting role, a demonstration role, a leading role and a legacy role in regional development. These roles promote each other, and together play the core role of the central city in regional economic and social development. If it is based on the administrative division of the government, the Northeast Asian economic circle is proposed on the basis of the Economic Circle around the Sea of Japan. The area around the Economic Circle of Japan Sea is defined as: the Far East of the former Soviet Union (coastal, Khabarovsk, Sakhalin Harlem, Heilongjiang and the Soviet Union), China 's three northeastern provinces, South Korea, North Korea, Japan 's coast of Japan.

2.1. The regional center must have a supply base of various production and economic factors for regional economic development.

A series of production conditions, technical conditions, talent conditions, etc. that it needs, this central city of supply conditions is available. Up to now, Jilin Province, with Changchun as the center, has negotiated and reached 17 economic and trade cooperation projects with relevant Chinese and foreign enterprises with a project value of 1.656 billion yuan. Secondly, Changchun is the axis of regional economic activities in Northeast Asia Economic Zone. The implementation of economic decisions, the organization and connection of economic activities, and the leadership and command of economic work must be supported. Without support, regional economic activities without an axis cannot operate. This axis can only be the central city. Third, Changchun City can form various links that must be established during economic development. Many economic networks must be formed, such as transportation networks, post and telecommunication information networks, science and education networks, financial services networks, market and trade networks, and urban-rural linkage networks. To coordinate the operation of so many networks cannot be separated from the hub, which can only be the central city. Fourth, Changchun has its own regional advantages and characteristics. Advantages and characteristics often take well-known brands and well-known enterprises as their own highlights, and the formation and promotion of this highlight can only be the central city.

2.2. The central city's comprehensive and multi-level influence on the economic activities and development of the surrounding areas has a great role as a model.

Judging from the definition of physical geography, China did not have the title of "Northeast Asia" in the past. , Inner Mongolia, Mongolia, and the Central Asia region within the Soviet Union) It can be seen that the economic circle of Northeast Asia should include Japan, North Korea, South Korea, the Far East of Russia, China, and the eastern region of Mongolia. However, many regions and cities in Japan and South Korea are facing the world in all directions, and their main targets are not necessarily in Northeast Asia or just limited to Northeast Asia. Overseas Chinese kinship, main interests and goals are not necessarily limited to Northeast Asia. Therefore, it is more realistic for China to take the eastern part of the north of the Yangtze River as the main body participating in the Northeast Asian economic circle. In this way, the Northeast Asian economic circle has become the Three Seas Economic Circle of the Sea of Japan, the Bohai Sea, and the Yellow Sea. Changchun is a science, education, and education center in the political, economic, technological, and cultural aspects of the Northeast Asian Economic Zone. It is also the source of scientific and technological progress and a regional innovation base. The emerging industries and high-tech industries that represent the direction of industrial development are often generated in central cities. The impact on surrounding and emerging industries is more permeable than the delivery of logistics. Changchun's advantages in science, education, and technological innovation are the root of its economic development and the growth pole that realizes modernization and externalization. It has become the most active and important factor for industrial structure upgrade and economic growth.

2.3. As the central city of the Northeast Asian Economic Zone, Changchun City is the center of regional economic and technological cooperation and exchanges.

It plays a leading role in regional economic and social development. As far as our country is concerned, pragmatic participation in the development of the Northeast Asian economic circle is reflected in the development of specific areas at the borders of countries or natural geographical conditions, especially in areas that have begun to take shape, such as the Yellow Sea and the Bohai Rim With the Tumen River area, these two areas are located at the border of the continental shelf plate in Northeast Asia, and they also involve different countries. There are unique conditions for bilateral and multilateral trade. We take the representative Northeast Asia region as an example to make a preliminary introduction. Changchun is a gathering place of industry and various service industries. It has comprehensive economic functions, a high level of industrial structure and a high degree of outward orientation. The conditions for developing foreign economic and technological cooperation are relatively good. Its products are mainly sold externally. In 2008, the industrial output value of enterprises above designated size in Changchun was 360 billion yuan, an increase of 26.8%. The output value of the automobile industry was 235.3 billion yuan, an increase of 16.6%. The output value of agricultural products processing industry was 52 billion yuan, an increase of 38.2%. The number of industrial enterprises above designated size increased from 1003 to 1,217. The number of industrial enterprises with an output value exceeding 100 million yuan increased from 174 to 232. The number of well-known trademarks nationwide has increased from 5 to 10.

The overall strength of the industrial economy has been further enhanced. In the process of industrial structure adjustment and the development of emerging industries, the outward transfer and diffusion of primary industries can provide good opportunities for the development of surrounding areas, forming a specialized production collaboration network and a distribution network that communicates production and sales.

3. NORTHEAST ASIA REGIONAL ECONOMIC DEVELOPMENT STATUS AND TRENDS

China's comprehensive economic and social development since the reform and opening up has achieved world-renowned achievements. In international trade cooperation, China's total trade volume has leapt to the second in the world, and the level of processing of export products is getting higher and higher, with low additional ties. [3]The value of exports of primary products is getting lower and lower. China's important position in international trade has also become one of the important factors for the active and stable development of the Northeast Asian economic circle. However, due to various historical reasons, many chemical industries are concentrated in Northeast China, and the phenomenon of aging equipment and redundant staff at the present stage is exposed. Many enterprises not only fail to give full play to the role of economic driving, but have become a heavy burden on local economic development. The so-called "Northeast phenomenon".

In Northeast Asia, the most developed country is Japan, but its economic development has not been satisfactory in recent years. The large excess of production capacity of random enterprises, the non-performing assets ratio of its financial institutions continued to rise and it is difficult to continue. With the decline of the US economy and the problems of Japan's own aging and labor decline, its domestic market is weak, and its products in the international market are weak. Competitiveness has declined, while the proportion of structural unemployment has continued to rise, and the stamina for economic development has been clearly insufficient. According to the statistics and economic forecasts of the International Monetary Fund, Japan's economic growth in recent years has been poor, mainly due to the inherent problems of its economic development that have not been fundamentally resolved. The Japanese economy still has the appreciation of the yen, the decline of the stock market, and the slowdown of the US economy. Risks are expected to rely on its internal market economy to recover quickly.

South Korea's economic development foundation in the past was very weak, but in the past few decades, it has developed into a newly emerging industrialized country with the most powerful economy in the contemporary third world. Its economic growth rate and development achievements have indeed attracted worldwide attention. Since the financial crisis in Southeast Asia, South Korea ’s economic recovery has also been relatively obvious. South Korea ’s semi-conductor power, rising prices of major export products such as LCD monitors, and the role of South Korea ’s “raising domestic demand” policy are the main reasons for South Korea ’s economic recovery. In addition, the expectation of Korean citizens for economic recovery has strongly promoted consumption and stimulated economic growth. Although the South Korean economy is showing a recovery momentum, domestic demand, mainly consumption and investment, is still the driving force behind economic growth, and investment and exports that support economic growth have not kept up with the momentum of economic recovery. In addition, due to the general economic downturn in the world, South Korea's current foreign trade exports are not stable enough, the domestic unemployment rate has risen, and private consumption has fallen. Especially under the constraints of the government, the contradiction between corporate debt and increased investment has been difficult to solve, and the Korean economy is also facing many problems.

As a big country after the disintegration of the Soviet Union, Russia still has a certain political and strong military status in the international community, but what does not match is the distress of its economic situation. Although Russia tried to adjust and optimize the industrial structure, due to its shortage of funds and backward equipment and technology, it has achieved little effect so far. Weak demand and weak investment, and the problem of arrears between corporate financial departments and budget drawing units, between governments and banks, and between tax departments and enterprises is still serious. In addition, the international competitiveness of its products is weak, and it has been relying mainly on its own abundant energy and strong arms industry to support huge government expenditures. Whether it is a "shock therapy" or the aid of Western countries, the decline in Russian investment and the existence of a shadow economy make it difficult for economic development to resume as quickly as possible.

North Korea has long been closed-door and self-defeating, its economic development has been slow, and due to nuclear weapons and other issues, there has been serious opposition to Western countries, Japan, and South Korea, and the crisis is perilous on the international political and military stage. In recent years, on the premise of adhering to the principles of socialism, North Korea has gradually started to try to reform the economic system and strive to explore an efficient economic growth model suitable for its own development. North Korea abolished foreign exchange coupons, made North Korean and foreign currencies directly convertible, expanded foreign trade quotas, and comprehensively raised prices and wages. These measures are all committed to the transformation of its economic operating model. However, the long-term economic weakness and poor economic system will make it difficult to implement these reforms and strategies in the short term.

Mongolia is located between northern China and southern Russia. It has no coastline, undeveloped land transportation, and underdeveloped international trade for a long time. Political instability and weak government's ability to regulate and make more mistakes in the reform process. Mongolia's foreign exchange reserves are low. It has little ability to regulate exchange rate holdings. In addition, it has a single export structure. Its main export commodities are copper and cashmere. Prices continue to fall. These are not good for the development of foreign trade and the high external debt owed by the country. With the increase of foreign investment and foreign aid, Mongolia's foreign trade situation has improved, but the foreign trade deficit remains high. In the Northeast Asian economic circle, China is a country with slow economic growth.

Generally speaking, the countries in Northeast Asia have different characteristics of their own development, but they also have difficult problems that cannot be resolved in their own development. As economic globalization and regional grouping have accelerated significantly, the economic relations between countries and regions have become increasingly close. Economic dependence is deepening. In order to properly solve the different problems in each region of the region, each country has a set of economic policies and implementation methods, but one of the common and effective methods is to give play to comparative advantages and evade the economies of countries through effective regional economic cooperation. Disadvantages in development drive the development of the entire Northeast Asian economic circle and even the economic growth of related countries with a complementary operating mode. NATO’s eastward expansion has given political and military pressure to develop and strengthen Northeast Asia. The expansion and deepening of the European Union and the launch of the North American Free Trade Agreement have made economic cooperation in Northeast Asia a necessary way for economic security in the region.

4. RESEARCH ON THE ROLE OF CENTRAL CITIES AND THE MAIN CHALLENGES AND COOPERATION MODELS THEY FACE

4.1. Challenges Facing Regional Central Cities.

The functions of regional central cities and their effects on socio-economic development are huge and unmatched by ordinary cities, but the functions and functions of regional central cities are restricted and affected by many factors. Due to the long-established dual economic structure, China has adopted the policy of strictly controlling large cities in terms of institutional arrangements, making the development space of large cities in administrative divisions too small and the population density too high, restricting and affecting the central city agglomeration And radiation function. In the national and regional urban systems, the development of central cities plays a pivotal role, affecting and dominating the development of the entire urban system. [4]Therefore, the proper adjustment of the existing administrative divisions based on the central city's function of attracting radiation and the internal connection of the regional economy has become an urgent task for China to give full play to the function of the central city.

With the rapid development of the economy and the continuous progress of the society, the administrative concept of the central city government has also changed significantly, new ideas, new perspectives, and new methods have continuously emerged. However, after in-depth observation and analysis, some ideas that restrict the change of functions are in Changchun. And the surrounding area still exists more or less. [5]The first is the concept of administrative supremacy. Due to the influence of the traditional management system, in some central city governments' implementation of management functions, the over-emphasis and dependence on administrative methods still exist, and the use of economic and legal methods is relatively limited. The second is the concept of a planned economy. In the face of increasingly close regional economic activities, some government workers are still accustomed to planning the regional economy with a planned economy thinking method. They will do this for the development of the city circle according to their own will and desire or that design arrangement. The third is the concept of local interests. At present, in the minds of some staff in the central city government, local interests are still the main guide for deciding how to advance regional management. When organizing regional economic cooperation dominated by big cities, the starting point of the center city itself and its immediate interests is often the starting point. In the case of shortage of related resources, the rational positioning of the center city and the reasonable division of labor with surrounding cities cannot be considered.

4.2. Research on cooperation models between central cities.

According to the regional characteristics and development status of Northeast Asia, the current economic cooperation in Northeast Asia should focus on border trade, logistics distribution, international finance, and a free trade zone with a well-established system. From an environmental perspective, this is also based on the resource endowment and political and cultural exchanges of surrounding areas and countries.

Changchun City and other central cities in the Northeast Asian Economic Circle will focus on developing the total trade volume of China, Japan, and South Korea on the basis of common prosperity, and at the same time start Russian trade in the region.

Northeast Asia's trade between countries and regions has developed rapidly. From the perspective of trade relations with China, China has become Japan's second largest trading partner, Japan has become China's third largest trading partner, and South Korea has become China's sixth largest trading partner. China has become Mongolia's second trading partner, second only to Russia; since the Sino-Russian trade resumed border trade in 1982, although there are also trade frictions similar to the dispute between the Anda Line and the Ana Line in the oil industry, it appears to have There have been breakthroughs.

Taking into account the sustained and stable growth of interregional trade. Sea, land and air transport logistics systems such as ports, railways, highways, waterways, ports, airports, communications, and navigation should be established.

In this case, the central city role of the big cities is more important. Governments and scholars from various countries have proposed their own regional development concepts, such as Japan’s economic circle around the Japan Sea, South Korea’s economic circle around the Yellow Sea, and the economic circle around the Yellow Sea and Bohai Sea, China ’s Tumen Delta, Russia Different development concepts for Northeast Asia, such as the Great Vladivostok Economic Zone, Hanshin's Luojin-Pioneer Free Trade Zone, and Mongolia's Tongou Continental Bridge. Therefore, when developing the logistics system, all countries and regions should seek common ground while shelving differences. While constructing the logistics system in each region, the development of the entire Northeast Asian economic circle must be considered, which is not only conducive to the sustainable development of the entire region, but also in line with all interests The long-term development tendency of the group.

In the process of economic cooperation in Northeast Asia, due to the restrictions on the level of economic development in various regions, it was not possible to form uniform trade barriers and free trade areas such as the European Union, North American Free Trade Area or Asia-Pacific Economic Cooperation.

Changchun, Shenyang, Dalian, Harbin, Seoul, Pyongyang, Tokyo, Osaka, Baoli, and other cities are very different. At present, regional economic cooperation in Northeast Asia is limited to spontaneous trade. Although its institutional construction is not perfect, this development model derived from common interests will have more development potential. With the liberalization of trade and the unified development of the logistics industry this trade will eventually form a regional economic integration with its own characteristics. Give full play to the role of the main force of the industrialization of the development zone, support high-tech, economic development, and automobile development zones based on their own advantages, and more quickly go to large industrial projects. Insist on infrastructure first, focus on the construction of industrial projects, and build the Changdong Northeast Open Development Pilot Zone, making it an important support for Changchun's industrial future.

5. CONCLUSION

The development of the urban economic circle not only involves economic cooperation and development, but also covers various factors such as politics, culture, and geography. It is a process of interaction and coordination of various factors. Therefore, eliminating the negative factors that hinder the development of the urban economic circle and creating a good condition for the development of the urban economic circle is an objective requirement for promoting regional economic development.

REFERENCES

[1]Chen Zhenguang. Song Ping. Regional Development and Coordination in the Process of Urbanization. Foreign Urban Planning, 2002, (5)

[2]Chen Yi. Regional characteristics of Chengdu's urban economic circle and its driving effects. Region and City, 2009 (5).

[3]He Yimin.The Rise and Development of Chengdu, the Central City in Western China at the Turn of the Century. Journal of Chengdu Administration Institute, 2000 (2).

[4]Ye Yumin. Regional Development in China. China Light Industry Press, 2000

[5]Duan Shujun. The economy of the administrative region restricts the economic development of the urban circle, China Macroeconomic Information Network, 2001-09-13

Reform of Practice Teaching of Rehabilitation Technology Major Based on Industry-Education Integration

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Abstract: Taking the rehabilitation technology specialty of Zhengzhou Yellow River Nursing Vocational College as the research object and the traditional rehabilitation treatment technology training program as the starting point of research, an in-depth analysis of the necessity of the practice teaching reform of the rehabilitation therapy technology specialty in vocational colleges is provided to innovate the talent training model for this specialty. Find a workable solution. From the teaching objectives, teaching content and curriculum system, actively explore a distinctive practical teaching mode that meets the needs of the professional development of rehabilitation therapy technology, and realize the reform and innovation of the talent training mode for this specialty.
Keywords: Industry-education integration; Practice teaching; Rehabilitation technology; Vocational college

1. INTRODUCTION

In the outline of the national medium and long term education reform and development plan (2010-2020), it is pointed out that higher vocational education should adjust its structure, develop its professional characteristics, and expand the training scale of compound, skilled and applied talents [1]. According to the report of the 19th National Congress of the Communist Party of China, "improve the vocational education and training system, deepen the integration of industry and education, and school enterprise cooperation." The competent department of education is also fully implementing the spirit of the 19th National Congress of the Communist Party of China on accelerating the development of modern vocational education, consciously giving play to the role of policy guidance and resource allocation, guiding the reasonable positioning of colleges and universities, and promoting the improvement of practical teaching level and personnel training quality in Vocational Colleges. Medical higher vocational education is a kind of education type which adapts to the development of social economy and medical technology and trains medical practical and technical talents. It has a special training goal and training mode. Therefore, medical higher vocational education must recognize its own professional nature, curriculum must be skill-based, to solve practical problems as the center. In order to meet the needs of the society for high-quality skilled talents, our college has continuously adjusted the teaching plan since 2016, improved the practical teaching guarantee system, and innovated the training mode of integration of production and teaching in the rehabilitation treatment technology major, which has achieved good teaching results and significantly improved the quality of talent training in this major.

2. REFORM OF TALENT TRAINING MODE

According to the guiding ideology of vocational education by the Ministry of Education, the Ministry of Human Resources and Social Security, school-enterprise cooperation, and the combination of production, learning, and research are the only way for the development of higher vocational colleges. China is a country with a large population, and the employment situation is very grim [2].

In addition, the overall quality of workers is low, which cannot meet the needs of enterprises for a large number of high-quality workers, especially a large number of highly skilled personnel. The production-education integration model is a market-oriented and social demand-oriented operating mechanism. It utilizes two different educational environments and resources of schools and enterprises, and adopts an organic combination of classroom teaching and practical teaching to cultivate high-level education suitable for the needs of different employers. Teaching mode for application-oriented talents.

Traditional rehabilitation therapy technology teaching has factors such as lack of practice bases, outdated textbook knowledge systems, and weak teachers. Teachers teach multiple theories and neglect practice when they are teaching, which affects the improvement of students' practical ability, and thus cannot reach the market and industry. Requirements for high-end rehabilitation treatment technical personnel.

In recent years, the rehabilitation technology major of medical schools has conducted some research on the theoretical aspects of school-enterprise cooperation, and has also summarized some successful models and experiences in practice [3]. However, on the whole, the production-education-integrated talent training model for rehabilitation technology is still in its infancy, and there are certain problems; and the company also has an urgent need to improve the overall ability of employees. Therefore, the reform trend of the talent training model for rehabilitation technology Imperative.

3. APPLICATION OF INDUSTRY-EDUCATION INTEGRATION

The industry-education of integration is the main driving force to promote education and teaching reform, give play to the important role of enterprises in running schools, and realize the collaborative education of schools and enterprises. Since the establishment of the Department of Rehabilitation Technology, the college has established good cooperative relations with a number of institutions engaged in rehabilitation. Cultivate them as the school's training base, and form a "2+1" talent training model, that is, students will study theory in school for 2 years, and will go to enterprises for internships in 1 year. In order to strengthen the students' practical ability, starting from 2012, the college and enterprise jointly built an on-campus rehabilitation therapy training center, and established and improved a training base that is matched with employment.

From 2016 to the present, our hospital has continuously adjusted and innovated the talent training model, cooperated with a number of rehabilitation treatment institutions, combined talent training with rehabilitation treatment services, and experienced nurses acted as instructors of the training courses. It completely solves the problem of vocational education deviating from the actual situation of work, greatly improves the professional level of students, and significantly improves the quality of talent training. The cooperative rehabilitation treatment institutions can sign employment agreements in advance for the outstanding students, which is also a beneficial promotion for improving economic benefits, thereby making them more enthusiastic.

4. STRATEGY OF PRACTICAL TEACHING REFORM

(1) Optimize practical teaching goals

As China gradually enters an aging society, the requirements of rehabilitation institutions for the quality of its employees are increasing, but the current status of professional education in rehabilitation technology is not optimistic. The professional talent training system is in urgent need of reform and innovation[4]. Based on social development, professional characteristics, and the needs of employers, our college invites industry experts, technical backbones, and professional teachers of the college to discuss together to develop a new practical teaching goal system. The system is divided into humanities and social science modules, occupation foundation modules, professional skills modules and clinical practice modules, totaling 3703 hours. The combination of off-campus and on-campus practical training; the combination of the first classroom and the second classroom practice activities; the off-campus teaching internship per semester and the third-year graduation internship. In the design of the practice teaching system, a practical ability training system is constructed in accordance with the three levels of basic, improvement, and integration, basic experiment, single skill training, comprehensive skill training, comprehensive internship, and social practice. At the same time, revise the practice teaching plan, determine the goal of practice teaching, and reform the practice teaching links and teaching methods. Make the practical lessons really play a role in improving students' practical ability and cultivating their professional literacy.

(2) Reform the content of practical teaching

Change the previous teaching mode of "emphasizing theory, neglecting practice" and "emphasizing knowledge transfer and neglecting skill training". According to the target system of practical teaching, based on ability, rationally configure all links of practical teaching and divide it into basic skills, professional skills and three major links in technology application. Design practical courses and training projects according to the requirements of each link, arrange the practical teaching content from shallow to deep, and gradually build a practical teaching content system centered on the cultivation of technical application capabilities [5]. Taking the rehabilitation technology major in our hospital as an example, the courses offered in the fourth semester pay more attention to the practical teaching of professional courses. In addition to increasing the proportion of experimental training courses, a 12-week teaching trainee session was arranged, and students went deeper into cooperative enterprises. The clinical tasks are completed by clinical teachers in various positions in the enterprise.

(3) Innovative Practice Teaching Form

In addition to the on-campus rehabilitation therapy training base and training center, our hospital boldly innovated, changed the previous "2+1" teaching mode, established and improved a new type of oral medical technology practice teaching base, and adopted cognitive apprenticeship, follow-up apprenticeship, and Post-employment internships make the practice of training projects into actual case treatment, which improves the true effectiveness of student training. At present, the rehabilitation industry also uses many advanced technologies and treatment equipment[6]. Through apprenticeship, students can get in touch and learn as early as possible, improve students' new understanding of the rehabilitation therapy industry, and enhance professional self-confidence, in order to achieve the goal of direct employment after graduation, a good combination of theory and practice.

(4) Establish the practical teaching guarantee system

According to the practical teaching goals, schools and enterprises jointly formulate practical teaching plans, practical teaching syllabuses, practical training materials, practical training assessment scoring standards, and evaluation systems. The quality control of practical teaching must be implemented in every practical process, and improvements and adjustments should be implemented through regular inspections, evaluations, rewards and punishments to optimize the management process of each practical teaching link and promote the smooth progress of talent training.

Establish and improve the teaching and training base of rehabilitation treatment technology majors that are matched with employment, and realize the integration of "production, teaching, and learning". The construction of practical training bases in the hospital should focus on advanced nature and simulation; the construction of practical training bases outside the hospital should be established in influential companies in the industry to provide guarantee for cultivating students' technology application ability.

Strengthen the construction of teachers. The requirements for teachers in practical teaching are very high. They require both a high level of professional theory and a strong practical ability, and they must have the quality of "double teachers". Attention should be paid to the introduction of talents and internal training of teachers to improve the professional level and quality of teachers.

It is necessary to start from job demands, actively seek cooperative enterprises, expand professional employment channels related to dental technicians, work with employers to formulate implementation schemes for rotation and rotation, and narrow the distance between teaching and job demand. To enable the resources between schools and enterprises to be organically combined and learn from each other's strengths, with a view to achieving the goals of mutual benefit, cooperation and win-win results.

(5) Establishment of Industry-Education Integration Working Group

The school has set up a production-education integration working group headed by the head of the teaching academy, which is specifically responsible for the assessment of the teaching quality of cooperative enterprises. The working group always has teachers to participate in the students' internships throughout the company and implement the process management of teaching quality evaluation. On the one hand, it can implement monitoring and feedback on the quality of teaching, on the other hand, it can also help companies find reasonable teaching points in time, adjust talent training programs in a timely manner, and ensure that teaching content meets market needs.

The working group's assessment opinion will be combined with student evaluation and enterprise self-assessment. The teaching effect in the cooperative enterprise is good, and the student's evaluation is high and the corresponding certificate of "Excellent Production and Education Integration Base" will be issued. Communicate in a timely manner and make adjustments as needed. Cooperating units will be replaced if the results are not good. The production-education integration working group is also responsible for assessing the performance of students. The students will be praised for outstanding performance in practical teaching. The school will hold a commendation ceremony to set a typical example and play a role of demonstration. , If there is no obvious improvement, different levels of punishment will be given according to school regulations.

5. CONCLUSION

With the continuous deepening of vocational teaching reform, a talent training model with complementary advantages and integration of production and education will become an important way to cultivate technical and management talents in front-line production positions in enterprises. Although the personnel training mode of the rehabilitation therapy technology specialty in our hospital has achieved certain results, it is still necessary to continuously sum up experience, adjust and improve in time to meet the needs of industry development, and to cultivate knowledge-based and innovative technical skills faster and better. Talent provides effective and feasible solutions.

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REFERENCES

[1]Cao Renren, “A review of the integration of production and education in China's vocational education in the new era,” Journal of Heilongjiang Teachers Development College, Vol.39, No.3, pp.56-59, 2020.

[2]Zhang Huili, Li Xiaojie, Zhang Shu, “Research on Professional Diagnosis and Improved Innovation Practice Based on the Integration of Industry and Education,” Educational Research, Vol.12, No.3, pp.105-107, 2020.

[3]Liu Xiuli, “Discussion on the professional talent training mechanism based on ‘industry-education integration and school-enterprise cooperation’,” Business Talent, Vol.25, No.6, pp.251-252, 2020.

[4]Zhang Qi, “Talent training model of private university-industry cooperation under the background of Internet of Things,” Educational observation, Vol.15, No.17, pp.121-123, 2018.

[5]Song Weitang, Zhang Shumei, “Empirical research

on talent training of ‘integration of production and education, school-enterprise cooperation’ in vocational education,” Journal of Jiangsu Vocational College of Economy and Trade, Vol.21, No.6, pp.65-168, 2018.

[6]Chu Zhenyong, Tain Hongxin, “Research on the innovation model of practical teaching oriented by actual combat,” Journal of Higher Education,Vol.19, No.2, pp.22-24,2019.

Study on the Relationship between Entrepreneurship and Family Business Transformation from the Perspective of Multiple Case Studies

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Abstract: The impact of the Internet era and the transformation of the market profit model have affected most of the family enterprises in China. These enterprises have to transform. Entrepreneurship plays a substantial role in the growth of family enterprises. Review of the literature, this paper preliminary build entrepreneurship and family business the conceptual framework of strategic transformation, based on grounded theory research methods, using case analysis, the paper mainly discusses the influence mechanism between them, finally clear the connotation of family business entrepreneurship and ten kinds of performance, entrepreneurship is established the influence mechanism of the family enterprise strategic transformation model.

Keywords: Family business; Entrepreneurship; Strategic transformation; Influence mechanism

1. INTRODUCTION

At present, China's economy is in the period of industrial restructuring, and the change of market economy has caught many Chinese family enterprises off guard. Most of these family enterprises are young and cannot meet the needs of development based on the current business model [1]. Therefore, strategic transformation is imperative. For any enterprise, entrepreneurs have a direct impact on the long-term development of the enterprise. Zhou kun believes that family business culture should realize the transformation from entrepreneur culture to truly modern enterprise culture. Schumpeter, a famous manager, once said that entrepreneurs are the main body promoting economic development, and the most prominent driving force for economic development is the psychology of "personal realization", namely "entrepreneurship". The sustainable development of family enterprises is related to how material capital promotes the transformation of enterprises. As a strong support of intangible resources, the entrepreneurship of family enterprises plays a crucial role in the transformation and development of family enterprises [2].

Through reviewing the literature, it is found that no scholars have studied the internal influence mechanism of entrepreneurship on the strategic transformation of enterprises, and the research on entrepreneurship and enterprise development only pushes the significance of entrepreneurship on the existence of enterprise growth backward through the sales volume and financial indicators [3-6]. As the internal and external environment of a family business is constantly changing, entrepreneurship will be actively adjusted due to the changes in the environment, which will have an impact on the business performance, the life span and the growth of family business. The key to the successful inheritance of family business lies in the inheritance, development and innovation of the entrepreneurial spirit. However, at present, family enterprises seldom pay attention to the role of entrepreneurship in strategic transformation of family enterprises. In view of this, this paper probes into the influence mechanism of family enterprise entrepreneurship on the strategic transformation of family enterprises.

2. THEORETICAL BASIS

2.1 Entrepreneurship and Family Business Eentrepreneurship

The definition of entrepreneurship in academia is very broad. "Knight" first proposed that entrepreneurship is the embodiment of entrepreneurs' personal values, talents and abilities. "Fillis" and "Rentschler" believe that entrepreneurship is embodied in the combination of public and individual resources to create value for enterprises and social groups by utilizing economic, social and cultural opportunities as the environment changes. Scholars such as "Galvo" believe that entrepreneurship is mainly reflected in creativity or a new vision of existing things. "Bai shaojun" and other scholars put forward that entrepreneurship is a psychological characteristic of entrepreneurs' persistent pursuit, courage to explore and firm belief in new projects or businesses. "Zhao weiliang" and other scholars understand entrepreneurship from three aspects: individual psychological characteristics and personality, individual behavior characteristics, world view and value theory. "Liu xianwei" believes that entrepreneurship at the individual level starts from the entrepreneur himself, including his personal characteristics, spiritual elements and behavior in the process of restarting a business. Contact "li poetry and scholars" enterprise culture, entrepreneurs, ethics and quality of entrepreneurs, compiled from all kinds of literature from 1987 to 2015, put forward ten kinds of entrepreneurship, including innovation spirit, adventure spirit, cooperation spirit, learning spirit and dedication spirit, the spirit of good faith, the spirit of competition, the humanistic spirit, the efficiency spirit and pragmatic spirit, a spirit of responsibility [7].

The literature on entrepreneurship of family business provides reference for defining its connotation. "Dou junsheng" and other scholars believe that the entrepreneurial spirit of family business includes entrepreneurship, adventure spirit, pioneering spirit, professionalism and cooperation spirit. "Tu yulong" and other scholars concluded that the entrepreneurial spirit of family business is based on the entrepreneurship and innovation spirit, which increases the sense of responsibility and mission shown by the family prosperity, and reflects the spirit of cooperation and learning of "harmony between family and everything" in traditional Chinese culture [8-12]. On the basis of previous work, "Bettinelli" and other scholars defined the entrepreneurial spirit of family business as the entrepreneurial attitude and activity in the family business organization.

2.2 The Connotation and Types of Enterprise Strategic Transformation

The study of enterprise strategic transformation first originated from the study of organizational behavior theory by foreign scholars, and then played an important role in the study of organizational transformation and enterprise transformation. American management scientists first put forward the enterprise strategic transformation, and think that the enterprise strategic transformation is the enterprise to the current strategy of multidimensional, multi-level, discontinuous management change. "Agarwal" and "Helfat" proposed that enterprise strategic transformation refers to the process in which an enterprise changes its resources and capabilities, adjusts its organizational goals and strategic behaviors, and seeks sustainable development of the organization due to changes in internal and external environments [13]. "Pang jian" and other scholars think that the strategic transformation of enterprises includes the reform of enterprise development strategy and enterprise competition strategy. "Hu Dan" and other scholars believe that the strategic transformation of enterprises is the process of re-establishing the competitive advantage in the aspects of enterprise management direction, operation mode, organizational structure and resource allocation, so as to form a new enterprise form. Jiao hao and other scholars studied the strategic transformation of enterprises from three perspectives, including the perspective of organizational theory, organizational behavior and strategic management [14].

The enterprise strategic transformation is divided into different types according to different standards. According to the transformation form, "Ginsberg" divides the enterprise strategic transformation into the transformation of strategic content and the change of strategic decision-making procedure. According to the degree of transformation, "wang wei" divided the strategic transformation of enterprises into first-order transformation and second-order transformation. "Xue youzhi" and other scholars divided enterprise strategic transformation into radical strategic transformation, gradual strategic transformation, erosion strategic transformation and structural strategic transformation [15-18]. According to the opportunity of transformation, the strategic transformation of enterprises can be divided into forward-looking transformation and crisis transformation. "Guo yongfeng" and other scholars further divided the types of strategic transformation of enterprises from the two dimensions of current performance and future environmental change, including forward-looking strategic transformation, reactive strategic transformation, strategic transition and strategic transition trap. Guo chao and other scholars divided the transformation of family business into the transformation of enterprise industry, product market and regional market. "Wang xiao" and other scholars summarized the family business transformation behavior as family business internationalization, marketing strategy change, and research and development.

2.3 The Influence of Family Enterprise Entrepreneurship on Strategic Transformation

The strategic transformation of enterprises comes from the entrepreneurs' review of the internal and external environment of enterprises, the formulation of new strategic planning and the mobilization, the change of opportunity orientation to strategic orientation, and the leadership and management of the implementation of the transformation of enterprises. Therefore, entrepreneurs are the main body of "brain" function in enterprises, who can effectively predict the market and take timely control measures to guide enterprises to make strategic choices for future development [19].

Entrepreneurship for enterprise strategic transformation mainly embodied in the following aspects: the influence of the entrepreneurial spirit, not only can help enterprises to identify market opportunities and threats for entrepreneurs keen insight and spirit of adventure but also provides a strong support for the enterprise transformation, the entrepreneur spirit of innovation, talent consciousness, professional spirit and the spirit of cooperation is the key to promote the strategic transformation. Entrepreneurs entrepreneurship is a collection of special skill, innovation spirit, adventure spirit and enterprising spirit of drive the enterprise increasing spending on research and development cooperation spirit and innovative spirit, pragmatic spirit to promote enterprise internationalization strategy, the more adventurous spirit and innovative spirit, entrepreneurs are more willing to capture market opportunities, promote the diversification of transformation. "Chen hansong" and other scholars pointed out that entrepreneurship at the value level related to the personality characteristics of entrepreneurs has a great impact on the strategic renewal and transformation of enterprises. "Chen zhizhong" and other scholars put forward that the value concept, thinking mode and spiritual quality of entrepreneurs affect the demand, planning, implementation and evaluation of the entire process of enterprise strategic transformation. Family business owners can identify the need for strategic transformation through insight and foresight into the environment. Family business owners with different entrepreneurial spirits have great differences in the strategic choice direction, and it is easier for them to determine the strategic transformation direction of family business and promote the implementation of strategic transformation.

2.4 A Brief Review of Previous Studies

Although there are abundant researches on entrepreneurship, family business entrepreneurship and strategic transformation of enterprises, there are still some research gaps. First of all, the relevant literature shows that, because of the family characteristics of family businesses, the connotation and composition of the entrepreneurship of family businesses are different from that of general enterprises, so it needs to be further studied in the front line of family businesses. In addition, differences in entrepreneurial ability, entrepreneurial mental model and values affect the transformation, upgrading and sustainable development of enterprises. The internal driving force of the strategic transformation of family businesses is from entrepreneurs, which is bound to be related to entrepreneurship to a certain extent. Different entrepreneurial spirits can guide enterprises to find the optimal solutions to problems and stimulate enterprises to make different strategic transformation behaviors. However, no scholars have studied the internal influence mechanism of entrepreneurship and strategic transformation of family enterprises [20].

Secondly, this paper holds that there is generally no difference in the classification of strategic transformation of family enterprises and that of general enterprises. This paper concludes the strategic transformation of family enterprises into product transformation, industrial transformation and regional transformation. Product transformation is reflected in product structure change and product portfolio adjustment. Industrial transformation is reflected in the transformation of industry correlation and the transformation of industry non-correlation. Among them, industry-related transformation includes industry-related diversification transformation and getting rid of non-core business. Industrial-related diversification refers to the development of relevant businesses on the basis of existing businesses. Getting rid of non-core business refers to the effective integration of family business from the perspective of core competitiveness in order to reduce the transformation of enterprise correlation or non-correlation. Industrial de-correlation transformation refers to a diversified transformation in which enterprises develop other industries on the basis of existing businesses. Regional transformation mainly refers to the development of the domestic market and the implementation of enterprise internationalization.

Through reviewing the literature, this paper believes that the strategic transformation of an enterprise first needs to identify whether the enterprise needs to implement the strategic transformation and whether the opportunity is sufficient by combining the internal and external environment of the enterprise. Secondly, in order to carry out strategic transformation, entrepreneurs need to adapt to environmental changes, concentrate internal and external resources, determine the direction of strategic transformation, that is, carry out product transformation, industrial transformation or regional transformation, and make strategic decisions and transformation plans. Finally, it is important to implement and complete the strategic transformation by being guided and driven by the entrepreneurs. In summary, this article establishes a conceptual framework, as shown in figure 1. This paper tries to answer the following three research questions: what is the connotation of family enterprise entrepreneurship? The composition of family business entrepreneurship includes what. The influence mechanism of family enterprise entrepreneurship on the strategic transformation (product transformation, industrial transformation, regional transformation) of family enterprises.

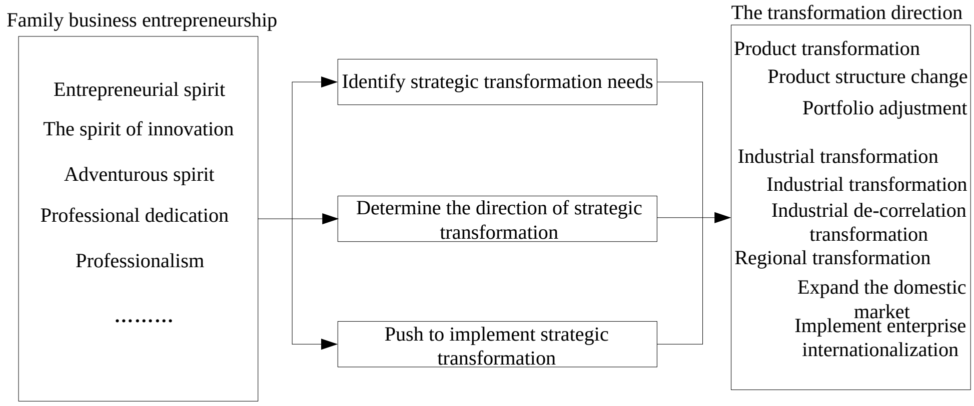

Figure 1 The conceptual framework of family enterprise entrepreneurship and enterprise strategic transformation

3. DATA COLLECTION AND PROCESSING

3.1 Selection of Research Methods

This paper mainly explores the internal influence mechanism of family business entrepreneurship on the strategic transformation of enterprises, and qualitative research method is the most suitable method for this kind of problems. This paper adopts the research method of grounded theory to explore the influence mechanism of entrepreneurship on the strategic transformation of family enterprises through the comparative analysis between case analysis and multi-case analysis. Promotional, in order to improve the robustness and can meet the theoretical principle of sampling, guarantee the reliability and validity of research, this article selects several family enterprises in hebei province for case study, to sample enterprise owners and the second generation successor as the object of in-depth interviews, the thorough enterprise first-line in-depth interviews, based on grounded theory data analysis method of interpreting the connotation of family business entrepreneurship, and based on the family enterprise actual refined form of entrepreneurship performance, finally summarized design a new theoretical framework.

3.2 Research Object Selection

This paper follows the theoretical sampling principle, and the criteria for selecting case enterprises are as follows: Follow the principle of typicality. This paper selects the family business that has been in operation for many years and has experienced it. In this way, the targeted selection of enterprises is helpful to study the influence of entrepreneurship on the strategic transformation of enterprises. Follow the replication logic of multiple cases. In this paper, two or more transformation case enterprises are selected, which can draw conclusions from different enterprises and verify each other, realize the replication logic, and improve the persuasive power of the research. Follow the convenience and accuracy of data acquisition. With the support and assistance of abundant MBA and EMBA alumni resources of the research school, this study can be carried out smoothly. Six enterprises were selected as the research samples. The basic information of the case enterprises is shown in table 1.

3.3 The Data Source

Data sources for this article include primary and secondary data. Primary data sources and methods of collection: semi-structured interview, try to interview the founders of family enterprises, let them freely comment on the relevant issues of entrepreneurship, guide the interviewees to describe their behavior when the three types of transformation of the enterprise, namely product, industry and region. After the end of the interview with each founder of the enterprise, immediately go into the factory to visit the enterprise. Visit the relevant departments of the government and industry associations to obtain relevant information of enterprises and review the industry background and market environment at that time. Supplement the information through E-mail and telephone channels.

Second-hand data sources and methods: (1) file data from the enterprise internal information, the official website, news reports, CNKI retrieval corporate news, Dr And journal articles, to recognize the interviewer before the interview is familiar with enterprise basic situation, to promote his establishing rapport with respondents, selected after the interview with information pertinent to the topic research. (2) issuing questionnaires, for the people who cannot be interviewed, to them issued questionnaires, questionnaires and statistics. The triangulation verification of multi-source data can enhance the reliability of the research. The most important data comes from 13 months of semi-structured in-depth interviews. The specific data collection of the six sample enterprises is shown in table 2.

Table 1 Case enterprise basic information

enterprise	industry	The transformation of the type	Company profile
JD rubber	Technical research, production, sales, service, installation of rubber products	Product transformation, industrial transformation, regional	Has been the production of recycled rubber, and later added rubber products foot pedals, during which also produced some rubber sundry, to now rubber board has become the main product under JD international trading company, to provide

		transformation	customers with a variety of sports ground materials and installation works; Under the technology research and development center, leading the enterprise science and technology innovation; In 2000, the company merged with the phosphate fertilizer factory, and in 2003, it entered the textile industry and acquired the cotton textile factory. In the catering industry; In 2014, it joined the rural credit cooperative association to promote overseas export in 2004, and now it has established trade relations with more than 50 countries and regions in the world.
XZ cable	Electric wire and cable, production and sales, technical consulting services		From the original production of power cables and civil power supply lines under one thousand volts to the production of all types of power cables to the production of fiber optic cable to give up the rolling mill to establish enterprises to produce and sell wire, cable, wire and cable production technical consulting services; Investment Banks and credit cooperatives started in Beijing, then expanded to the beijing-tianjin-hebei region, and now cover most of the country except for remote provinces such as Tibet and qinghai
SL Welding materials	Welding materials, production and sales		From the production of general welding material to general welding material as the basis, added gold, silver, tin and other precious materials welding material production in addition to doing welding material, but also to establish enterprises to develop new energy batteries.
HM Commerce and trade	Soybean products production and sales		From the wholesale of various kinds of snacks to snack food distribution and then to the production and distribution of snack food, the current development to focus on the bean processing of snack food production on the basis of the existing food enterprises and the investment in the hotel and restaurant market from the original local supermarkets to the whole north of the major shopping malls and supermarkets
XC glass	Glass products production and sales		The initial production mold to medicine plastic packaging and then to the production of medicinal straw, now the main production of medicinal glass packaging and aluminum plastic bottle caps from north China to expand the market to the three provinces of the northeast to all parts of the country
LS The real estate	Real estate development and operation		The original building wall structure was changed into a comprehensive wall structure, and the traditional building of reinforced concrete was changed into prefabricated building. The market of property management company and real estate guarantee company was expanded from hebei to Inner Mongolia

Table 2 Case enterprise data collection

			JD rubber	XZ cable	SL Welding materials	HM Commerce and trade	XC glass	LS The real estate
Firsthand material	Interview	Time	2020.2.10	2020.2.15	2020.2.17	2020.2.19	2020.3.5	2020.4.1
		Respondents	Founder	Founder	Founder	Founder	Founder	Founder
		Position	Chairman	General manager	General manager	General manager	Chairman	Chairman
		Interview time	97	75	69	78	95	92
Second-hand information	Questionnaire	Object (relationship with interviewees)	General manager (father and son)	Chairman (uncle nephews)	Chairman (father and son)	Chairman (father and son)	General manager (father and son)	General manager (brother)

3.4 Data Analysis

In this paper, qualitative data coding software is used to process data. Data analysis and data collection are jointly implemented and interlinked. In the process of data collection, the last interview was used to gradually clarify the constructs and the relationship between the constructs, refine the questions and research topics, and improve the interview outline for the next interview. In the process of data analysis, using a semi-structured interview recording the words, summing up the data, the data abstraction and conceptualization, and constantly in the events and event, concepts, and more, concept and concept, frequent comparisons for a given set of steps to review literature, analysis and reflection memo, construct and category, saturation until reach theory, there is no longer the emergence of new construct, category and relation data collection.

In this paper, by two interview team members to open the original data coding, spindle type code, through constant comparison and test, final results calculated code consistency of 85%, a case on the coding of growing new case again at the same time, reach a theoretical saturation forming a total of 379 of the 89 concept, category, 34 categories and 10 main categories (including the spirit of innovation, entrepreneurial spirit, bear spirit, cooperation spirit and enterprising spirit, professional dedication, spirit of adventure, exploring spirit, learning spirit and professional spirit). Then select the core categories that can have enough important connections with sub-categories and main categories to form a compact theoretical logic chain and construct a complete "story line". Through coding, it is found that the core category of this paper is "the influence of family enterprise entrepreneurship on the strategic transformation of enterprises", and the basic relationship is that the 10 main categories have a significant impact on the product transformation, industrial transformation and regional transformation of family enterprises. Different entrepreneurial spirits are embodied by the entrepreneurial business decision-making behaviors, which also guide the family enterprises to carry out different strategic transformation to a certain extent. The detailed coding process of programmed grounded theory is shown in table 3.

Table 3 Demonstration of programmed grounded theory coding process

Main categories	Deputy category	Category	Typical concept example	Example of representative data	Source
The spirit of innovation	Try new ideas; Reinvent yourself; Trial and error culture	Accept new ideas from employees; Try new industries; Explore new products; Distinctive in terms of products; Allow trial and error; Have the courage to try	Employees suggest changing the product structure; New product development	I was interested when the staff came to me with the idea of product transformation; At that time, I made fast food because I wanted to develop in Beijing and wait for more opportunities, not just for the catering industry	ALL
Entrepreneurial spirit	Market analysis; Abandon policies; Synergies; Design strategies to match current environmental trends; Objective planning; The allocation of resources	Estimate the market; Risk feasibility analysis of new business; Assess the market and spread risk; Evaluation of Assess the market and establish the main business; Identify market trends; Short-term market observations; Weigh your advantages; Weighing the advantages and disadvantages of the market; To remove obstacles; Targeted friends; Develop new business; Integration of business units; Establish coordination mechanism	Market research; Risk feasibility analysis; Cancel the agent product; Diversification of risk; Observe market trends; To hold regular meetings on a regular basis; Utilization of resources; Play the role of talents and teams	Real estate development business is the company's main business and advantages, so after business diversification, we are now in charge of this; Eggs do not put in a basket, conducive to the diversification of risk, then invest in rural credit cooperatives; rubber Rubber board has been retained because of its large market, so rubber board has been our main products; This is not the time to play a lone hand, you have to combine resources, their own people do not do well	ALL
Bear spirit	To assume social responsibilities; Family responsibilities; To assume corporate responsibilities; Brand construction	Focus on social progress; Focus on charity; Social responsibility; Provide taxes; Providing employment opportunities; Building a family vision; Keeping families together; Build the corporate vision; Establish brand image; Brand positioning	Promote enterprises through charitable donations; Career development; Inheriting the enterprise	Through charity, party building and other activities, enterprises in the community to establish a new, responsible image; From the family's point of view, I want the family to continue	ALL
Spirit of cooperation	Formal relationship; Informal relationship	Customer dependence; Peer relationships; Non-peer guidance; Customer guidance; Professional services; Practical input; Customer contact; Seek expert advice	Customer requirements; Introduction to mining companies; Agent introduction	The improvement of our production process is based on the opinions of customers. Existing agents are their peers in the circle of friends, through their recommendation, it is better to talk than to find their own	ALL
Enterprising spirit	Thinking about the future and achieving long-term goals; Business image; Product positioning; There is a clear	To adjust the direction of development; Corporate reputation; Product quality; On-demand services; Customer satisfaction;	Limit the number of defective goods; Customer service; Customer evaluation; Customer respect; To do fine; Brand effect	According to different customers, we make the plan is not the same, the final is to provide good customer service; Our products	XZ\SLHM\LSXC

	direction of development	Industry orientation; Market positioning; Deep in the field		are outstanding in the same industry, speak with products, let customers express satisfaction, respect for the product is respect for the enterprise	
Professional dedication	Down to earth; Pragmatic; The good faith	Solid; Sincere; Do the practical work; My word	Do a good job of entity; By the customer	Always wanted to do something through a platform	ALL
Adventurous spirit	Make decisions quickly to overcome difficulties; Be proactive in making changes; Emergency consciousness	External environment; Internal resources; Complete transformation; ascension	Market saturation; Low core technology; Product-related changes; Maximize profits	When the market here became saturated, it quickly bought another piece of land and put it into production in 2000	ALL
spirit of discovery	Opportunity; Policy interpretation	Attend trade conferences and trade fairs; Grasp the social activities related to business; Venturing into uncharted territory; Search for market gaps; Actively seek customers; Policy forecasting; Policy sensitivity	Attend customer exchange meeting; Attend trade fairs to seek customers	Regular exchange of electricity, equipment and technology with major customers such as state grid; Every year in the spring and autumn period, every prefecture-level city agents will go, I go to the main purpose is to find customers	XZ\SL\HM\LS\XC
Learning spirit	Experience summary; The combination of professional education and practice; Get information from others; Learn to imitate	Lessons learned; Take the initiative to attend training courses; Use other people's products; Tapping into other people's markets	Training and learning; Imitate a new product	We learn this through regular training; Bring in foreign samples for analysis	ALL
Professional spirit	Application of new process equipment; Professional knowledge or basic knowledge of various areas related to the business; Technical requirements	The new technology; New equipment; Know the links; Meeting the requirements of the field; Technical support; professional	Adopt automatic equipment; Having qualification certificates; Technological innovation; Investment in science and technology	Enterprise culture, human resources, party building, production, financial to understand some; So far there have been more than a dozen technological innovations, mainly aimed at improving production efficiency; The two years add up to about a million dollars in technology funding	ALL

4. CASE ANALYSIS

4.1 Analysis on the Constitution of Family Enterprise Entrepreneurship

This paper analyzes the coding results of the data of six case enterprises, so as to understand the actual behaviors of the family business owners in the process of operating the enterprise, so as to better disintegrate several kinds of family business entrepreneurship in their personal body. Through summing up these to describe entrepreneurial activity and behavior, in this paper, the connotation of entrepreneurship has a richer understanding of that family business entrepreneurship is entrepreneur's way of thinking, a reflection of personal characteristics and psychological state, the difference from general entrepreneurship, main mission is to family and family business responsibility, to have a keen insight, dare to make a change and take risks, be good at communication, adhere to the ideal as the core, pay attention to market orientation, good at seize the opportunity to keep on learning new knowledge and applied to various aspects of the behavior practice, Specifically, it includes ten kinds of entrepreneurial spirit of family business, which are respectively innovation spirit, entrepreneurship, sense of responsibility, cooperation spirit, enterprising spirit, professional spirit, adventure spirit, exploration spirit, learning spirit and professional spirit. The ten forms of family business entrepreneurship are shown in table 4.

Table 4 The composition of family business entrepreneurship

Performance	Definition	Behavior
The spirit of innovation	Entrepreneurs use existing thinking patterns to provide insights that are different from conventional or ordinary ideas, and generate new ideas and changes in products, technologies and markets based on existing knowledge and ideal requirements	Try new ideas and reinvent yourself; Develop a culture of trial and error in the organization
Entrepreneurial spirit	Entrepreneurs have a strong cognitive ability and creative thinking on the internal and external environment of the enterprise, constantly monitor the progress of the enterprise, in order to better achieve the company's goals, can organize all kinds of	Study business activities and business environment in advance, and analyze the market environment; Implement the policy of abandonment, set up outsourcing and create advantages; Activities and objectives are combined, and business units are effectively

	resources, weigh costs and benefits, and reasonably design strategies to cope with the occurrence of occasional events	coordinated; Design strategies to match current environmental trends; Target planning and resource allocation
Bear spirit	Entrepreneurs fully consider the interests of stakeholders, families, society and the government, share resources and cooperate with each other to achieve corporate goals, and conduct active business activities	Social, family and corporate responsibilities; Pay attention to the enterprise brand construction, in order to stabilize the enterprise market position
Spirit of cooperation	Externally, entrepreneurs are good at establishing an environment of cooperation and trust with others through communication, network, product or service channels. Internally, they can manage a team well, form a strong atmosphere of teamwork, and ensure the efficient operation of the organization	Establish formal relationships with clients, peers or non-peers, and experts; Establish informal relationships with government agencies and friends
Enterprising spirit	Entrepreneurs attach importance to creating a good business image and reputation, have a clear development direction for the future, commit to long-term goals, and fully grasp any opportunities conducive to the development of enterprises	Thinking about the future and developing long-term goals; Create a good image and reputation; Product positioning, providing good products and services; There is a clear direction of development
Professional dedication	Entrepreneurs always maintain a positive work attitude, show a strong love for their career and career, and put a lot of energy into their work	Solid; Down to earth; Pragmatic; The good faith
Adventurous spirit	The emergence of any market opportunity is accompanied by the emergence of risks. The spirit of risk requires entrepreneurs to have a strong risk concept and make changes actively	Make decisions quickly to overcome difficulties; Be proactive in making changes; Emergency awareness
spirit of discovery	Entrepreneurs can find, identify, evaluate and utilize market opportunities through various means, obtain timely information, use these opportunities and information to adjust strategic decisions, and actively follow up the target	Industry communication, seize the opportunity; Actively seek business opportunities; Actively looking for customers; Interpret national policy and look for opportunities
Learning spirit	Entrepreneurs constantly update their knowledge base, pay close attention to the latest developments in their field in real time, and learn and apply knowledge and skills from experience and other aspects to practical work	To draw lessons from experience; The combination of professional education and practice; Get information from others; Good at learning to imitate others
Professional spirit	Entrepreneurs pursue professional standards, requirements, and quality, and have the ability to operate tools, expertise, and expertise related to their field	Application of new process equipment; Professional knowledge or basic knowledge of various areas related to the business; Application of business-related technical support; Focus on enterprise technology needs

4.2 The Influence of Family Enterprise Entrepreneurship on Strategic Transformation

4.2.1 The influence of family enterprise entrepreneurship on product transformation

(1) Changes in product structure. With the growth of family enterprises and the change of consumer demand, family enterprises gradually produce a gap in product structure with the market demand. In order to adapt to the dynamic change of the environment, it is important for family business owners to give full play to their entrepreneurship to solve this problem. The innovation spirit, entrepreneurship, cooperation spirit, exploration spirit, learning spirit and professional spirit of family business owners promote the change of family business product structure. Specific performance in the following aspects:

First of all, family business owners with an exploratory spirit will actively seize the opportunities of the industry, acquire new knowledge through the industry exhibition, and recognize the new product changing needs. All of the six business owners surveyed said they choose to attend industry conferences, equipment or technology exchanges each year to strictly control the production and quality of their products. In the daily operation of the enterprise, in order to meet the needs of other customers on the industrial chain, family business owners will increase their mutual benefit and win-win cooperation with customers. The spirit of cooperation helps family business owners realize that the enterprise has the need to improve the product structure. Cooperative family business owners maintain formal client relationships and informal relationships with other networks, seek out technical staff, and actively listen to their advice to improve their skills.

Secondly, technological innovation is one of the causes of product structure differences, and family business owners also actively seek technical support from network. Innovative family business owners allow a culture of trial and error to develop within the company, to experiment with new ideas, to improve product flexibility, and to reduce differences in product structure. For example, the founder of XZ cable said that by observing cable usage in the market, enterprises are encouraged to try to develop and promote cable products of different specifications.

Thus it can be seen that the exploratory spirit of family business owners enables enterprises to grasp more opportunities, while the cooperative spirit enables enterprises to maintain formal and informal cooperative relations, both of which promote the identification of the needs of product structure changes. In addition to the spirit of cooperation, the spirit of innovation drives the formation of the culture of trial and error, which determines the choice and planning of the strategic transformation of the enterprise. Entrepreneurship enables enterprises to allocate resources reasonably and effectively, learning spirit enables enterprises to adopt the way of learning and imitation, and professional spirit prompts enterprises to increase technical demand, which promote the implementation of product structure change. The data encoding process is illustrated in table 5.

Table 5 Examples of categories, concepts and their representative data coding processes

Deputy category	Category	Typical concept example	Representative data set	Source
The culture of trial and error	Allow trial and error; Have the courage to try	Try to develop different products	By observing cable usage in the market, enterprises are encouraged to try to develop and promote cable products of different specifications	ALL
The allocation of resources	Use and accumulate resources efficiently	Use a variety of resources	We have the professional team, the market, the enterprise in the technology and equipment to ensure that it is not difficult to update the product	ALL
A formal relationship	Seek expert advice	Network with professionals	In terms of real technology, I'm still lacking. There are technical experts in the company	ALL
Informal relationship	Other relationships	Holding customer exchange meeting; Attend trade shows to find customers	At the beginning of the introduction of optical fiber and cable, the technology was difficult. We recruited professionals everywhere and perfected the technology for many years	ALL
Grasp the opportunity	Attend trade conferences and trade fairs	Holding customer exchange meeting; Attend trade shows to find customers	Regularly communicate with major customers, such as state grid corporation of China, about power or equipment and technology	SL\HM\LS\XC
Learn to imitate	To imitate others	Imitate customer's sample; Develop other people's products	We don't have the ability to lead the market right now. We are still in the imitation stage	JD\HM\LS\XC
Technical requirements	The new technology; New equipment; Technical support; professional	Adopt automatic equipment; Technological innovation; Investment in science and technology; Apply for a patent	We have applied for a research and development patent, and the product has not only improved in quality and technology, but also in safety	ALL

(2) Product portfolio adjustment. The change of product categories, the expansion of product depth and breadth of the enterprise have produced different product combinations. With the growth of family enterprises, the differences in product portfolio will become more and more obvious, and the adjustment of product portfolio will become extremely complex and difficult. As a result, family business owners with different entrepreneurial spirits exhibit different behaviors to narrow product portfolio differences. The entrepreneurial spirit, cooperative spirit, enterprising spirit, adventurous spirit and exploratory spirit of family business owners promote the family business to adjust the product portfolio.

Family business owners with entrepreneurial spirit will increase the market forecast, risk prediction and business evaluation behavior of the enterprise, develop product portfolio strategy, and reduce product portfolio differences. There is no denying that the change of policy environment, including the government's support and assistance to enterprises, restrictions and restrictions, will have an important impact on family enterprises. Successful family business owners have the ability to perceive policy opportunities, pay close attention to government policies, acquire, interpret and grasp the key points timely and effectively, and win development opportunities for their enterprises. Cooperative family business owners often get information from customers through customer visits and traditional cooperation, through formal relationships, and then integrate it as the future direction of the product.

Thus it can be seen that the entrepreneurial spirit of family business owners enables enterprises to conduct a lot of market analysis, the spirit of exploration enables enterprises to actively interpret policies, and the spirit of cooperation enables enterprises to maintain formal cooperative relations, which promote the need to identify the adjustment of product portfolio. In addition to the spirit of cooperation, the enterprising spirit strengthens the enterprise's product positioning, which determines the choice and planning of the enterprise's strategic transformation. The spirit of adventure makes the business owner establish the sense of emergency, it and enterprising spirit together promote the implementation of the change of product structure. The data encoding process is illustrated in table 6.

Table 6 Examples of categories, concepts and their representative data coding processes

Deputy category	Category	Typical concept example	Example of representative data	Source
Market analysis	Short-term market observations; Estimate the market	Market research; Risk feasibility analysis	By staying on the market for three or four months, I know which products are selling well, and we can make them when we open a factory in the future	ALL
Formal relationship	The customer guide	Customer Suggestions	When we cooperated with HY enterprise, we felt that the output value of straw was small and the profit was low. HY suggested us to produce glass bottles with large output value and high profit. After that, our brothers set up another enterprise to make glass bottles	ALL
Product positioning	On-demand services; Product positioning	Make it nice and fine	The company divides its products into three grades: high, medium and low. It feeds its enterprises with low-end products and invests its energy and resources to develop high-end products to improve its profits	ALL
Emergency consciousness	Get rid of the crisis	Get rid of redundant business	Had done waterproof building materials before, but did not make big, consider the company's core technology is not in this, so did not have long then immediately cut down	ALL
Policy interpretation	Policy sensitivity	Make the product that the country encourages	China's natural rubber shortage, the country encourages recycling, we chose to use waste tires	XZ\SL\HM\LS\XC

4.2.2 The influence of family business entrepreneurship on industrial transformation

(1) Industrial transformation.

Firstly, industrial diversification transformation. With the growth of enterprises, family business owners don't content with the enterprise, the current situation of development of gradually expand the scale of the enterprise, the traditional industrial structure adjustment is the family business to Rio extend the starting point of the deep level of industry, family business owners exploring spirit, entrepreneurial spirit and adventurous spirit to promote the enterprise to develop leading industries related business. Government policies play a role of policy regulation and guidance in industrial transformation, and the exploratory spirit of family business owners is reflected in their high policy sensitivity to some extent. Family business mainly explores the policy changes that are taking place or brewing in a timely manner, analyzes the effective information in the national policy, and captures various opportunities arising therefrom. In view of the above analysis, this paper finds that the exploratory spirit of family business owners makes enterprises actively interpret policies and promote enterprises to identify new opportunities in the market. Entrepreneurship enables enterprises to exert synergies and determine the direction of industry-related diversification transformation. The spirit of adventure makes business owners establish emergency awareness and promotes the implementation of industry-related diversification transformation. The data encoding process is illustrated in table 7.

Table 7 Examples of categories, concepts and their representative data coding processes

Deputy category	Category	Typical concept example	Example of representative data	Source
Synergistic effect	Develop new business; Establish coordination mechanism	Set up many branch factories based on rubber	We already have one and two rubber factories, and we plan to set up a trading company to provide sports materials and installation works	XZ\JD\SL\HM\LS
Emergency consciousness	Dare to challenge; Get rid of the crisis	Challenge new business	Only do agent market bureau limited to a few local places, so I resolutely carry out the production and sales of soy products, but distribution is as a	XZ\JD\SL\HM\LS

			sideline in doing	
Policy interpretation	Policy sensitivity	Set up the company according to the policy	The country made a new policy, I went to interpret, according to the policy set up a guarantee company, in order to be able to absorb some capital, create more profits	HM\LS

Secondly, get rid of non-core businesses. Due to their entrepreneurial spirit, family business owners timely obtain effective information, make rapid strategic adjustment according to changes in the market environment, and improve and enhance their business according to the assessment of business activities. For example, HM business was originally responsible for delivering services to other food manufacturers, targeting local supermarkets. Its business owners gradually realized that the market share could be smaller and smaller, and that there were many distributors, and later concentrated on food processing to expand the market scope. Thus, the entrepreneurial spirit of family business owners enables enterprises to conduct a lot of market analysis and promote enterprises to identify potential market risks. Entrepreneurial spirit enables enterprises to adopt abandon policies timely, determine and plan the direction of industrial transformation; The spirit of adventure makes business owners establish emergency awareness, get rid of non-core business, play their own advantages. The data encoding process is illustrated in table 8.

Table 8 Examples of categories, concepts and their representative data coding processes

Deputy category	Category	Typical concept example	Example of representative data	Source
Market analysis	Identify market trends	Long-term business exploration	I used to be a snack agent, but after a few years, I found that the market was limited to a few local agents, so I resolutely carry out the production and sales of soy products, but distribution as a sideline in doing	XZ\JD\SL\HM\LS
Abandon the policy	Weigh your advantages; Weighing the advantages and disadvantages of the market; The obstacles	Give up irrelevant business	With whom to deal with, friends are slowly looking for opportunities, the original choice to do catering is a wrong decision, because the friends and our main business is completely irrelevant, so we do after a period of time decisively gave up	XZ\JD\SL\HM\LS
Emergency consciousness	Get rid of the crisis	Get rid of redundant business	After I take over decisively give up rural credit cooperatives, because a year less than how much money, but also a waste of energy	XZ\JD\SL\HM\LS

4.2.3 The influence of family business entrepreneurship on regional transformation

(1) Explore the domestic market

Entrepreneurial family business owners, faced with a growing market share gap, can timely observe the current market situation, understand the needs of domestic customers, assess future market risks, design and establish product strategies to gain domestic market share. The exploratory spirit of the family business owners enables the enterprise to make full use of the opportunity of the trade fair to actively conduct market exploration and customer development activities. For example, the second generation of HM business successor every year actively participate in the spring and autumn sugar and wine meeting, the main purpose is to find customers. Family business owners also have a keen sense of market, actively door to find business opportunities, mining market gaps, for the future rapid development of the domestic market to create an advantage. The founder of SL welding materials evaluated the local competitive pressure of welding materials based on the geographical location and local economic development of hainan, and adopted the preconceived strategy to occupy the hainan market first. In terms of market exploration, family business owners interpret government policies, keep pace with the development of The Times, carefully plan marketing strategies and actively conduct exploration activities. LS real estate every time the development of new land will actively follow the national policy, in advance to interpret.

The above case analysis shows that the entrepreneurial spirit of family business owners enables the enterprise to conduct a large number of market analysis, the spirit of exploration enables the enterprise to actively grasp the market opportunities, policy interpretation, and the spirit of cooperation enables the enterprise to maintain a formal cooperative relationship. In addition to the spirit of cooperation, the spirit of responsibility makes enterprises pay more attention to brand building, provide employment opportunities for family members and the society, and the enterprising spirit makes enterprises focus on improving their business image. The spirit of learning enables business owners to sum up their experience, the spirit of professionalism enables enterprises to increase their technical needs, and the spirit of enterprise promotes the development and implementation of the domestic market. The data encoding process is illustrated in table 9.

Table 9 Examples of categories, concepts and their representative data coding processes

Deputy category	Category	Typical concept example	Example of representative data	Source
Market analysis	Evaluate the market and establish the main business; Diversification of risk; Weigh the market	Provide raw materials for key customers; Look at where the market is going	We started with the production of recycled rubber. When we saw that there were thousands of shoe-making factories in the area, we decided to provide raw materials for the sole. At that time, the market was in short supply, so the benefits were very good	ALL
Brand construction	The brand image	Set up the brand	Establishing a good brand image is helpful to expand the market scale	ALL
Take on family responsibilities	Employment opportunities; Building a family vision; Keep the family together	Involvement of family members; The career development	In the enterprise, family members take over more, relatives have to rely on the enterprise to do something	ALL
Assume corporate responsibility	Provide taxes; Building corporate vision	Paying tax lawfully; Inheriting the enterprise	Become a legitimate tax paying enterprise, gain a foothold in the market, and return to the society	ALL
Formal relationship	Customer dependence; Peer relationships; The customer guide	Radiation effect of customer market; Company introduction; Agent introduction	HB oilfield is headquartered locally. Through HB oilfield, we see that petrochina is a market and the oilfield needs our products. Therefore, we have successively carried out cooperation with other bases of petrochina	ALL
Informal relationship	Friend introduction; Liaison with government agencies; Other relationships	make friends	Go to where all want to make a friend, this building is built through the introduction of a friend	ALL
Business image	The quality of the product	Regulating product quality	Manufacturing enterprises can not avoid product problems, I control within the scope of the affordable, to ensure that the standard product quality, in the industry to get a good evaluation of the market	XZ\SL\HM\LS\XC
The opportunity to grasp	Attend trade conferences and trade fairs	Attend trade shows to find customers	Every spring and autumn sugar and wine fair, every prefecture-level city agents will go, we go to the main purpose is to find customers	XZ\SL\HM\LS\XC

(2) Implement enterprise internationalization

Family business owners imbued with professional spirit ensure the smooth implementation of overseas business by understanding the relevant processes of international business and developing and utilizing international knowledge. Business owners surveyed all said that to do export business, they need to have professional marketing knowledge and English skills, so they regularly attend professional education and training to improve their skills. At the same time, the enterprise has the necessary business qualifications to enable the enterprise to carry out the internationalization strategy smoothly. Through the above multi-case analysis, this paper concludes that the cooperative spirit of family business owners enables enterprises to maintain formal and informal cooperative relations, and promotes enterprises to identify the needs of internationalization. In addition to the spirit of cooperation, the entrepreneurial spirit strengthens the goal planning of enterprises, which determines the choice and planning of enterprises' internationalization. The professional spirit urges the enterprise to increase the technical demand, promoted the enterprise internationalization implementation. The data encoding process is illustrated in table 10.

Table 10 Examples of categories, concepts and their representative data coding processes

Deputy category	Category	Typical concept example	Example of representative data	Source
Goal programming	Formulate blueprint	Set goals regularly	We have weekly meetings with our staff, including expanding into other	ALL

			markets, and we develop strategies and goals	
Formal relationship	Customer contact; Foreign entrepot	Build relationships with customers; Introduction to mining company	We have established a cooperative relationship with petrochina	ALL
Informal relationship	Other relationships	Friend introduced	Many foreign orders are obtained through the introduction of friends	ALL
Technical requirements	Know the links; professional	Technical certification; Qualification certificate; Intellectual engagement	When you cooperate with many foreign enterprises, people will look at your products to see whether they are certified or not, so we try to make our products meet the industry standards in order to apply for certification	ALL

5. CONCLUSION AND DISCUSSION

It is found that the entrepreneurial spirit of family business is composed of the spirit of innovation, entrepreneurship, responsibility, cooperation, enterprising, professional, adventure, exploration, learning and professionalism. Although professional spirit is one of indispensable important family business entrepreneurship spirit, but its effect on the family enterprise strategic transformation is not obvious, in addition to the professional spirit, nine other kinds of family business entrepreneurship based on different combinations to the transformation of family enterprises products, industrial transformation, regional transformation had an obvious promoting effect, respectively. Specifically reflected in: the entrepreneurial spirit of innovation, entrepreneurship, cooperation, enterprising spirit, adventure spirit, exploration spirit, learning spirit and professional spirit drove the family business to achieve product transformation; The spirit of innovation, entrepreneurship, cooperation, adventure and exploration drove the family business to achieve industrial transformation. Entrepreneurship, responsibility, cooperation, enterprising, exploration, learning and professionalism drive the family business to achieve regional transformation. This article also found additional entrepreneurship to identify strategic transformation requirements, selection and planning strategic transformation, promote the implementation of strategic transformation of role and influence, family business entrepreneurship prompted the family business owners shows strategic decision-making behavior to promote the development of the strategic transformation process, and then drive the family business more than three different strategic transformation.

First of all, the entrepreneurship, the spirit of exploration and the spirit of cooperation have strengthened the family business owners' understanding of the needs of enterprise strategic transformation. Entrepreneurs with entrepreneurial spirit generally have a forward-looking strategic vision, enterprises take strategic action to fully examine and analyze the market and business activities. Through a lot of information collection and investigation and analysis of the market environment, family business owners can identify the future development direction of the enterprise and lead the enterprise to take a step ahead. The spirit of exploration is reflected in the family business owners' recognition of opportunities and crises in the changeable market, their careful judgment of the market environment, understanding of the market development trend, and seeking new opportunities for enterprise development. The government and the family business have always maintained an interdependent relationship. The family business owners have an insight into and grasp the factors of the government and an accurate understanding of the future direction of the government, so as to better understand the strategic transformation needs of the enterprises. Cooperative family business owners have a large social network. When it is difficult for enterprises to add new products or expand markets according to the needs of end users, they will explore the need of strategic transformation of enterprises through these formal relationships with customers and informal relationships such as friends and relatives.

Secondly, the spirit of cooperation, entrepreneurship, responsibility, innovation and enterprising play a key role in the direction selection and planning of the strategic transformation of enterprises. The spirit of cooperation makes family business realize the need of strategic transformation. Family business owners make use of the power of formal and informal relationships to formulate specific methods and implementation plans for strategic transformation. In complex dynamic environment, have entrepreneurial family business owners need to encourage enterprises to form synergies and abandon policies, based on existing resources and ability, to each business unit for effective integration and optimization, abandon those anachronistic, hindering the development of the enterprise transformation, establish an effective coordination mechanism. At the same time, the family business owners will make the corresponding strategic transformation plan according to the development law of the market and the analysis of the current situation of the market. In order to smoothly implement the strategic transformation of the enterprise, the family business owners will consider the improvement of the business image of the enterprise, pay attention to the brand construction of the product, refine the product market, and strengthen the product positioning. The establishment of business image and product positioning fully explain the enterprising spirit of family business owners, while brand building is one of the concrete embodiment of family business owners' spirit of responsibility. In addition, the family business owners also family responsibility and social responsibility, not only to ensure that the family business built to last, also for family members and the whole society to provide employment, for the enterprise and society created the economic and social benefits, for countries to provide sources of tax revenue, in another Angle embodies the spirit of family business owners to bear. Family business owners give play to the spirit of innovation, encourage the enterprise to have the courage to try, to bear the losses and consequences of the experiment, through the formation of a trial-and-error culture in the enterprise, decided the choice of strategic transformation direction of family business.

Finally, the entrepreneurial spirit, adventurous spirit, learning spirit and professional spirit successfully promoted the implementation of strategic transformation of family business. Entrepreneurship makes family business owners in the practice of strategic transformation, must have a detailed understanding of the enterprise's resources and capabilities, to be able to make a rational allocation of resources to help the enterprise to obtain the best benefits. Family business owners with the spirit of adventure have insight into opportunities and the ability to take risks. When the enterprise is in danger, they no longer persist in the conservative attitude, but react quickly, rise to the challenge, dare to take the lead, and stimulate the rapid transformation of family business. In the process of daily business management, family business owners keep the spirit of continuous learning. They mainly promote the successful implementation of strategic transformation of family business by summarizing the experience of past failures and successes and learning new knowledge from others. Family business owners with professional spirit persist in the standard and pursuit of professional skills, and require to increase their own professional quality, improve the quality of products and services, and improve the professional skills of enterprises, which all play a role in promoting the development and implementation of the strategic transformation of enterprises.

REFERENCES

[1]Maria Margarida De Avillez, Andrew Greenman, Susan Marlow. Ethical Judgments About Social Entrepreneurship in Sub-Saharan Africa: The Influence of Spatio-Cultural Meanings. Journal of Business Ethics, 2020, 161(1): 877-892.

[2]Sklaveniti, Steyaert. Reflecting with Pierre Bourdieu: towards a reflexive outlook for practice-based studies of entrepreneurship. Entrepreneurship & Regional Development, 2020, 32(3-4): 313-333.

[3]David B. Audretsch, Erik E. Lehmann, Matthias Menter, et al. Intrapreneurship and absorptive capacities: The dynamic effect of labor mobility. Technovation, 2020, (2): 308-326.

[4]Christopher J. Boudreaux. The Importance of Industry to Strategic Entrepreneurship: Evidence from the Kauffman Firm Survey. Journal of Industry, Competition and Trade, 2020, 20(3): 93-114.

[5]Gulsen Kirpik. Entrepreneurship, Professionalism and Leadership Intention of Generation Z. SEISENSE Journal of Management, 2020, 3(2): 58-72.

[6]Desmond Osaretin Oriakhogba. Empowering rural women crafters in KwaZulu-Natal: the dynamics of intellectual property, traditional cultural expressions, innovation and social entrepreneurship. South African Law Journal, 2020, 137(1): 145-172.

[7]Esmat Mohamed Abdel Moniem el sayed. Small and Medium Entrepreneurship in Saudi Arabia's Vision 2030 and Its Role in Reducing Unemployment in the Kingdom of Saudi Arabia. Research in World Economy, 2020, 11(1): 86-108.

[8]Aning Az Zahra, Aftina Nurul Husna, Ahmad Liana Amrul Haq. Dinamika Pengambilan Keputusan dan Perkembangan Jiwa Wirausaha pada Mahasiswa. Psympathic: Jurnal Ilmiah Psikologi, 2019, 6(1): 111-130.

[9]Hongjun Guan, Zhen Zhang, Aiwu Zhao, et al. Research on Innovation Behavior and Performance of New Generation Entrepreneur Based on Grounded Theory. Sustainability, 2019, 11(10): 88.

[10]Riot. Patterns of intention: Oberkampf and Knoll as Schumpeterian entrepreneurs. Entrepreneurship & Regional Development, 2019, 31(7-8): 623-651.

[11]Laguía González, Jaén, Topa, et al. University environment and entrepreneurial intention: the mediating role of the components of the theory of planned behaviour / El entorno universitario y la intención emprendedora: el papel mediador de los componentes de la teoría de la acción planificada. Revista de Psicología Social, 2019, 34(1): 137-167.

[12]Susmi Biswas, Arunangshu Giri. Issues & Challenges of Management Institutions in West Bengal: A swot analysis. ZENITH International Journal of Business Economics & Management Research, 2019, 9(9): 1-8.

[13]Shabana Abdulkhaliq Memon. A never die entrepreneurial spirit-case of a struggling entrepreneur. JIMS8M: the Journal of Indian Management & Strategy, 2019, 24(2): 59-63.

[14]Alex Jingwei He. Manoeuvring within a Fragmented Bureaucracy: Policy Entrepreneurship in China's Local Healthcare Reform. The China Quarterly, 2018, 236: 1088-1110.

[15]Giliberto Capano, Maria Tullia Galanti. Policy dynamics and types of agency: From individual to collective patterns of action. European Policy

Analysis, 2018, 4(1): 23-47.
[16]Fabrice Hervé, Armin Schwienbacher. CROWDFUNDING AND INNOVATION. Journal of economic surveys, 2018, 32(5): 1514-1530.
[17]Marc Debus, Jale Tosun, Marcel Maxeiner. Support for Policies on Entrepreneurship and Self‐Employment among Parties and Coalition Governments. Politics & Policy, 2017, 45(3): 338-371.
[18]Mallevi Agustin Ningrum. Peran Keluarga dalam Menumbuhkan Jiwa Wirausaha Sejak Usia Dini. JP (Jurnal Pendidikan), 2017, 2(1): 39-43.
[19]Hailipitimu Aibibula, Gege Wang, Chengcheng Zhang. Religious Belief and Firm R& D Investment. Technology and Investment, 2017, 8(2): 142-150.
[20]Gabriel CROITORU, Mircea DUICA, Ofelia ROBESCU, et al. Entrepreneurial Resilience, Factor of Influence on the Function of Entrepreneur. Risk in Contemporary Economy, 2017, 1: 193-216.