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# CONTENTS

<b>Research on the Essence of Interaction Relationship of Ideological and Political Education Based on Spiritual Communication in the Era of Big Data .....</b>	<b>1</b>
<i>Litao Ji</i>	
<b>Research on the Innovative Development of Intelligent Physical Education Teaching in Universities .....</b>	<b>5</b>
<i>Zhihui Jing, Lirong Chen</i>	
<b>The Practice of Modern Apprenticeship Pilot Project Construction in Mechanical Specialty.....</b>	<b>9</b>
<i>Fanyong Bu, Xinbo Xu</i>	
<b>Exploration and Practice Of School-Enterprise Cooperative Education Mechanism Based On Modern Apprenticeship System.....</b>	<b>11</b>
<i>Yongjiang Cheng, Fengjin An</i>	
<b>Research on Teaching Diagnosis and Improvement of Modern Apprenticeship Pilot Project .....</b>	<b>14</b>
<i>Yuxi Fang</i>	
<b>Problems and Countermeasures of Modern Apprenticeship Project Implementation .....</b>	<b>16</b>
<i>Jinhua Li</i>	
<b>The Analysis of Skills for Translating English Movie Subtitles into Chinese Subtitles -Taking the Translation of Douban Top155 English Movies as An Example .....</b>	<b>18</b>
<i>Yangxiang Ma</i>	
<b>Advance the Modernization of Educational System and Capacity for Governance.....</b>	<b>20</b>
<i>Liping Wang</i>	
<b>Current Situation and Countermeasures of Self-Employment of Graduates Majoring in Music Performance in Universities.....</b>	<b>22</b>
<i>Ning Wang</i>	
<b>The Practice Exploration of Modern Apprenticeship in Mechanical Manufacturing and Automation Specialty in Higher Vocational Colleges.....</b>	<b>24</b>
<i>Cangang Zhang</i>	
<b>Development and Research of Intelligent Manufacturing Technology and System.....</b>	<b>27</b>
<i>Lei Zhang</i>	
<b>Analysis of Opportunities and Challenges Faced by Digital Libraries in The Era of Big Data .....</b>	<b>29</b>
<i>Caihong Wang</i>	
<b>Analysis of English Audio-Visual and Oral Independent Learning Mode Based On "Iflytek Fif Intelligent Teaching Platform" .....</b>	<b>32</b>
<i>Liguo Wang</i>	
<b>Analysis on The Construction Strategy of The Ecological Environment of Art Education in Colleges and Universities Based on Wechat Platform .....</b>	<b>34</b>
<i>Hai Wang</i>	
<b>Analysis on Teaching Reform Strategy of Environmental Engineering Under the Background of Engineering Education Accreditation .....</b>	<b>36</b>
<i>Qingfeng Wang</i>	
<b>Comparative Analysis of English And Chinese Idioms Based on History and Customs.....</b>	<b>38</b>
<i>Xiaolan Wang</i>	
<b>The Impact of The Epidemic on Cross-Border E-Commerce Business Promotion.....</b>	<b>40</b>
<i>Jia Wei</i>	
<b>Study on The Development of Children's Creativity and The Countermeasures of Education and Teaching .....</b>	<b>42</b>
<i>YunFang Wen, Hyunah Seo</i>	
<b>On Constructing the Collaborative Mechanism of Ideological and Political Education in Colleges and Universities in The New Era .....</b>	<b>44</b>

Zhenpeng Xia

<b>Research on The Construction Path Of "Double Teachers and Double Abilities" Teaching Staff In "Transformation" Pilot Universities.....</b>	<b>47</b>
<i>DaoPing Xu, GuiYing Gui, BeiBei Liu</i>	
<b>Discussion on Urban Public Space Design Based on Tod Development Mode.....</b>	<b>49</b>
<i>Junhui Yang, Wanyi Zhang, Jun Lu</i>	
<b>Study on Urban Street Design Based on Tod Concept .....</b>	<b>51</b>
<i>Junhui Yang, Wanyi Zhang, Jun Lu</i>	
<b>Cultural Consideration and Exploration of College English Education.....</b>	<b>53</b>
<i>Fei Yao</i>	
<b>Analysis of The Application of Block Chain Technology in The Logistics and Express Industry.....</b>	<b>55</b>
<i>Jun Ye</i>	
<b>The Analysis of Professional Associations In Colleges And Universities To Enhance The Innovation And Entrepreneurship Ability Of College Students .....</b>	<b>57</b>
<i>Peng Yin</i>	
<b>Analysis on the Construction and Implementation of Ideological Education in Intensive Reading Course for English Majors .....</b>	<b>59</b>
<i>Hui Zhang</i>	
<b>Analysis on The Application of Cultural Creative Product Design in Sichuan Opera Communication.....</b>	<b>61</b>
<i>Jingjing Zhao</i>	
<b>Research on Enterprise Financial Management Innovation Model Under Hainan Free Trade Port Policy.....</b>	<b>63</b>
<i>Xiaoqiong Zheng, Yan Tu</i>	
<b>Research and Practice of Online and Offline Mixed Teaching Mode of Ideological and Political Course in Colleges and Universities.....</b>	<b>65</b>
<i>Xinyi Zhou</i>	
<b>To Explore the Effect of Pain Nursing Intervention in Patients with Gastric Cancer After Resection .....</b>	<b>68</b>
<i>Chengfeng Cao, Kehong Feng, Yubo Jiang</i>	
<b>Impact of Interest Rate Liberalization: Analysis on Bank Liquidity Creation.....</b>	<b>70</b>
<i>Ruihua Chen, Baowei Li, Yun Zhang, Chunsheng Zhang, Ping Yang, Jiaming Zhang</i>	
<b>Cultural Differences and Handling Methods in Tourism English Translation.....</b>	<b>75</b>
<i>Mingyu Yin, Xiaolei Tian, Xiaona Jiang</i>	
<b>The Significance of College Chinese Teaching to Campus Culture Construction in Higher Vocational Colleges.</b>	<b>78</b>
<i>Fang Zhang</i>	
<b>Discusses the Curriculum and The Teaching Theory to Promote the Effective Study the Teaching Countermeasure.....</b>	<b>80</b>
<i>Zhiwen Zhang</i>	
<b>Explore the Computer Application Based on Network Information Security Technology Management .....</b>	<b>84</b>
<i>Jianfei Zhu</i>	
<b>Research on the innovation of cooperative education between Counselors and Political Teachers .....</b>	<b>86</b>
<i>Yongfeng Deng</i>	
<b>Application of Artificial Intelligence Technology in Cruise Interior Design .....</b>	<b>89</b>
<i>YanChi Chen</i>	
<b>Study on The Development Strategy of The Private Colleges and Universities .....</b>	<b>91</b>
<i>Yue Cheng, Wanjun Jia, Yingzi Xu</i>	
<b>Research on The Development of Health Tourism Industry in China.....</b>	<b>94</b>
<i>Xiaohui Deng, Xuefen Li</i>	
<b>Research on the Path of Internet + E-Government Online Mass Line .....</b>	<b>96</b>
<i>Wen Ding</i>	
<b>Discussion on Quality Cost Control and Guarantee in Construction Process.....</b>	<b>99</b>

*Ronghui Gao, Junya Zhang*

**Effectiveness of Minimally Invasive Percutaneous Pedicle Screw Fixation in Thoracolumbar Spinal Fractures**101  
*Qian Guo, Shanjin Wang, Xiaodong Kang, Shuzhang Liu, Zhaohe Kang, Gang Zhou*

**Study on the Application of Tea Culture Combined with Double Grid Management Mode in Student Apartment Management**..... 103  
*Pei Hao, Yanyi Wang*

**Mathematical Logic and Its Application in Computers** ..... 105  
*Chicheng Huang*

**Research on Preschool Art Education Under the Vision of Taishan Culture** ..... 107  
*Guiju Li*

**Application of Artificial Intelligence in Computer Network Technology**..... 109  
*Liangming Li*

**A Brief Analysis of The Ways to Improve the Quality of Foreign Teachers' Specialized Courses for Junior College Students in Sino-Foreign Cooperation** ..... 111  
*Zinuo Li*

**This Paper Discusses the Value of Cloud Computing Technology in Computer Network Security Storage** ..... 113  
*Bo Lin, Xiaoling Xu, Zhaoqiong Mu*

**Professor Tang Lilong's Experience in Treating Allergic Rhinitis with Addition and Subtraction of Lifting Powder**..... 115  
*Sitian Lin, Xiaojun He, Quanlong Wu, Xiaobo Hai, Tiantian An, Lilong Tang*

**Research on the Hindrance Factors and Improvement Countermeasures of Art Innovation Education in Contemporary Universities**..... 118  
*DongMei Liu*

**The Strategy of Infiltrating Humanistic Education Idea in Physical Education Teaching of Higher Vocational Colleges**..... 120  
*Jian Liu*

**A Preliminary Study on The Training Mode of Contemporary University Students Under the Background of Curriculum Reform**..... 122  
*Ying Liu, Heliang Xiao*

**Selection and Optimization of Motor and Reducer for Industrial Robot**..... 124  
*Shanshan Long, Manman Gao, Yongli Chen, Chaona Li*

**A Study on College English Translation Teaching and Flipped Classroom**..... 127  
*Li Lu*

**Research on Algorithms of Multi-Source Information Fusion in The Internet of Things** ..... 129  
*Maoyuan Luo*

**Application of Ultra High Liquid Chromatography in Drug Analysis**..... 131  
*Wenna Ma, Haitao Wang*

**Higher Mathematics Teaching Research Integrating Mathematical Modeling Idea** ..... 133  
*Nan Ning*

**Research on Automatic Production Technology of Cnc Machine Tool Based on Plc Technology** ..... 135  
*Min Niu*

**Investigation and Research on Mental Health Problems of Poor College Students in Old Revolutionary Areas** 137  
*Qi Xiaoqin*

**The Impact of Internet Environment on Cross-Border E-Commerce Consumption Economy** ..... 142  
*Shen Sang*

**To Explore the Anesthesia Convalescence Nursing of Nerve Block Combined with Tracheal Intubation General Anesthesia for Hip Arthroplasty** ..... 144  
*Jiabei Shi, Min Gao*

**Analysis of Machining Error** ..... 146  
*Liping Sun*

<b>The method of Corporation Law -- As the example of forging shareholder's signature.....</b>	<b>148</b>
<i>Tao Ran</i>	
<b>Modular Construction of Civil Engineering Courses in Colleges and Universities .....</b>	<b>153</b>
<i>Tian Tian</i>	
<b>Analysis on The Practical Value of Stratified Teaching Method in Swimming Teaching.....</b>	<b>157</b>
<i>Jingjing Wang</i>	
<b>Study on the System and Mechanism of Mixed Ownership in Higher Vocational Colleges .....</b>	<b>159</b>
<i>XiaoLi Wang</i>	
<b>Innovative Reform of Library Information Work Under the Background of Digital Information .....</b>	<b>161</b>
<i>Yifei Wang</i>	
<b>Discuss How to Design Ac Permanent Magnet Synchronous Servo Motor Control System.....</b>	<b>163</b>
<i>Jian Wu</i>	
<b>Cultural Confidence and The Output Integration of Cultural Elements Under the Background of The New Normal .....</b>	<b>165</b>
<i>Zhe Xu</i>	
<b>The Effective Way of Vocal Music Teaching Reform and Innovation in Colleges and Universities.....</b>	<b>167</b>
<i>Lei Xue</i>	
<b>Study on Current Situation and Countermeasures of Wushu Teaching in Colleges and Universities .....</b>	<b>171</b>
<i>Hongtao Yan</i>	
<b>Exploration of Innovative Paths for College Employment and Entrepreneurship Guidance in The New Media Era.....</b>	<b>173</b>
<i>Meng Yan</i>	
<b>An Analysis of Vocational Skill Training Of "1+x Certificate System "For Architectural Engineering Technology Majors in Higher Vocational Colleges.....</b>	<b>175</b>
<i>Dan Zhao</i>	
<b>Application of New Media Technology in Film and Television Media.....</b>	<b>177</b>
<i>Xiang Zhao</i>	
<b>Research on Three Learning Forms of Gill Withdrawal Reflex in The Aplysia.....</b>	<b>179</b>
<i>Jiamin zhang, Sun-Woo Ko</i>	
<b>Significance and Advantages of New Media Law Popularization .....</b>	<b>185</b>
<i>Changheng Chen, Hetian Zhang, Zhen Liu, Zefeng Xu, Fei Sun</i>	
<b>Research on the Supply Mechanism of Grassroots Community Service Under the Background of Community Governance-- Taking Shunde District of Foshan City as An Example .....</b>	<b>186</b>
<i>Fangping Fu</i>	
<b>Investigation on the Current Situation of Cross-border E-commerce Enterprises' External Publication Text Translation in China.....</b>	<b>193</b>
<i>Wenwen Hu</i>	
<b>On the Artistic Features and Cultural Geographic Features of Du Fu's Longyou Poems .....</b>	<b>196</b>
<i>Yaning Hu</i>	
<b>Thinking on The System Construction Of "Double - Qualified" Teachers in Vocational Colleges .....</b>	<b>198</b>
<i>Cong Li, Zhe Wang</i>	
<b>Research and Analysis of Higher Vocational Continuing Education Under the New Era Background.....</b>	<b>200</b>
<i>Ming Lin</i>	
<b>Study on the agglomeration of tourism industry in Beijing-Tianjin-Hebei Region .....</b>	<b>202</b>
<i>Niya Liu</i>	
<b>Exploring the Practical Path of Situational Creation in Primary School English Teaching.....</b>	<b>205</b>
<i>Jin Liu</i>	
<b>Application Exploration of Computer Software Technology in The Era of Big Data .....</b>	<b>207</b>
<i>Maisi Lv</i>	

<b>Research on the Application of Modern Machinery Manufacturing Technology and Processing Technology ...</b>	<b>209</b>
<i>Fanrong Meng</i>	
<b>Exploration on Teaching Reform of The Course of Computer Application Foundation Under Engineering Education Professional Certification .....</b>	<b>211</b>
<i>Xianhao Miao, Hao Xiong, Chenyang WU, Yong Yuan</i>	
<b>"Experiential Marketing" Under the Complex Commercial Space Design .....</b>	<b>214</b>
<i>Shubei Qiao</i>	
<b>Thinking About the Application Consciousness of Mathematics into The Teaching of Higher Vocational Mathematics Education .....</b>	<b>216</b>
<i>Jianbo Sun, Xuemei Tang</i>	
<b>Challenges and Countermeasures of College Students' Ideological and Political Education in The We-Media Era .....</b>	<b>218</b>
<i>Huili Tang</i>	
<b>Application Analysis of Pdca Theory in Physical Education in Higher Vocational Colleges .....</b>	<b>220</b>
<i>Xuemei Tang, Hui Zhao</i>	
<b>The Effective Form and Long-Term Mechanism of The Integrated Development of University Campus Media in The New Period.....</b>	<b>222</b>
<i>Ke Wang</i>	
<b>Practice Research on Innovative Talent Training Mechanism of Local Transforming Universities in Heilongjiang Province.....</b>	<b>226</b>
<i>Zhili Wang, Nan Liu</i>	
<b>One Belt, One Road, The Training Mode of Business English Compound Talents in Universities .....</b>	<b>228</b>
<i>Xinhong Huo</i>	
<b>Research on Training Mode of Innovative Applied Talents for New Energy Materials and Devices Specialty Based on Practice.....</b>	<b>230</b>
<i>Zhicheng Ju, Zheng Xing, Yaxin Chen, Yueli Shi, Yongli Cui</i>	
<b>Research on The Cultivation of Rule Consciousness in College Football Teaching Under the Background of Curriculum Ideology and Politics .....</b>	<b>233</b>
<i>Yong Li, Jingli Wang</i>	
<b>Coordination to Synergy: A New Realm of Re-Optimization of Regional Development Strategic Relations: Historical Enlightenment Based on The Road Network System of The Eastern Extension of The Ancient Silk Road .....</b>	<b>235</b>
<i>Xiaoyan Lu, Yi Zhang</i>	
<b>Research on Mental Health Education Model of Engineering Postgraduates Based On "Sandwich" Model .....</b>	<b>240</b>
<i>Minghui Qin</i>	
<b>Research on The Cultivation Path of Team Spirit in University Table Tennis Teaching from The Ideological and Political Perspective.....</b>	<b>242</b>
<i>Jingli Wang, Yong Li</i>	
<b>Take Commercial Pedestrian Street as An Example to Explore the Ecological Logo Design in Landscape Design .....</b>	<b>244</b>
<i>Zhengyang Zhang, Tao Wang, Guorui Li</i>	
<b>On the Changing of College English Teachers' Role Under Blended Teaching Model.....</b>	<b>246</b>
<i>Lan Zhang</i>	





# Research on the Essence of Interaction Relationship of Ideological and Political Education Based on Spiritual Communication in the Era of Big Data

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**Abstract:** From the perspective of the ideological and political education in the era of big data, the relationship between the two parties in the process of ideological and political education is a two-way interactive relationship. This kind of interactive relationship essentially has the universal attribute of spiritual interaction and is embodied in the spirit of value orientation. Communication and core value-oriented spiritual communication make the nature of the interactive relationship of ideological and political education hierarchical. Profoundly understanding and grasping the nature of spiritual interaction in the interactive relationship between ideological and political education is the correct value orientation for adhering to the interactive relationship between ideological and political education, and can continuously improve the actual results of the interaction between ideological and political education.

**Keywords:** Big data era; Spiritual communication; Ideological politics

## 1. INTRODUCTION

In the current era of big data, the interactive relationship between ideological and political education is an interactive relationship formed by certain ideological and political education subjects in the process of certain ideological and political education objects, as well as in the process of consciously, programmatically, and organizationally exerting ideological influence. It has the essential attributes of spiritual communication, and is embodied in value-oriented spiritual communication and core value-oriented spiritual communication, so that the nature of the interactive relationship of ideological and political education presents a hierarchy. Therefore, to deeply understand and grasp the nature of spiritual interaction in the interactive relationship between ideological and political education in the era of big data, we should always lead the interactive relationship of ideological and political education with core values, and adhere to the correct value orientation of the interactive relationship between ideological and political education, and promote the interactive relationship between ideological and political education. It is undoubtedly of great value to develop in the right direction, and continuously improve the actual results of the interaction between ideological and political education.

## 2. THE ESSENCE OF THE INTERACTIVE RELATIONSHIP BETWEEN IDEOLOGICAL AND

## POLITICAL EDUCATION BASED ON SPIRITUAL INTERACTION IN THE ERA OF BIG DATA

### 2.1. The construction of interaction model of ideological and political education in spiritual communication in the era of big data

This paper builds a theoretical model of interactive interaction of ideological and political education in the era of big data in the context of the big data. It aims to explore the impact of the interaction of ideological and political education on the spiritual communication among college students, and analyze the mediating role of spiritual communication, and the age of big data. The essential role corresponds to interaction between ideological and political education and spiritual interaction. As one of the external ideological and political education of colleges and universities, college students have received the common concern of the theoretical circles. They have established the interactive relationship between the ideological and political education in colleges and universities, in order to make full use of the interactive resources of the nature of the ideological and political education of college students, and solve the dilemma faced by college education, and to obtain education. Therefore, it is necessary to explore the mechanism of interaction between ideological and political education and the interaction education on college students' spiritual communication. Knowledge is the cornerstone of the interactive nature of ideological and political education. The influence of interaction between ideological and political education on the interactive nature education may occur through spiritual interaction. The interaction of ideological and political education on spiritual interaction may be affected by the era of big data. Therefore, according to the different stages of the conception of the interactive nature of ideological and political education, this paper divides the spiritual communication of college students into three dimensions: conception, research and practice of the ideological and political education. In the theoretical and practical context, the theoretical model of this paper came into being.

In addition to the interactive relationship between the nature of ideological and political education and college students' communication and exchange, college students can also interact through instant messaging tools, which is the supplementary spirit interaction in this research. This paper proposes the following assumptions:

H1: The interactive nature of ideological and political

education has a positive and positive effect on college students' spiritual communication.

H1a: For the nature of ideological and political education, the basic interaction among college students has a positive influence on the concept of interaction.

H1b: The nature of ideological and political education. The interactive relationship between complementary and spiritual interaction has a positive impact on the concept of essential interaction.

H1c: The interactive nature of ideological and political education. The basic interaction between college students has a positive influence on the conception of essential interaction.

H1d: The nature of ideological and political education, and the interactive relationship, and the complementary spirit interaction have a positive influence on the study of the concept of essential interaction.

H1e: The nature of ideological and political education. The interaction of basic interactions has a positive effect on the concept of essential interactions.

H1f: The nature of ideological and political education, and the interactive relationship, and the complementary spirit interaction have a positive impact on the essential interaction and practice.

## **2.2. Measurement of interactive variables of ideological and political education based on spiritual interaction in the era of big data**

(1) Measurement of the interaction of ideological and political education

Measured according to indicators such as interaction frequency, interaction time, interaction scope and interaction mode are based on the specific circumstances of the study, and modify existing measurement items, and finally determine measurement items.

(2) Interactive control variables of ideological and political education

This paper combines interviews with teachers and classmates around the school and the actual situation. This study will be subject to the most controlled variables for college students to participate in class time to ensure that this study is more accurate. Among them, the degree of education is divided into junior college, undergraduate, graduate students and above, and the time for college students to participate in the interactive relationship between the nature of ideological and political education is divided into 6 months and below, 6 months to 1 year, 1 to 3 years, 4 years and above. The empirical data needed in this study were collected using a questionnaire survey. The questionnaire consists of two parts: the first is basic personal information, including information on gender, age, education, etc. The second part is a measurement scale for variables, and the options for the items are divided into seven intentions. There are two ways to issue formal questionnaires online. Firstly, in the interactive relationship between the nature of ideological and political education, formal questionnaires are connected and people are asked to answer questionnaires in the classroom one by one. The second is through the Internet, they are distributed in the form of emails and instant messages to the essential interactive relations that have

participated in ideological and political education.

(3) Interactive data collection of ideological and political education

This research survey was conducted from November 2017 to February 2018. A total of 300 questionnaires were distributed and a total of 187 questionnaires were retrieved. The recovery rate was 88.5%. In order to ensure the reliability and validity of the questionnaire, it is necessary to test the reliability and validity of the small sample data, and correct the questionnaire items based on the data analysis results. The research of this study has obtained 128 valid questionnaires, and it is planned to use SPSS17.0 to test the reliability and validity of the survey data.

## **2.3. The reliability analysis of the interaction of ideological and political education based on spiritual communication in the era of big data**

Reliability analysis is a measure of the reliability and stability of the questionnaire and that is to evaluate whether each variable has internal consistency with the corresponding question item in the questionnaire. At present, Cronbach's Alpha coefficient is the most commonly used in academic circles as a criterion. The higher the value of  $\alpha$  is, the higher the accuracy of the questionnaire design is, and the smaller the error received between different problem items is. Scholars generally believe that 0.7 is the minimum acceptable  $\alpha$  coefficient. If the coefficient is above 0.8, it means that the scale of the questionnaire has high reliability. Based on the above criteria, SPSS17.0 is used to test the Cronbach's Alpha coefficient of the survey data overall scale and the coefficient of each subscale.

The result shows that the coefficient of the total table is 0.822, which is significantly greater than the minimum standard of 0.7, indicating that there is a good internal consistency between the overall indicators of the total table. The coefficient of the interactive ideological and political education scale is 0.866, and the coefficients of the two subdivided dimensions of the basic interaction and the supplementary spiritual interaction are 0.882 and 0.814, respectively. The coefficient of the spiritual interaction of the mediator variable is 0.778, and the knowledge acquisition and knowledge contribution are two dimensions. The coefficients are 0.862 and 0.794 respectively; the coefficient of the college students' spiritual interaction is 0.868, while the essence of the interactive nature of ideological and political education, the interactive conception of the nature of ideological and political education, and the interactive conception of ideological and political education are 0.839, 0.872, 0.848, respectively. From the above results, it can be seen that whether the variables or the coefficients of the sub-dimension of each variable are greater than 0.7, the Cronbach's Alpha value of each measurement item does not increase significantly, and the corrected correlation coefficient is greater than 0.6, which can explain the use of this study. The scale has a good degree of credibility.

## **2.4. Interactive validity of ideological and political education based on spiritual communication in the era of big data**

The validity test is used to reflect the accuracy of the measurement results to measure the content of the measurement. The validity analysis includes content validity and structure validity. This paper uses factor analysis to measure the structural validity of each variable scale. Before factor analysis, KMO test and Bartlett sphericity test are needed to determine whether the data can be analyzed by factors. This paper uses SPSS17.0 statistical software, using factor extraction method and maximum variance rotation method. Factor analysis has the variables of ideological and political education interaction, spiritual communication, and college student spiritual interaction to test its structural validity.

#### (1) Analysis of interactive effectiveness of ideological and political education

In this paper, firstly, the interaction between ideological and political education, including basic interaction and supplementary spiritual interaction, is carried out by the KMO metric and the Bartlett sphericity test. The results show that the KMO value is 0.749 and the Bartlett sphericity test is 0.001. The level is significant, so the ideological and political education interactive scale is suitable for factor analysis. A factor analysis was performed on the measurement items of the two variables of basic interaction and supplementary spiritual interaction in the questionnaire. From the table, it can be seen that the load values of the first five items of basic interaction on the first factor are higher, and the values of the load of the five items of spiritual interaction on the second factor are higher, indicating basic interaction and supplementation. The 10 items of spiritual interaction have a good structural validity.

#### (2) Analysis of validity of college students' spiritual communication

The mediator variables in this study have two dimensions of knowledge acquisition and knowledge contribution. KMO metrics and Bartlett sphericity test of spiritual interactions have a KMO value of 0.738. The Bartlett sphericity test has a significance level of 0.001, so it is suitable for factor analysis. Factor analysis has the two dimensions of knowledge acquisition and knowledge contribution factor analysis, exploratory factor analysis results. The three items of knowledge acquisition have the highest load on the first factor, and the three items of spiritual communication have the highest load on the second factor. Therefore, knowledge acquisition and spiritual communication have better discriminate validity. In this study, the college students' spiritual interactions of the dependent variable are divided into three dimensions: the conception of the interactive nature of the ideological and political education, the interactive conception of the nature of the ideological and political education, and the interactive conception and practice of the ideological and political education. The KMO was first applied to the measurement items of these three dimensions. The statistical analysis results show that the KMO value of college students' spiritual communication is 0.803, and the Bartlett sphericity test is significant at the level of 0.001. Therefore, the college students' spiritual interaction scale is suitable for factor analysis. The 3 items of measure

items generated by the interactive concept of ideological and political education have the highest load on the 3rd factor, and the 3 items on the interactive conception of ideological and political education have the highest load on the 2nd factor, with the nature of ideological and political education. The 4 items of interactive practice have the highest load on the first factor and the spirit of college students.

#### (3) Analysis of the essential effect of the interaction between ideological and political education

This paper examines the method of sequential testing of the interactive nature of the big data era. First, the basic interaction and big data era are placed in the regression equation, and then the basic interaction and the era of big data are used to cross multiply, and the dependent variable is the knowledge acquisition or knowledge contribution. Step-by-step regression, determined by the regression analysis results, has an essential interaction between basic interaction and knowledge acquisition, basic interaction, and knowledge contribution in the era of big data. Similarly, the same method is used to test complementary spiritual interaction and knowledge acquisition and supplement spiritual interaction. The essential effect of interaction is with knowledge contribution. Models (1) and (2) test the essential effects of the interaction between basic interaction and knowledge acquisition in the age of big data. Models (3) and (4) test the interaction between complementary spiritual interaction and knowledge acquisition in the age of big data. The supplementary spiritual interactions in model (8) and product terms in the era of big data ( $\beta=0.024$ ,  $P>0.05$ ) have no significant regression coefficients, suggesting that the era of big data has a significant interactive essential effect on basic interactions and knowledge contributions and on complementary spiritual interactions. There is no significant interactive essential role with knowledge contribution. In the era of big data, for the essential interaction between basic interaction and knowledge acquisition, supplementary spiritual interaction and knowledge acquisition, basic interaction and knowledge contribution, the big data era all play a significant positive interactive essential role.

### 3. CONCLUSION

At present, deepening and developing the core value-oriented spiritual exchanges in the interactive relationship between ideological and political education in the era of big data must pay particular attention to dealing with the relationship between dominance and diversity in value leadership in the interactive relationship. The Internet is a new area of ideological and political education. Ideological and political education is the new form of ideological and political education. Leading value in the interactive relationship of ideological and political education is a new topic of ideological and political education. Therefore, we must attach great importance to the interactive relationship of ideological and political education in the era of big data, and insist on using socialist core values to lead the spiritual exchanges in the network field, and consciously use the socialist core value system to analyze, and identify and lead the diversified social trends and values in the network field. Concepts lay

a solid ideological foundation for realizing the Chinese dream of a great rejuvenation of the value of its own life.

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# Research on the Innovative Development of Intelligent Physical Education Teaching in Universities

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**Abstract:** With the arrival of the information age, China's higher education has entered a new stage of development, so it is also urgent to promote the innovation and reform of intelligent physical education teaching in colleges and universities. From the overview of intelligent sports, this paper analyzes the importance of the innovation of college physical education teaching, and puts forward the innovative strategy of intelligent physical education teaching in universities, aiming to build an efficient intelligent physical education classroom and education teaching system.

**Key words:** Universities; Smart Sports; Innovation And Development

## 1. AN OVERVIEW OF SMART SPORTS

At present, most teachers still do not innovate the traditional teaching concepts and means in time, and the teaching elements introduced in the actual teaching can not meet the actual needs of contemporary college students. In the background of "Internet +" era, information technology gradually has wide application prospects in various industries, and university sports education should also follow the development trend, to the Internet as the carrier to promote the innovation and reform of colleges and universities, all teachers to innovative view the future development direction of sports teaching, relying on intelligent network platform to bring new sports learning experience, improve college wisdom physical education teaching quality and level, promote the development of sports teaching.

Under the background of the continuous development and popularization of Internet information technology, the Internet is gradually inextricably related to the public's daily production and life, and sports industry should conform to the development of the new era, the "Internet +" and physical education teaching, to the wisdom of college sports education work to provide technical support. At the same time, when carrying out smart sports education under the background of "Internet +", we should also deeply study the positive impact of smart sports education on national fitness, and study the characteristics, functions and implementation strategies of smart sports, to provide reliable reference for the smooth progress of national fitness sports in China.

Smart sports essentially belongs to the Internet-based new sports mode, in the process of actual construction must cater to the big data, Internet of things, cloud computing information technology development trend, based on the new era development normal analysis future sports

development concept and construction direction, also need to fully consider the feasibility of the smart sports, China sports information framework, really create good prerequisite for Chinese sports innovative development and reform, in the implementation of the national fitness concept proposed by the State Council to achieve the strategic goal of sports power.

Based on this, wisdom sports refers to the reference to the wisdom earth, wisdom town, wisdom transportation, wisdom medical mode derived from modern sports mode, in the actual construction process of the cloud computing, Internet, big data, virtual simulation technology, positioning navigation technology, and with the support of wisdom sports China sports can also develop in the direction of wisdom and security, really for healthy China construction played a vital role in promoting.

## 2. THE IMPORTANCE OF PHYSICAL EDUCATION TEACHING INNOVATION IN UNIVERSITIES

When promoting the innovation and reform of college education and teaching under the background of the new era, relevant teachers should adopt more diversified teaching methods and means to improve the enthusiasm of students to invest themselves in classroom teaching activities, so as to bring more novel classroom learning experience to students. However, at present, most Chinese colleges and universities still lack educational innovation, especially in the process of physical education teaching in colleges and universities, some teachers have not changed their traditional education concept in time. In fact, as an important course to exercise students' physical fitness, strengthen students' psychological quality, and promote the comprehensive and balanced development of students, physical education courses have played a vital role in students' daily study and life. This requires college teachers to follow The Times, actively promote the innovative development of college physical education teaching, relying on advanced Internet platform and information technology to create online and offline teaching mode, to provide students with more sufficient independent thinking time, according to their subjective consciousness free arrange learning time and learning plan, really give students certain autonomy, break the traditional teaching in time and space, make teachers correctly view the individual differences between different students, by teaching students at all levels with targeted teaching guidance.

When promoting the innovation and reform of college physical education teaching based on the background of

"Internet +", it is also necessary to highlight the main position of students from the aspects of teaching methods, teaching concepts and educational ideas, so that teachers and students can maintain close communication, and truly regard students as the protagonist of college physical education teaching in the new era. However, it should be noted that the innovation of physical education teaching in universities should not only be limited to teaching methods and teaching concepts, but also focus on the cultivation of students' innovation ability, and stimulate students' innovative thinking as far as possible in the practical teaching process, so as to effectively promote the comprehensive and balanced development of students.

### **3. INNOVATIVE DEVELOPMENT AND IMPLEMENTATION STRATEGY OF SMART PE TEACHING IN UNIVERSITIES**

#### **3.1 Effectively integrate educational resources and establish the concept of lifelong sports**

In recent years, China has attached more and more attention to the cultivation of students' physical quality, and universities need to not only pay attention to the explanation of basic theoretical knowledge, but also to guide students to establish the ideology of lifelong physical education from the ideological level. Based on the intelligent network platform, colleges and universities in physical education teaching should effectively integrate existing education resources, such as sports open class, physical education course resources, and students can combine their interest preferences using mobile phone, computer and other terminal equipment for independent learning, and in daily learning, life choose interested in network video to exercise, so as to cultivate students form lifelong sports consciousness and habits. For example, physical education teachers can draw the action teaching of Taijiquan into micro class videos, encourage students interested in Taijiquan to observe and practice independently, or show students badminton related movements and skills in micro class videos, so that students can apply it to badminton action exercises. With the support of the intelligent sports education platform in colleges and universities, it not only effectively extends the teaching space, but also appropriately increases the practice intensity of physical action teaching, and truly implements the physical education teaching into the actual situation of students' life. In addition, the use of intelligent network platform can also realize the teaching mode of human-computer interaction, teacher-student interaction, and student-student interaction, prompting students to form a good habit of independent thinking in the process of exploration, and then guide students to establish the idea of lifelong learning in a step by step way.

#### **3.2 Innovate the teaching concept and highlight the main position of students**

Physical education teaching in Chinese colleges and universities has long taken the main mode of oral transmission. Whether in indoor teaching or in sports venues, teachers need to explain physical action skills and relevant theoretical knowledge, students imitate the demonstration actions made by teachers and conduct independent exercises on this basis. Although this

teaching method can improve the efficiency of classroom teaching, the main position of students can not be highlighted, and students also lack basic enthusiasm in the process of classroom learning, especially in the process of action practice may be perfunctory attitude, which is not conducive to the sports teaching goals put forward in the new curriculum standards. But with the support of the Internet platforms, Physical education teachers can utilize advanced information technology and platform equipment, Micro-class video to present students an intuitive and three-dimensional teaching picture in the video, Teachers can also upload videos to a designated physical education network platform, Students are required to download their own micro-course videos according to their own actual needs, In the face of the problems and puzzles existing in the learning process, you can also actively interact with the teachers online, In order to provide scientific and effective guidance for students through online answering questions, Or teachers can also analyze and sort out the questions raised by students online, Take offline guidance to students in a unified way, Effectively improve the efficiency of physical education teaching. At the same time, teachers can also use the smart platform to effectively integrate students' fragmented time, so that students can learn independently anytime and anywhere. In track and field hurdle teaching, for example, teachers can use multimedia courseware to play hurdles related video, or in basketball teaching show basketball action skills, requires students in the process of watching each sports action points, and encourage students to use spare time for independent practice, and record it into video uploaded to the designated network platform, by the teacher online comments and guidance.

#### **3.3 Realize hierarchical teaching and respect students' individual differences**

In the process of traditional physical education teaching, teachers usually make demonstration actions, and students focus on imitation and practice. This teaching method makes it difficult for the teachers to take into account all the students, and the students with a solid physical education foundation are likely to lose interest in learning the subsequent content after completing the action, or to learn other projects after the action practice. And the students with weak sports foundation are difficult to learn a complete set of actions within the limited class hours, which affects the whole classroom teaching efficiency to some extent. Therefore, in the process of intelligent physical education teaching innovation in colleges and universities, physical education teachers can rely on flipping classroom teaching mode to break the limitations of time and space, adopt the combination of online teaching and offline teaching mode, guide students to watch the content to learn online, and through the interaction of online video and teachers. At the same time, students can also use their spare time to repeatedly watch the teaching videos in the network platform, so as to better master the action skills and technical points explained in the classroom teaching. In addition, physical education teachers should also consciously establish the concept of hierarchical teaching, and formulate hierarchical teaching

plans according to the learning situation of different classes. For example, the physical education teacher to carry out dance teaching, can record in the process of lesson preparation single, two, and collective dance video, and insert the corresponding explanation content in the video, and students in the pre-class practice can freely choose companions to cooperate, and then directly show students 'practice results in classroom teaching, at the same time organize other students to watch the student's dance action, finally make targeted guidance and summary. For the problems of students, teachers also need to focus on guidance, and record them into a video and upload them to the online platform, requiring students to practice repeatedly in their spare time.

#### 3.4 In-class and extracurricular combination, to build a diversified evaluation system

Smart physical education teaching in colleges and universities to some extent reflects the life-based curriculum view, so in the construction process of physical education classroom, we should focus on the cultivation of extracurricular physical exercise habits. Extracurricular practice teaching is originally another supplement and continuation of classroom teaching. Only by organically combining extracurricular practice teaching with classroom teaching can it form a complete sports teaching system. Therefore, when improving the evaluation index of physical education teaching, we can determine their comprehensive results from the aspects of physical education courses, mid-term results, peacetime results and extracurricular assessment materials. When evaluating students 'class performance, you can refer to students' attendance records, physical quality level and special indicators. Organize students to participate in extracurricular assessment, can use the simple application software, require students to complete about 90km running every semester, in order to combine boring class assessment and extracurricular assessment, through a variety of evaluation methods and means to improve the subjective initiative of active participation in physical exercise, and provide the authenticity and reliability of the final assessment results basic guarantee. In fact, in the background of increasing modern scientific and technological means, a variety of advanced devices or equipment applications were born. For example, in the assessment process of physical education teaching in colleges and universities, teachers can collect students' sports with sports bands, punching instruments and other equipment, and use the data and information obtained to analyze and integrate the big data platform. After setting the corresponding management system in the sports equipment, it can be fixed in the sports field to achieve the unsupervised purpose. In the system in the process of real-time monitoring students 'attendance records, physical quality indicators, special test performance and extracurricular exercise, digital data processing, can be according to a specific category into the performance evaluation system, so that through multiple dimensions to detect students' physical exercise, and teachers can also grasp students 'physical quality indicators and extracurricular exercise, and the subsequent teaching plan,

greatly reduce the work burden of teachers, make it better deal with students' supervision and management of physical exercise.

#### 4. CONCLUSION

Based on the big data era background, promote college physical education innovation and reform has become the inevitable result of the development trend of the new era, and universities should also use the opportunities of digital, intelligent, information development, from teaching concept, teaching content, teaching evaluation and teaching resources to build a new college sports teaching system, under the support of information, intelligent platform to give new development power, make college sports courses and information technology means, truly provide technical guarantee for the comprehensive and balanced development of college physical education.

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# The Practice of Modern Apprenticeship Pilot Project Construction in Mechanical Specialty

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**Abstract:** At present, under the situation of education reform, increasing the development and implementation of modern apprenticeship has become an important measure to promote the deepening reform and further development of higher vocational education, which is conducive to promoting the connotation development of higher vocational education. To this end, the article mainly discusses the problems existing in the current higher vocational colleges implementing the modern apprenticeship of machinery specialty pilot system, and puts forward several countermeasures, hoping to help the smooth development of this work.

**Key Words:** Higher Vocational Colleges; Modern Apprenticeship; University-Enterprise Cooperation

## 1. PROBLEMS FACED BY THE PILOT IMPLEMENTATION OF MODERN APPRENTICESHIP IN HIGHER VOCATIONAL COLLEGES

### 1.1. Lack of sound regulations and regulations

Modern apprenticeship is a systematic project, which mainly includes schools, enterprises and governments, etc. In order to run smoothly, sound systems and regulations should be adopted to maintain the project. However, in the current pilot implementation of modern apprenticeship in higher vocational colleges, due to the lack of sound laws and regulations and management, many links are difficult to proceed smoothly, can only rely on the school itself or the communication and exchange with other colleges and universities to carry out effective management. This not only leads to the greatly reduced efficiency of the implementation of modern apprenticeship, but also lays a potential safety hazard [1-4].

1.2. The cooperation enthusiasm of enterprises is not high, and the phenomenon of hot school and cold enterprise is serious

According to the development of pilot work of modern apprenticeship in some vocational colleges, the common problem is that schools are more active, while enterprises remain indifferent. Even if some enterprises participate in this process, it is only to prepare for recruiting excellent employees, and they are not willing to invest more manpower and material resources. The main reasons for this phenomenon are as follows: First, enterprises attach more importance to interests than development, and are afraid of taking the risk of talent cultivation; Second, students' practical ability is insufficient, unable to hold positions with higher technical requirements.

1.3. Difficulties in effectively coordinating employment and sustainable development issues

In recent years, due to the wrong understanding of employment-oriented problems in higher vocational

colleges, the current higher vocational education has gradually appeared the phenomenon of alienation, which can not effectively cultivate high-quality and high-ability talents. Some higher vocational colleges in the implementation of this measure pointed out that only in accordance with the needs of enterprises and post requirements to set up teaching content and professional courses, has a strong pertinence, once the students transferred from the training post, it is difficult to find a corresponding post. Furthermore, higher vocational education should take promoting the comprehensive and sustainable development of students as the teaching concept, and should pay attention to the education of people first, and then develop vocational education.

## 2. COUNTERMEASURES TO PROMOTE THE PILOT IMPLEMENTATION OF MODERN APPRENTICESHIP IN HIGHER VOCATIONAL COLLEGES

### 2.1. Establish a sound system and regulations

Relevant national legislatures should formulate reasonable legislative procedures to effectively deal with the problems existing in the pilot implementation of modern apprenticeship, and promote the smooth progress of the work through certain guidance work, so as to implement the smooth implementation of modern apprenticeship teaching mode. Local governments and education departments should also formulate detailed rules and standards to reasonably divide their rights, responsibilities and obligations, so as to avoid differences among education subjects due to cognitive biases.

2.2. Stimulate the active participation of enterprises by comprehensively applying guidance and incentive measures

First of all, it is necessary to select enterprises for cooperation in a targeted way, and ensure that they have real needs and have the ability to train talents, so as to fully rely on the actual needs of enterprises to carry out pilot work of modern apprenticeship. Secondly, it is necessary to effectively divide the responsibilities of schools and enterprises to ensure the benefits of enterprises. The two sides need to work out cooperation agreements with legal effect, and ensure that recruitment and recruitment are carried out simultaneously, so as to clarify the dominant position of enterprises, ensure that enterprises can recruit apprentices that meet their own needs, and ensure that students can go to work upon graduation, so as to dispel the concerns of enterprises. Finally, local governments should formulate relevant preferential policies to mobilize the enthusiasm of enterprises to participate.

2.3. Specific measures to improve the modern apprenticeship system

Higher vocational schools should actively cooperate with

enterprises to carry out pilot work of modern apprenticeship system and take the initiative to contact enterprises to seek further cooperation. Enterprises and schools should set up relevant institutions based on the analysis of their own characteristics and formulate a series of measures to protect their own interests. At the same time, the government also needs to formulate implementation rules and relevant support policies. In addition, some government functions can be entrusted to trade associations through the purchase of services, so as to link schools and enterprises closely.

2.3.1 Develop talent training programs and build curriculum systems. In the education teaching theory and modern apprenticeship thought under the guidance of many aspects, such as internal personnel training mode in higher vocational colleges to study, to understand the status of the machinery manufacturing industry development and talent demand trends, find out the industry jobs, and careful analysis and job tasks of the professional knowledge, professional ability and basic quality, and provide professional construction reform train of thought, Work out a new talent training program.

Although there are orders for students to be trained, the talent training program and curriculum system construction are not only for one enterprise. After graduation, students should have the general basic knowledge and skills of the industry. Therefore, industry experts, professional teachers and enterprise masters are all involved in the course system construction. Industry experts guide students' basic skills and professional quality, professional teachers grasp the logical relationship between students' cognitive rules and courses, and enterprise masters assist in providing job tasks.

Tripartite cooperation, together to form a professional group, to study and discuss the necessary courses in the curriculum system, the forerunner and follow-up links between courses, the connection and cooperation between school theory teaching and enterprise practice, the assignment of teaching tasks and other issues. Based on the enterprise's full participation in the talent training process, it can provide necessary resources and human resources support. In the formulation of talent training programs and curriculum construction, it can appropriately strengthen the cultivation of students' practical ability and corporate identity, and implement

some courses with high practical requirements in the enterprise. The practical curriculum of the school has also been reformed. Teachers focus on teaching knowledge framework and key points, reduce demonstration experiments, and let students think by themselves and complete comprehensive experiments by hand, so as to cultivate students' ability to deal with comprehensive problems and lay a foundation for their internship in enterprises.

To sum up, the effective implementation of modern apprenticeship teaching mode is related to the sustainable development of higher vocational colleges. In addition, this teaching reform measures help higher vocational colleges to more targeted implementation of teaching plans, and for the development of society and enterprises to provide corresponding high-quality talents, which also fully realize the connection between higher vocational education and industrial needs, is conducive to promoting the national talent training plan.

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# Exploration and Practice of School-Enterprise Cooperative Education Mechanism Based on Modern Apprenticeship System

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**Abstract:** Higher vocational education is always a very important stage of education in vocational education in our country, in the modern apprenticeship training mode, the modern enterprise of higher vocational college students with higher skill requirement, in order to be able to let the students to quickly adapt to modern enterprise working environment, higher vocational colleges are actively create synergy between colleges education mechanism, The aim is to cultivate more high-quality and skilled professionals.

**Key Words:** Modern Apprenticeship; Cooperative Education; Exploration And Practice

## 1. THE CONCEPT OF MODERN APPRENTICESHIP

Modern apprenticeship is a jointly by higher vocational colleges and enterprises put forward the mode of talent training, teaching object facing modern apprenticeship students in higher vocational colleges can be, also can be in the enterprise want to learn the technical workers, by completing the modern apprenticeship learning, students can choose to continue to study in the school study, Skilled workers in enterprises can apply the skills they learned during their apprenticeship to their future production activities. They can either study in schools or work in factories, so that they can get a certain amount of pay while learning. Modern apprenticeship in the pilot operation development, higher vocational colleges to cultivate more talents, enterprise development need to connect closely with industry form in, is our country vocational education development path, at the same time embodies the education of "lifelong learning", cultivate and improve the students' professional level and practical ability to innovate, Enterprise education and vocational education in higher vocational colleges are linked together to promote the coordination and common development between the two[1-3].

## 2. CHALLENGES FACED BY HIGHER VOCATIONAL COLLEGES AND SCHOOL-ENTERPRISE COOPERATION UNDER THE BACKGROUND OF MODERN APPRENTICESHIP SYSTEM

### 2.1 Lack of systematic policy design

From higher vocational colleges in our country the actual situation of the development of modern apprenticeship, university-enterprise cooperation development level is not high, lack the systematic policy design, rarely provide students with "double identities", local government work do not reach the designated position, not to play well in the government department in the leading role in the development of university-enterprise cooperation, Thus in

many higher vocational colleges and the modern enterprise financial funds nervous, no ability to university-enterprise cooperation projects, on the basis of students practice operating within vocational equipment and software are very old, failed to timely maintenance of update and system upgrade, due to the university-enterprise cooperation project link loopholes and a lack of policy system, development of modern apprenticeship in China at a standstill, It fails to give full play to the characteristics and advantages of modern apprenticeship, imitates the modern apprenticeship model of other countries too much, but fails to carry out school-enterprise cooperation projects in combination with the actual situation of the school.

### 2.2 Lack of regularized industry supervision and management

For higher vocational students, the lack of standardization of the supervision and administration of industry and not to set up a special audit team, so it is difficult to implement education in higher vocational colleges cultivate and modern enterprise talent demand of seamless docking, cannot produce social development need the skills of qualified personnel, supervision and management of this lack of standardization, Makes the modern apprenticeship in the university-enterprise cooperation in higher vocational schools can't play to the role of the right and value, not sure about the future development of the teaching goal, and with modern apprenticeship coordinated development between higher vocational colleges and the relevant laws and regulations are also missing, the higher vocational colleges of university-enterprise cooperation projects like a ship without direction, there is no scientific principles, the development of the industry nature also walk not to long term.

### 2.3 There is no correct awareness of school-enterprise cooperation in education

As modern apprenticeship is jointly completed by modern enterprises and vocational colleges, in the actual process of talent training, enterprises and vocational colleges will still have different emphases or even divergences on the concept of talent training. The fundamental reasons of talent training philosophy split because no coordination good modern enterprise and the interests of the relationship between higher vocational colleges, higher vocational education wants to be able to produce more theory several innovative talents, and the modern enterprise is hope that the innovation of training more skilled technical personnel, if you can't set up the correct concept of talent training, It will lead to the disordered

management of modern apprenticeship in the practice of talent cultivation and fail to form a common school-enterprise cooperative education consciousness.

2.4 Lack of incentive measures for cooperative enterprises  
In recent years, with the continuous development and deepening of the modern apprenticeship talent training mode, many higher vocational colleges have carried out school-enterprise cooperation projects with a relatively large scale and well-developed modern enterprises. However, in the process of actual cooperation, they are still faced with problems such as low level of cooperation and imperfect cooperation mechanism. No corresponding incentive measures to relevant cooperation enterprises, enterprise cooperation's enthusiasm is not high, many enterprises are not willing to take out of time and energy in university-enterprise cooperation to train students to start from scratch, no incentives means that enterprises pay training effort may not get any return, cannot balance in higher vocational colleges, the relations between and among students, and the modern enterprise, It hinders the establishment of the school-enterprise cooperative education mechanism.

### 3. STUDY ON THE SCHOOL-ENTERPRISE COOPERATIVE EDUCATION MECHANISM OF VOCATIONAL COLLEGES BASED ON MODERN APPRENTICESHIP SYSTEM

#### 3.1 Improve the school-enterprise cooperative education policy

In the context of the development of modern apprenticeship system, in order to better build the school-enterprise cooperative education mechanism between vocational colleges and modern enterprises for students, we can start from the direction of improving the school-enterprise cooperation policy and improve the communication efficiency between vocational colleges and enterprises. When improving the school-enterprise education policy, Higher vocational colleges need to learn from the western developed countries advanced university-enterprise cooperation development mode, the fusion between higher vocational colleges and enterprises ", "engineering integration" personnel training mode combined with the education policy of local government, combined with the area of the local economic development level in higher vocational colleges, and implementation of university-enterprise cooperation education policy, through the policy should play the role of guidance, Build a professional school-enterprise cooperation platform, summarize the shortcomings of vocational students in school-enterprise cooperation practice, and then better improve vocational students' practical application ability, and innovate the school-enterprise cooperation education model based on modern apprenticeship system.

#### 3.2 Strengthen supervision of school-enterprise cooperation projects

After improving the school-enterprise cooperative education policy, higher vocational colleges should further strengthen the supervision and management of school-enterprise cooperation projects under the guidance of modern apprenticeship system, improve the long-term

operation mechanism of school-enterprise cooperation, and build an "open" and "sharing" school-enterprise training base. At the same time attract more qualified modern enterprises to actively participate in and into the university-enterprise cooperation, actively promote the development of professional education integration, strengthen students practice operating system, makes the double main body of the synergy between colleges education management mechanism, the enterprise of higher vocational students in the process of internship evaluation to the students' comprehensive quality assessment of Then strengthen the role of local government in "guaranteeing basic needs" and "promoting fairness", let vocational colleges and modern enterprises reach consensus on student talent training, and build a cooperative education model of school-enterprise co-management and shared responsibility. In the coordinated development of the two, the supervision consensus can be further reached.

#### 3.3 Encouragement and incentive measures shall be implemented for the JV

Based on modern apprenticeship training background, higher vocational colleges, when combined with a modern enterprise to carry out the cooperative education between colleges need to carry out the encouragement and incentives of related cooperative enterprises, improve the higher vocational students in university-enterprise cooperation financial accounting internship performance evaluation mechanism, implement dynamic management accounting students in higher vocational colleges, The problems arising from students' internship should be returned to higher vocational colleges in a timely manner, and the cooperative enterprises should be perfected from the aspects of policies, systems and personnel training mechanism. Local governments in the regions where higher vocational colleges are located should provide some preferential policies and subsidies to the cooperative enterprises. In this way, modern enterprises can have more funds to invest in the maintenance and upgrading of financial accounting system and software, and more energy to invest in the training of professional skills of vocational students. For example, they can create education practice bases in vocational colleges and send excellent employees to carry out practical teaching activities in vocational colleges.

### 4. CONCLUSION

To sum up, based on modern apprenticeship vocational university-enterprise cooperation project implementation, must balance the interests of the relationship between the higher vocational students and enterprises, and realize the win-win development of both sides, improve modern enterprise's ability to drive professional technology development, improve and perfect the cooperative education mechanism and constructing the practice base and Then cultivate more professional and skilled talents needed for the development of modern enterprises.

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# Research on Teaching Diagnosis and Improvement of Modern Apprenticeship Pilot Project

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**Abstract:** Since entering the 21st century, the cause of education has been greatly improved, followed by the emergence of "modern apprenticeship", aimed at promoting the development of talents, can be quickly integrated into the society, and strengthen their own learning, means the combination of education and labor, belongs to the school-enterprise cooperation, the combination of work and study. In this mode, students can strengthen the opportunity to practice, and realize the unity of knowledge and action, which can be regarded as a good teaching method.

**Key Words:** Apprenticeship; Pilot Project; Teaching Diagnosis

## 1. INTRODUCTION

In today's social environment, to pilot apprenticeships develop smoothly and effective implementation, and summarize and should do well in innovation, to find a correct path in the continuously explore and conform to the actual situation of roads, this paper mainly through professional diagnosis and improve the process and content, this paper discusses the modern apprenticeship pilot professional diagnosis and improvement, hope to provide some constructive Suggestions for education industry.

## 2. THE CONNOTATION AND SIGNIFICANCE OF MODERN APPRENTICESHIP AND TEACHING REFORM

At present, the modern apprenticeship teaching mode is proposed, which means the integration and improvement of new education and traditional education. Some experienced and skilled teachers cooperate with the school as representatives, which is a cross-field combination of the industry and the school. Apprenticeship is not strange, it is the combination of school needs and enterprise needs, to achieve common education measures. On the one hand, schools and enterprises create a good learning environment for students and obtain the free phenomenon of integration of practice and theory. On the other hand, in the cooperation between enterprises, it means that students have more job opportunities.

From an objective point of view, the society now pays more and more attention to the education cause, because now we are in an important moment of national transformation, and the demand for quality talents is increasing. As the education base, the quality of education determines the future development of the country, so the innovation of education cause is an inevitable trend. In addition, the disadvantages of the former school-

enterprise cooperation form have gradually been exposed, and modern apprenticeship has become the focus of cooperation again [1].

Moreover, the application of modern apprenticeship has been gradually widely, because people realize the advantage, can better cultivate students, in the beginning ability, ability to solve the problem, the thinking transformation ability have good stimulates, and work-integrated learning mode, is to satisfy the students for conversion and validation theory practice, if in the long term of guidance, Students can develop a good attitude towards life and work, is a modern talent should have good quality.

## 3. THE PROCESS AND CONTENT OF PROFESSIONAL DIAGNOSIS AND IMPROVEMENT

### 3.1 Professional positioning diagnosis

The teaching program and teaching content of medical specialty should be further studied and integrated, so as to provide a high-quality teaching environment for students and determine the educational objectives of colleges and universities. Moreover, the construction of medical specialty is different because of different specialties, so the infrastructure construction should be analyzed and talents should be trained accordingly.

### 3.2 Diagnosis of professional courses

According to professional courses, diagnosis can be roughly divided into the following three aspects:

3.2.1 The overall structure of the course is mainly the duration of the course, the arrangement of theory and practice, and the reaction between the content of the two and the students.

3.2.2 Curriculum and teaching materials. For example, the development of some technologies is approaching maturity, and the teaching resources are abundant and easy to understand, so students can accept them easily and apply them skillfully. There are also some professional teaching emphasis on innovation, so professional teachers need to make comprehensive lesson preparation, the content of which should be neatly typeset, concise and comprehensive.

3.2.3 Curriculum implementation management. The management mentioned here is about students' daily study and attendance, etc., and then learn about students' understanding of major and specific study, and then adopt some methods.

### 3.4 Diagnosis of professional conditions

Diagnosis of professional conditions involves numerous contents, like teacher level, relevant conditions, a few hardware equipment that the student contacts, relevant

school-enterprise cooperation, specific funds and so on. Among them, the teachers are very easy to understand, including teachers in school and front-line personnel of enterprises. The specific diagnosis of professional conditions affects the pilot development in the later stage.

### 3.5 Diagnosis of professional results

Diagnosis of professional results is an important factor, which is related to the formation and understanding of students' later employment, professional knowledge and accomplishment, practical ability, social consciousness and quality. For the investigation of employment situation, it is more clear to use data directly. Through understanding the employment rate of students in major in recent years, and then making statistics, analyzing the declining data can provide some suggestions for future employment. Next is the analysis of professional knowledge and practical ability, specifically the performance of students in school, as well as some indicators obtained in the later period. The contents of these indicators are required certificates: practice certificate and graduation certificate. Social service awareness is a permanent work, requiring schools to imperceptibly guide students and create cultural atmosphere on campus, such as cultural bulletin boards, blackboard newspapers, social public welfare activities, etc., so as to stimulate students' service awareness and develop noble feelings [2].

### 3.6 Specialized diagnosis

Diagnosis of specialty characteristics is a long-term work. What we need to do is to understand the future trend and development prospects of the specialty, and then get out of the complex environment and information, and complete the innovation and reform in colleges and universities with goals and brains, which is in line with the reality and can promote the growth of students. The formulation of professional characteristics must be based on the teaching quality and standards to ensure the effectiveness of teaching. In addition, professional education can cover all parts of the society and better serve the society. Then, we can choose the enterprises that share the housing, so as to maintain long-term development.

## 4. PROFESSIONAL DIAGNOSIS AND IMPROVEMENT OF MODERN APPRENTICESHIP PILOT SYSTEM

### 4.1 Establishment of diagnostic index system

The construction of the diagnostic indicator system is a complex work. The first thing to think about is the model of apprenticeship, and what are the outstanding features, which are usually: Enterprise and school cooperation targets, how long, how should the practice teaching, teachers and how to divide the responsibility of the master, how to arrange, etc., as well as in teaching for the students to emphasize the combination of theory with practice, teacher and the teacher can effective cooperation, designed to ensure that students have the standardized

assessment, management, can join operation efficiently.

### 4.2 Strengthen procedural diagnosis

Process diagnosis refers to the operation status of each link in the implementation of apprenticeship system in colleges and universities. It can complete the three processes of collection, exclusion and analysis by means of collection and whole. The process of data collection is based on quantification, which indicates that data should be classified and removed in the later work to avoid the interference of invalid data. Only in this way can the truly effective information be analyzed. In general, it is carried out by combining big data and automation. After a comprehensive analysis of each major, a more detailed score can be obtained to provide a basis for later summary.

### 4.3 Based on the diagnostic report

Data processing is a very critical process. After the actual processing is completed, schools and enterprises should conduct a joint analysis of the data. The specific processing is not limited to the year and month, but the two sides should put forward their own problems in the end, aiming at deeper exploration, instead of focusing on the appearance. Then we can determine the specific measures for the cultivation of skilled and professional talents, and then provide advantageous services for the modern society.

## 5. CONCLUSION

To sum up, it is a brief analysis of the research on teaching diagnosis and improvement of modern apprenticeship pilot project. In view of the above discussion, it can be seen that apprenticeship is a way of education proposed in the new era, which emphasizes the cooperation between schools and enterprises, as well as the cultivation of talents. In this paper, several suggestions are put forward for the diagnosis and improvement of modern apprenticeship pilot project: the construction of diagnostic index system, the strengthening of process diagnosis, and the diagnosis report according to diagnosis.

## ACKNOWLEDGEMENT

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# Problems and Countermeasures of Modern Apprenticeship Project Implementation

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**Abstract:** Modern apprenticeship refers to the school and enterprise cooperation vocational education system, which is an ideal vocational education system, has a positive effect on the training of professional talents. However, at the present stage, there are some problems in the implementation of modern apprenticeship project, which seriously affect the implementation of the project, which is not conducive to improving the relevant vocational education and training system, thus reducing the quality of apprenticeship work. Therefore, countermeasures should be formulated to solve the implementation problems, so as to cultivate more high-quality modern apprentices. This paper will discuss the problems existing in the implementation of modern apprenticeship programs, and put forward corresponding solutions, hoping to provide valuable reference for related research.

**Key Words:** Modern Apprenticeship; Existence Of Problems; Countermeasures

## 1. INTRODUCTION

In order to improve the talent training system of vocational education, the implementation of modern apprenticeship project has become an important way, which is also a way to train professional talents. However, according to the specific situation of the implementation of the modern apprenticeship project, there are some problems, such as the lack of enthusiasm of both parties to participate in the project and the serious loss of teachers, which leads to the ineffective implementation of the project. Therefore, it is necessary to strengthen the construction of teaching staff, implement the implementation of modern apprenticeship project well, prevent the phenomenon of large enterprises poaching teachers with high salaries, and at the same time, it is necessary to refine the relevant work content, so as to improve the implementation quality of modern apprenticeship project.

## 2. PROBLEMS EXISTING IN THE IMPLEMENTATION OF MODERN APPRENTICESHIP PROGRAMS

### 2.1 Problems in talent training mode

In carrying out the modern apprenticeship project work, it is necessary to combine the actual situation to train, so as to avoid the blindness of the project implementation, so as to implement the specific content of the modern apprenticeship project. But at this stage, the personnel training mode there is a big problem, such as formal serious, blindness, and some not seriously study, in the implementation of the actual work is carried out in accordance with the traditional personnel training mode to carry out the project of cultivating this leads to a lack of

scientific nature, and then dismissed the participation enthusiasm of the students. In addition, the internship positions provided by enterprises are often simple manual operation projects, and students cannot receive systematic training, resulting in the low efficiency of modern apprenticeship projects [1].

### 2.2 Problems in teacher team construction

According to the current situation of the implementation of the modern apprenticeship program, there is a problem that the construction of teachers is not perfect enough. On the one hand, the structure of the teaching staff is not reasonable. Many teachers in vocational colleges lack practical ability. They often have a higher level of education but lack of teaching experience. On the other hand, some colleges and universities are short of high-quality teaching talents, and some highly qualified teachers will be hired by big enterprises with large sums of money, which further aggravates the brain drain.

### 2.3 Low efficiency of teaching management

At present, higher vocational colleges are faced with many restrictions, many teaching activities are only in accordance with the "superior instructions", there is no substantial innovation, which leads to the teaching management work has been seriously affected. In this case, the management mode of higher vocational colleges can not meet the development needs of students, and it is easy to eliminate the enthusiasm of students to participate, which leads to the adverse impact on the cultivation of students' thinking consciousness. When students enter the enterprise, on the other hand, after the internship, faces strict enterprise management mode can feel disoriented, this negative emotions affect students' future career outlook, so must strengthen the attention to the teaching management, improving flexibility of modern apprenticeship project implementation, to cultivate high quality talent [2].

## 3. SOLUTIONS

### 3.1 Build a team of dual tutors

In order to solve the current problems in modern apprentice in the process of project implementation, the need to pay attention to on construction of teaching staff, can adopt the method of double mentor faculty construction, try to choose a high level of competence and degree of teachers, to clear its own boot responsibility, strengthen the guidance and help of students, to lay a good foundation for the modern apprenticeship project implementation. In addition, the school should also establish a scientific audit system, including technical evaluation and recruitment, annual performance, etc., to give appropriate encouragement to outstanding teachers, which is helpful to stimulate the enthusiasm of teachers, and then alleviate the serious loss of teachers. In addition,



the school should also encourage teachers to go to enterprises for training, so that students can practice with teachers, which can not only build a good relationship between teachers and students, but also promote the further implementation of the modern apprenticeship program.

### 3.2 Strengthen training and improve teachers' teaching ability

For modern apprenticeship program implementation, the condition of the teachers' training effect is not obvious, this leads to the modern apprenticeship system project implementation does not reach the designated position, so should strengthen efforts to teacher's training, improving teachers' teaching ability, encourage teachers can possess the quality of professional spirit and teaching ability, and then provide professional guidance and help for the students., schools need to hire a relevant personnel to guide the modern enterprise, the purpose is to enhance the school teachers' practical ability, teachers can convert text theory to practical experience, help to improve the level of enterprise and school teaching, to cultivate high-quality professionals, meet the demand of students' learning and personality development, It lays a good foundation for future career life [3].

### 3.3 Establish a sound teaching management system

With the development of higher vocational education, the past single management model has been unable to meet the needs of teaching development, so it is necessary to timely innovate the past teaching management system, in order to meet the needs of students' physical and mental development. In order to break the restriction of the traditional teaching management system, we should establish a perfect teaching management system, and integrate the actual situation into it, so as to break the restriction of the traditional teaching management. In this regard, the teaching management mode of alternating learning and training can be adopted to continuously improve the flexibility of teaching management, clarify the teaching responsibilities of enterprises and schools, and change the management evaluation mode. In this way, the characteristics of enterprise teaching and school teaching can be fully played, and then the modern apprenticeship project can be truly implemented.

### 3.4 Establish an integrated education mechanism for enterprises and schools

Through the cooperation between the enterprise and the school, a perfect integrated education mechanism can be established, so that students can participate in the operation of the enterprise, so that they can receive the

enterprise culture in advance, and then play the role of training students' quality and ability. In this regard, schools should formulate scientific talent training programs, strengthen cooperation with enterprises, formulate relevant performance assessment standards, and jointly undertake the work content of modern apprenticeship project, so as to implement the internship work of apprenticeship enterprises in place. Through the establishment of the education mechanism, some colleges and universities can clarify the specific content of the implementation of the program, which is helpful to improve the traditional education model in the past, so as to bring into play the education effect of the modern apprenticeship program.

## 4. CONCLUSION

At the present stage, the social competition is becoming increasingly fierce. In order to cultivate more high-quality professionals, it is necessary to innovate with the help of modern apprenticeship program, constantly improve the comprehensive quality and ability of students, so that they can get in touch with the corporate culture in advance, so as to lay a good foundation for future work. For colleges and universities, they should timely solve the problems existing in the modern apprenticeship program, improve the past single teaching management mode, and pay attention to the diverse personality development of students. Only in this way can they meet the physical and mental development needs of students, and then cultivate high-quality professionals.

## ACKNOWLEDGEMENT

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# The Analysis of Skills for Translating English Movie Subtitles into Chinese Subtitles -Taking the Translation of Douban Top155 English Movies as An Example

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**Abstract:** With the development of economy, as a carrier of culture, movies are widely popular all over the world. Since China announced the introduction of English movies, a large number of them have flooded into the Chinese market. However, the translation of English movie subtitle into Chinese varies in quality due to the difference between Chinese and English. Many excellent English movies could not attract people's attention because of poor subtitle translation. Based on the 155 English movies that appeared in Douban (a China's civil platform on which people evaluate movies) top250, this article analyzes the translation skills of English movie subtitles into Chinese, and summarizes the film data and proportions of translation skills. It is hoped that some common rules can be found to provide reference for film translators so as to improve translation, thereby promoting the dissemination of the movie.

**Keywords:** English Movies; Subtitle Translation; Translation Skills; Movie Data; Proportion

## 1. OVERVIEW

The appear of film provided mankind the means to record and reproduce reality in the form of moving images. As a product of cultural and artistic processing, film plays an indispensable role in promoting cultural exchanges. A great amount of excellent English films have entered into China since announcement of English films introduction was made in 1994. At the same time, movies are not only artistic, but also commercial in the context of the rapid development of economic globalization. Therefore, how to translate English movie subtitles that are generally accepted by the Chinese people will have a huge impact on the box office, which has always been a concern. A appropriate English subtitle translation can not only convey the meaning of the original subtitle, but also leave a deep impression on people and stimulate people's desire to watch. 155 English films from the top 250 latest Douban films were selected and translation techniques were analyzed in the article in order to summarize the translation techniques of generally accepted.

## 2 .TRANSLATION SKILLS OF ENGLISH MOVIE SUBTITLES

The popularity of a movie depends on how to translate the textual information and length of movie subtitle. This part will discuss common skills for translating English movie subtitles into Chinese subtitles, hoping to improve the translation accuracy.

### 2.1 Translation skills of textual information

The translation skills of textual information mainly include transliteration, literal translation, free translation, amplification, omission.

#### 2.1.1 Transliteration

The transliteration aims to achieve a similar pronunciation between English subtitles and Chinese ones. For example, the movie *Avatar*, which is translated in Chinese as "A Fan Da (Chinese phonetic alphabets)", which is easier to read. Similar films also include *Titanic* which is translated as "Tai Tan Ni Ke Hao"(in Chinese phonetic alphabets), *Modern Times* as "Mo Deng Shi Dai"(in Chinese phonetic alphabets), a total of 3 in 155 English movies.

#### 2.1.2 Literal translation

Literal translation refers to a method to render of text from one language to another by following closely the form of the source language. Such as the film *The Godfather* which is translated as "Jiao Fu" (in Chinese phonetic alphabets ), *Rain Man* as "Yu Ren "(in Chinese phonetic alphabets). There are a total of 70 films out of 255 English movies.

#### 2.1.3 Free translation

When the subtitle contains idioms, allusions and specific cultural background, and applying the literal translation method cannot accurately express the meaning of the subtitle, then free translation can be considered. For example, "cuckoo" refers to "Du Juan " (an animal) in Chinese. if the movie *One Flew Over the Cuckoo's Nest* is literally translated as " Fei Yue Du Juan Wu "(in Chinese phonetic alphabets), the audience may be confused and do not understand the content of the movie. Therefore, it is necessary translate the movie subtitle based on the hidden cultural meaning of the "cuckoo's nest" which means a lunatic asylum. Therefore, the subtitle translation, " Fei Yue Feng Ren Yuan "(in Chinese phonetic alphabets), is more accurate. There are 2 similar movies.

#### 2.1.4 Amplification

The application of amplification aims to increase the amount of information and help the audience better understand the movie under the condition not familiar with its background. The film *Seven* mainly tells the criminal committing seven kinds of crimes such as "arrogance", "jealousy", "rage", "laziness", "greed", "gluttony", and "lust". If the film is literally translated as "Qi"(seven in Chinese), it cannot accurately summarize the content of the movie. So it is translated as "Qi Zong Zui"(Seven Deadly Sins literally in English) with

information added which is easier for the audience to understand. The number of similar movies accounts for 28.

#### 2.1.5 Omission

The omission method can be used when some movies' subtitles are too long or have too much content. For example, the movie *Three Billboards Outside Ebbing, Missouri* would be more redundant if the subtitle of the film was translated with all the information. The translator adopted the omission to translate it as "San Kuai Guang Gao Pai" (Three Billboards in English), which is more clear. Similar movies also include *Perfume: The Story of a Murderer* ("Xiao shui", perfume in English). The number of similar movies accounts for 3.

#### 2.1.6 Adaptation

The adaptation method refers to the creative processing based on the information of the original subtitle to make it more in line with the expression habits of Chinese, thereby increasing the orientation and attractiveness. It is worth noting that the adaptation does not completely abandon the content of the original subtitle. For example, the movie *Waterloo Bridge*, the literal translation of the subtitle can neither reflect the content of the film, but also make people think of Napoleon. Because the audience is more familiar with Napoleon was defeated by Wellington in Waterloo. The translator translated it into "Hun duan lan qiao" (Dying on the bridge in English) revealing that the movie is a lingering love story. Similar movies also include *Psycho*, *Green Mile*, etc., a total of 26.

#### 2.1.7 Rewriting

The rewriting method refers to completely abandoning the original English subtitle and drafting a new one. If the original subtitle is not attractive enough to meet the expectations of the audience, or is restricted by language, which results in the subtitle being too long or too short, a rewriting method may be considered. For example, if the movie *Inception* is literally translated, it will not be attractive. The main content of the film is that the protagonist is hired by others. By entering the dreams of others, the concept of the dreamer is changed. The translator translates it into "Dao meng kong jian", (to instill an idea in a dream in Chinese) which is more in line with the plot. Similar movies also include *Triangle*, *Coco* etc. The number of similar movies accounts for 23.

## 2.2 Characters of translated movie subtitle

characters of Chinese-translated movie subtitles	Numbers	Percent
1	0	0%
2	12	7.7%
3	21	13.5%
4	48	31%
5	35	22.6%
6	10	6.5%
7	14	9%
8	8	5.2%
9	4	2.6%
>9	3	1.9%

It can be seen from the above table that the characters of Chinese-translated movie subtitles is more common within two to seven characters, of which three to five characters accounts for a relatively high proportion, totaling 67%. Therefore, it is easier to be accepted by the public if the length of the translated subtitle is within two to seven characters, or even three to five characters.

## 3. CONCLUSION

The quality of movie subtitle and subtitle translation directly affects whether the movie can be accepted by the public, and thus affects the box office. Accurate and oriented movie subtitles can quickly attract the public's attention and are more likely to achieve a double harvest in art and the market. Through the analysis of the above subtitles and the discussion of translation skills, I hope to provide reference for translators and improve the quality of movie subtitle translation.

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# Advance the Modernization of Educational System and Capacity for Governance

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**Abstract:** Modernization of governance system and governance ability is the reform program put forward by the party and the country to achieve the general goal of comprehensively deepening reform, which points out the development direction for the reform cause in all fields in the new era. From the perspective of the modernization of governance system and governance ability, we should effectively deal with the realistic dilemma, promote the modernization of education governance system and governance ability, and set up goals with values as the orientation. Take the system as the guarantee, perfect the system construction; Transforming the function of management education; Improve the internal governance and other specific measures.

**Key Words:** Governance System; Governance Ability; School Management; Efficiency

## 1. BACKGROUND OF THE QUESTION

In 2013, the Third Plenary Session of the 18th CPC Central Committee adopted the Decision of the CPC Central Committee on Some Major Issues Concerning Comprehensively Deepening Reform, which set forth the overall goal of deepening reform to "promote the modernization of China's governance system and capacity." Education plays a fundamental, overarching and pioneering role in China's reform and development, and education governance is an important part of the country's governance system. "Promote the modernization of education governance system and governance capacity" as one of the ten key tasks in China's Education Modernization 2035 2018. Promoting the modernization of education governance system and governance capacity is the general requirement of deepening the comprehensive reform in the field of education, the driving force and guarantee for realizing the modernization of education, and the key link for completing the transformation of education.

## 2. CONNOTATION OF EDUCATIONAL GOVERNANCE SYSTEM AND GOVERNANCE CAPACITY

### 2.1 Connotation of educational governance system.

It consists of educational value pursuit, system, policy, subject and object, process and way and other elements. It has the characteristics of systematicness, wholeness and synergism. The transformation from educational management to educational governance includes the transformation of the subject from singleness to diversification, the operation mode from singleness to interaction, the process from power concentration to democracy, and the implementation mode from control to cooperation [1].

### 2.2 Connotation of educational governance ability.

In accordance with national laws and within the framework of education governance system, different subjects use institutions to manage the ability set of education, including understanding ability, executive ability and innovation ability.

## 3. STANDARDS FOR THE MODERNIZATION OF EDUCATION GOVERNANCE SYSTEM AND GOVERNANCE CAPACITY

### 3.1 Features of modernization of education governance system

To realize the modernization of governance concept, the institutionalization and legalization of power operation, the democratization of governance process, the integration of governance structure and the maximization of governance efficiency, and to construct a modern education governance system with "government macro-control, schools' independent education and active participation of society" [2].

### 3.2 Modernization of educational governance capacity

The modernization of governance concept, governance mode and governance efficiency, and the stable and orderly operation of public education shall be guaranteed by legal, democratic, efficient and scientific means.

### 4. The realistic dilemma of education governance system and governance ability

#### 4.1 Conceptually, there is still a big gap between the value goal of education governance and the reality.

It is manifested in the following aspects: the concept of rule of law in government education management is not strong, offside, dislocation and absence; School self-restraint and self-development mechanism is not perfect; Citizens' awareness of orderly participation in education governance is not strong, lack of motivation and ability. (It is closely related to the development of the national economy, the people's living standard, the level of education and the concept of rule of law.)

#### 4.2 In terms of system, education legislation cannot meet the innovation needs of education governance system.

It is reflected in the following aspects: the law does not make specific provisions and requirements for the government's investment in education, and the financial support for the education priority development strategy is lack of clear provisions; The legislation does not stipulate the administrative responsibility and legal responsibility of the government for education; The education legislation based on society is not perfect, the power of education management is lack of restriction, the power and responsibility are unclear, the democratic and equal cooperative relationship has not been established, and the synergistic role of system support is difficult to play.

#### 4.3 In terms of the ability of subject and object, the interest subjects of education tend to be diversified, but the pattern

of "strong government and weak society" has not changed fundamentally.

The transformation of government role has not been completed yet, and it still shows the role identity under the mode of regulatory government. The independent development and self-restraint mechanism of the school is not perfect. The interaction and cooperation mechanism among the multiple subjects in the field of education has not yet been established, and the autonomy of the social subjects is poor.

#### 5. PROMOTE THE PATH OF MODERNIZATION OF EDUCATION GOVERNANCE SYSTEM AND GOVERNANCE CAPACITY

5.1 With values as the guide, the goal is to carry out the fundamental task of cultivating people by virtue, realize the modernization of education, build a strong country in education, and run education that satisfies the people.

5.2 With system construction as the key, a complete system of education laws and regulations should be constructed to combine system construction with ability improvement and continuously improve the level of education under the rule of law.

First, we will accelerate the revision of education legislation and laws, build a complete system of education laws and improve the rule of law in education. The second is to promote institutional innovation, and the third is to improve the educational security system.

5.3 Change the function of government management education.

We will focus on the reform of education administration and improve the level of government services and education. Change government function, change micro, direct management to macro, indirect management; We will separate government administration, government administration, and evaluation from government administration. We will give the government more authority over education and give schools more autonomy in running their schools. We will strengthen state supervision of education and introduce third-party evaluation.

5.4 Strengthen the important subject status of the school, improve the internal governance system, and improve the efficiency of independent management.

At the national system level, we should strengthen the subject consciousness and leave the allocation of resources, the use of funds and the management of evaluation to schools. We will strengthen the construction of school leading groups, enhance their capabilities, and bring the administration of the school in accordance with the law into the assessment and supervision. In the internal governance of the school, in accordance with the charter of independent running; Establish a modern school system and give full play to the functions of the teaching congress, academic committee, council and family committee; We should improve the internal governance structure,

optimize the organizational structure, strengthen the building of cadres and talents, improve institutions and systems, and strengthen the unity of responsibilities and rights. Private schools are encouraged to carry out modern school system reform and innovation [3].

5.5 Improve the mechanism for the whole society to participate in school management and education evaluation and supervision and promote the normalization of social participation in education governance.

First, we should establish and guarantee the status and rights of multiple subjects in the education governance system by law and system. Second, the government should innovate ways of serving education, such as dialogue, participation, communication, collective decision-making, consultation, etc., to encourage people to express their demands on an equal footing and reach consensus. Third, improve the supervision mechanism of social participation in education evaluation. Fourth, strengthen the construction of information technology, protect the equal right of social subjects to receive education, and realize extensive participation.

#### 6. LOOKING FORWARD TO

It is the right time to promote the modernization of education governance capacity and governance system in the new era. At the macro level, China has profound economic, political, cultural and social foundations and institutional advantages, and is deepening reform in an all-round way. At the middle level, Party committees, governments, schools and social subjects took active actions; At the micro level, college administrators renew their ideas, improve their abilities and take the initiative to do so.

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# Current Situation and Countermeasures of Self-Employment of Graduates Majoring in Music Performance in Universities

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**Abstract:** Under the new situation, with the continuous expansion of the scale of college enrollment in China, the number of students majoring in music performance also began to gradually increase. The employment difficulty of music major college students has become the main problem prevailing in the current colleges and universities, and the employment rate of music performance major has shown a "red card". At this time, it is necessary for colleges and universities, based on reality, conform to the development trend of The Times, broaden the channels of employment and entrepreneurship, and maximize the employment guidance for college music graduates. Strengthen the social adaptability in the process of professional training and solve the problem of current employment difficulties. Therefore, this paper takes the music performance major in colleges and universities as an example, firstly analyzes the current situation, and then, combining with the actual situation, establishes the cultivation path of independent innovation.

**Key Words:** College Music Performance; Graduates; Self-Employment

## 1. THE STATUS QUO

With the development of economy and the expansion of schools, the number of students majoring in music performance has gradually increased. However, the employment opportunities of colleges and universities have not increased, and the corresponding employment pressure is gradually white-hot. At this time, many universities encourage graduates majoring in music performance to start their own businesses, and based on reality, establish a "one-stop" service platform and a "green channel" for self-employment, further improve the function of the "National College Students Entrepreneurial Service Network", and increase the docking [1]. To provide students with more access to entrepreneurship consulting and guidance, programs to ease employment problems and improve a path to innovation. However, in the process of practice, we can clearly see that the number of college music performance major graduates self-employment is less, the wait-and-see majority. The development goal of self-employment is not clear, the comprehensive quality of music performance major graduates is insufficient, and the school has insufficient entrepreneurship education for students. Lack of targeted guidance leads to lack of motivation for students to start their own businesses [2]. The overall development needs to be improved, the target students are small, the development forms need to be enriched, the

implementation content is not comprehensive, and the teachers are weak. In view of this, how to encourage students to start their own businesses? How to guide students to find the possibility of network entrepreneurship? It has become the content that the current education workers need to focus on analysis.

## 2. COUNTERMEASURES FOR SELF-EMPLOYMENT OF COLLEGE MUSIC PERFORMANCE GRADUATES

### 2.1 Improve college students' self-employment education policies

At this point, it is necessary to establish an overall plan under the support of policies and in combination with the current situation of self-employment education. Under the multi-level vision, we will break through the original single situation, and extend the various entrepreneurial education concepts to form our own construction results. Increase the linkage mechanism of the upper and lower levels to maintain the development needs of policies. The government, universities, research institutions and enterprises should be effectively combined to establish a "College Student Entrepreneurship Service Platform". From the perspective of the whole process, it can help students to start their own businesses, reduce the failure rate and improve the brand and long-term effect of entrepreneurship through all-round tracking in a team way [3].

### 2.2 Empirical "theory" of school-enterprise cooperation to expand students' vision and heuristic education

In the process of entrepreneurship education of music performance major, colleges and universities need to base on reality, enrich and improve the forms of self-employment education, carry out a variety of practical activities of self-employment, and ensure the strength of support for self-employment. At this time, colleges and universities also need to extend students' entrepreneurial vision, cultivate students' sense of innovation, increase the direction of guidance, provide more entrepreneurial and employment guidance for students majoring in performance, and enrich the corresponding theoretical basis. In the practice of cognition, increase the intensity of understanding, improve the consciousness of industry. At this point, colleges and universities can combine the development characteristics of music performance major, not limiting entrepreneurship to a single point, but under the overall concept of development, integrate ideas, increase innovation, and maintain a sustainable extension path. Colleges and universities can guide students to develop in the direction of wedding celebration companies,

performing arts companies, art training institutions, piano shops, game music episode studios, new media short video creation companies, etc. [4]. For students, who have little experience in school, information methods can be used to collect relevant materials to enhance students' understanding of information and knowledge, maintain a sustainable development path and enhance their ability of understanding. Schools can also be combined enterprise, invite the head of the enterprise to the school to share their successful experience, and actively adjust the mentality, to reinforce the sense, find belongs to own business direction also steps, and expand communication, for the students to find the right development direction, promote the sustainable development of the students' innovative entrepreneurship, improve the success rate.

### 2.3 Integrate various resources to assist entrepreneurship and provide a "theory + practice" platform

In the current development trend, students majoring in music performance still have insufficient cognition of entrepreneurial skills, experience, knowledge, mentality and other main contents, and there are still many deficiencies in the control ability of entrepreneurship courses. At this time, colleges and universities need to combine with the actual needs, establish diversified training efforts, to provide students with more practical opportunities. For example, colleges and universities can set up themed activities of "Fly Your Dream, Simulate Entrepreneurship" based on practical needs, so as to provide students with a platform for innovation and entrepreneurship to the greatest extent. Local or government needs to combine local needs to establish a "national college student entrepreneurship service network" to provide a "one-stop" service platform for students majoring in music performance to start their own businesses [5]. In addition, I will provide them with entrepreneurial consulting, projects and other relevant content to improve the performance of the results. For students majoring in music performance, not every business can be successful, there may also be failure. However, colleges and universities need to build platforms for students to the maximum extent, find suitable entrepreneurial methods, strengthen entrepreneurial guidance, optimize students' thinking and improve their theoretical and practical knowledge from the perspectives of strategies, projects, platforms, strategies and so on. In addition, the school also needs to cooperate with parents, increase the integration of resources, expand policies, strengthen process construction, and enhance publicity, so that more parents can understand the importance of doing so, and actively

cooperate with them to give maximum support to students majoring in music performance. Pay attention to the issue of preferential policies, make reasonable use of these preferential policies, solve the worries of entrepreneurship, improve good foundation preparation for future development, maintain scientific development power, and increase the strength of continuation. Through market research and visiting art troupes, I gradually understand the market related to music, and truly realize my own business in school-enterprise cooperation.

### 3.CONCLUSION

With the progress of society and the development trend of "leading employment by entrepreneurship", music performance major also needs to conform to the development trend of The Times, increase policy support, and provide students with relevant content guidance in entrepreneurial experience, awareness, direction and other aspects. In addition, the theory and practice are organically combined to improve the art of entrepreneurship and create a training and guidance model of "1V1 entrepreneurship". On the basis of actual cases, set an example, expand the intensity of communication, provide students with more entrepreneurship competitions, enhance students' ability to practice, improve the quality of entrepreneurship.

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# The Practice Exploration of Modern Apprenticeship in Mechanical Manufacturing and Automation Specialty in Higher Vocational Colleges

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**Abstract:** China's higher vocational colleges are independently exploring the "modern apprenticeship" education model. The mechanical manufacturing and automation major of higher vocational college has made some innovative explorations in the aspects of recruiting students, making talent training plan, constructing curriculum system, curriculum implementation, teaching organization and daily management, teaching evaluation and so on, which provides practical experience for the follow-up research of modern apprenticeship.

**Key Words:** Modern Apprenticeship; Talent Training Program; Teaching Project; Reform

## 1. INTRODUCTION

China's vocational education has developed vigorously for many years, and has trained a large number of technical personnel, which has made great contributions to the social and economic growth. But with the change of the economic situation and the adjustment of the industrial structure, from made in China to created in China, the level of social demand for talents has also undergone great changes. At present, higher vocational education should respond to the characteristics of The Times, and actively explore the modern apprenticeship, a new mode of vocational and technical personnel training, to improve the quality of personnel training and serve the local characteristic economy[1-2].

Modern apprenticeship is a kind of talent cultivation method through school-enterprise cooperation and joint schooling, which enables students not only to receive teacher education and theoretical knowledge in school, but also to participate in the production activities of enterprises and receive the guidance of specialized teachers. Machinery manufacturing industry has developed rapidly in our country, which requires the staff has the high field beginning ability and the ability to deal with the problem, and give priority to with traditional theory teaching of higher vocational education has already can't meet the demand of the professional personnel training, graduate student orientation, enterprises need to mentoring transfer mode and training, students can smoothly enter the role. Therefore, modern apprenticeship training mode is the inevitable result of the development of mechanical manufacturing and automation technology.

## 2. THE EXPLORATION STATUS OF MODERN APPRENTICESHIP AT HOME AND ABROAD

### 2.1 Development status of modern apprenticeship abroad.

Foreign apprenticeship originated from the vocational training and education in Germany after World War II, and then gradually developed into the "dual system" model, which promoted the rapid economic development in Germany after World War II. According to the different national system and educational background, western countries have innovated and developed the apprenticeship system in line with their own development rules. Such as the "sandwich model" of the United Kingdom, the "three-way system" of Switzerland and the "cooperative education" of the United States.

2.2 The development status of modern apprenticeship in China. Under the support of national policies, schools in various regions have carried out pilot programs. After going through the stages of on-the-job practice and order cooperation training, some relatively mature models have now been formed, such as professional studio model, vocational education group model, order oriented training model, and on-campus productive training base model. However, according to the existing data, the exploration of modern apprenticeship has very local characteristics, and the pilot system in various regions and schools cannot be directly transplanted to other regions, schools or majors. At present, most forms of school-enterprise cooperation are dominated by schools, and enterprises do not participate in the talent training process much, which cannot truly achieve the "combination of work and study".

## 3. THE EXPLORATION PROCESS OF MODERN APPRENTICESHIP IN HIGHER VOCATIONAL COLLEGES

3.1 Recruitment is recruitment. In September, after students enter the school, the school, enterprises and students (parents) sign a tripartite agreement, and clarify the rights and responsibilities of the three parties, which lays a foundation for the follow-up work.

3.2 Develop talent training programs and build curriculum systems. In the education teaching theory and modern apprenticeship thought under the guidance of many aspects, such as internal personnel training mode in higher vocational colleges to study, to understand the status of the machinery manufacturing industry development and talent demand trends, find out the industry jobs, and careful analysis and job tasks of the professional knowledge, professional ability and basic quality, and provide professional construction reform train of thought, Work out a new talent training program.

Although there are orders for students to be trained, the



talent training program and curriculum system construction are not only for one enterprise. After graduation, students should have the general basic knowledge and skills of the industry. Therefore, industry experts, professional teachers and enterprise masters are all involved in the course system construction. Industry experts guide students' basic skills and professional quality, professional teachers grasp the logical relationship between students' cognitive rules and courses, and enterprise masters assist in providing job tasks. Tripartite cooperation, together to form a professional group, to study and discuss the necessary courses in the curriculum system, the forerunner and follow-up links between courses, the connection and cooperation between school theory teaching and enterprise practice, the assignment of teaching tasks and other issues. Based on the enterprise's full participation in the talent training process, it can provide necessary resources and human resources support. In the formulation of talent training programs and curriculum construction, it can appropriately strengthen the cultivation of students' practical ability and corporate identity, and implement some courses with high practical requirements in the enterprise. The practical curriculum of the school has also been reformed. Teachers focus on teaching knowledge framework and key points, reduce demonstration experiments, and let students think by themselves and complete comprehensive experiments by hand, so as to cultivate students' ability to deal with comprehensive problems and lay a foundation for their internship in enterprises.

With many efforts, the modern apprenticeship training process for students majoring in mechanical manufacturing and automation technology in many schools can be roughly divided into three years and three stages. First year students double identity consciousness cultivation stage, with students and staff members of the double identity, the general course of study, not only including the engineering drawing, engineering mechanics, electronics and other professional foundation courses, still need to attend induction training, enterprise culture and enterprise management lecture induction must be course, rotating internship, etc. After this stage of learning, students can clearly identify their dual identities in mind and emotionally, especially as employees of enterprises. In the preparation stage of vocational qualification for students in the second academic year, due to the particularity of machinery industry, personnel must hold relevant qualification certificates. Panel of experts refer to this professional often require certificates of professional skill teaching outline, the second year next semester, the school and enterprise joint venture, association of members to participate in the organization of related courses, and under the guidance of enterprise master and full-time teachers, on the certificate related practice, consolidate, improve and innovate, eventually get enterprise employee's ability is qualified to get your professional qualification certificate. In the third academic year, the enterprise and students will choose the specific jobs and teachers of students on the basis of mutual

understanding in the first two academic years. During the internship, each member to the employee's standard in daily work, accept the guidance of the mission of the organization and the teacher, finish school graduation internship report at the same time, back to school two days a month, with professional teachers share their experiences in practice, amend the internship report, continue to improve their professional level, for the real familiar and prepare work to be going to work.

3.3 Curriculum implementation. According to the requirements of modern apprenticeship system, the core courses of this major are reorganized in a market-oriented manner. The determination of core professional courses can be divided into six steps: investigation, determination of professional post group; Analyze the tasks of each position; Summarize typical work tasks; Analyze typical job tasks to determine the professional abilities students need to have; According to professional ability, establish the knowledge and skills that should be mastered; The core professional courses are summarized by knowledge and skills. According to these steps, the professional team established five core courses of mechanical manufacturing and automation technology major, refined and reorganized the knowledge points of these five courses, combined with the actual work tasks of the enterprise and the teaching concept of "integration of work and engineering", designed a "teaching project series" in line with the cognitive law of students. The process of students learning "teaching projects" can also be divided into three stages: under the leadership of professional teachers, students master the leading knowledge and theoretical basis of "teaching projects"; In the enterprise master's practical demonstration, hands-on practice, complete the project; Finally, group communication and discussion, teachers and teachers to supplement and summarize, to promote students to master knowledge, improve their ability.

#### 4. CONCLUSION

Modern apprenticeship system is the direction of the reform and development of contemporary vocational education, and it is a talent training mode of five win-win parties. For students who have graduated from the college entrance examination, goal-driven learning is conducive to self-restraint and self-learning during college, and the knowledge they have learned can be applied to employment. To the enterprise re-learning staff, update knowledge, self-improvement, to avoid being eliminated by the rapid development of society; For schools, teachers combine theory with practice in school-enterprise cooperation, improve teaching level, cultivate students' employment is guaranteed, and ensure the vitality of sustainable development of schools; For enterprises, while improving the quality and ability of employees, reduce the cost of staff retraining, enterprise development motivation is full; For the society, it is necessary to improve the utilization efficiency of educational resources and human resources, cultivate high-tech talents, and ensure the sustainable, stable and rapid development of social employment and economy. In short, it is the inevitable demand of the development of The Times to root vocational education in enterprises and promote modern

apprenticeship.

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# Development and Research of Intelligent Manufacturing Technology and System

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**Abstract:** In recent years, the social development, science and technology is increasingly mature, the manufacturing industry as a key component part of the industrial structure of economy in our country, its development has been rapid, intelligent manufacturing technology to become the mainstream technology in the field of industry, and has obtained certain achievements, but also for the industry development in the actual application has brought some challenges and tests, Based on this background, this paper discusses the development and research of intelligent manufacturing technology and system, hoping to analyze the status quo, to promote the implementation and application of intelligent manufacturing technology and system to provide assistance, and promote the further development and innovation of the manufacturing industry.

**Key Words:** Intelligent Manufacturing; Technology; System; Development

## 1. MAJOR PROBLEMS EXISTING IN THE DEVELOPMENT OF INTELLIGENT MANUFACTURING TECHNOLOGY AND SYSTEM

### 1.1 Economic problems

From an economic perspective, although the development of intelligent manufacturing technology and system can largely improve the efficiency of the industry, and promote the level of intelligence and integration, but it still need for economic performance and economic indicators of evaluation set in-depth discussions, at the same time, the application of this new manufacturing technology, solve the labor problems are resolved, For developing countries cheap labor dependence will be greatly reduced, in addition, the intelligent manufacturing technology and the system will prompt industry practitioners of professional and comprehensive skills improved, then it is easy to appear talent discontinuity, and if the developed countries in the hands of the system, the technology will cause the market competitiveness of China is lower, easy to lose a lot of opportunities, in the end, There is a significant disconnect between intelligent manufacturing products and the work of sales staff. Only by ensuring the innovation and optimization of sales intelligence can intelligent manufacturing services be implemented [1].

### 1.2 Personnel Problems

For the development and operation of the manufacturing industry, there are great differences in the staff and technical experts involved in different work links. Good and reliable manufacturing results are implemented by relying on the communication, coordination and cooperation of technical personnel in each link. While the application of intelligent manufacturing technology and system can largely avoid may occur in the process of

repetitive work, and make risk, in addition, the manufacturing task in the work link, knowledge of staff for intelligence, and behavior is not have the same level or level, therefore, the need to use different ways to say, at the same time, Because each link of the staff will be affected by the social various interference factors, which will bring certain negative or positive influence for the manufacturing industry, on the other hand, different staff's life background and culture, language, etc. It is difficult to unity, thus makes the intelligent manufacturing industry production is hampered by a certain human factors, However, according to the research at the end of the 20th century, for the development of the manufacturing industry, people have always been the main source and core of its intelligent development.

### 1.3 Technical problems

Horizon, from a technical level, a product of the manufacturing process is very complex, each link between the ability of coordination and integration automation is the main influence factors of manufacturing process automation level, in addition, each link also determine the integrated intelligent degree between the intelligent level of the whole production system, the present stage, Intelligent manufacturing integration technology is also a research focus in the background, on the other hand, within the scope of international had countries on intelligent manufacturing system analysis to explore the stressed that the core of intelligent manufacturing system based primarily on intelligence activities, and diversified technology in the intelligent manufacturing technology in the process of research also face processing is a critical problem, It can directly affect the intelligent manufacturing process and integration of activities, in addition, the development of intelligent manufacturing technology and systems in the study also needs to attach importance to the commonality between technology and products, the standard and normative, and optimize the structure of intelligent sharing information and exchanging form, to the further development of intelligent manufacturing technology and system as laying the groundwork [2].

## 2. RESEARCH AND APPLICATION ANALYSIS OF INTELLIGENT MANUFACTURING TECHNOLOGY AND SYSTEM

### 2.1 Design technology

Throughout the manufacturing engineering, intelligent manufacturing technology and system is a relatively new concept, its still in the stage of development, on the one hand, the need for the evaluation of its technology to explore, mainly focused on the function evaluation, economic evaluation, market evaluation, production evaluation, at the same time, also need to attach

importance to the study of design and development environment, the process, To clear the development tools, operating system and language necessary factors such as study, also need to be synchronized to strengthen the generalization, modularization and standardization of design, on the other hand, in the light of the structural system of intelligent manufacturing technology and system and development strategies also need to start to explore, for its future application and progress to provide a strong driving force.

### 2.2 Treatment technology

For now, most people will be industrial production as a whole, the reason is the technical relationship between different manufacturing link, and based on this, the study of intelligent manufacturing processing technology to carry out the work, is from the processing, sharing, integration, description, and other aspects to carry out the work, To ensure that provide the basis for intelligent machine intelligence activities and specifications, in particular, mainly covers the fusion method of intelligent activity, generation, mechanization technology and intelligent manufacturing processing core link, finally, the need for intelligent production of uncertain factors in the process of manufacturing process, and implement the plastic powder, modeling and system construction, etc.

### 2.3 Unit technology

For unit technology and system integration and intelligent manufacturing technology research of the application of a points, mainly includes the decision, control and compensation, diagnosis, monitoring, treatment, ha, guidelines, and scheduling system module, module unit technology corresponds to the different work link, under the overall coordination of the implementation of optimization and the whole manufacturing process control, on the other hand, Intelligent concurrent design can also not be ignored, as it can conduct behavioral imitation for diversified manufacturing links, so that the design of different links of products can be implemented. The research focus of intelligent concurrent design mainly includes design method, intelligent interaction, description model, supporting environment, etc. [3].

### 2.4 Network technology and knowledge base system

For the research and application of intelligent manufacturing technology and system, network technology and knowledge base system can play a role of intelligent integrated effectively, the former mainly can be operated from the system control, information communication and information exchange interface and

so on to provide help, the latter rely on database distribution, and maintenance of knowledge base of lenovo, knowledge base structure and research value, on the other hand, Intelligent machine also belongs to a research focus, which can imitate the intelligent behavior of technical personnel, so it can be said that it has great research value. The key contents mainly include the following: First, the behavior and visual control of intelligent robot, such as manipulator, sensor, mechanical eye, etc.; Second, intelligent self-maintenance and learning technology, and then implement the control in the actual manufacturing process, to maximize the accuracy and efficiency of processing; Third, cell manufacturing design, which is essentially applied to intelligent manufacturing, needs to focus on cell and material selection, design methods and structural composition.

### 3 CONCLUSION

To sum up, the development of intelligent manufacturing technology and systems research has important research value and the actual developing in economy, people, technology and level there is a problem, and for the further research of its is also need from the design, processing technology, cell technology and network technology and knowledge base system and so on aspects, further optimize manufacturing the intelligent level of the industry, To provide impetus for the long-term development of the manufacturing industry.

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# Analysis of Opportunities and Challenges Faced by Digital Libraries in The Era of Big Data

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**Abstract:** With the high-quality development of China's economy and the progress of information network technology, all walks of life are entering the era of big data. This paper analyzes the opportunities and challenges faced by digital libraries in the era of big data, and puts forward feasible suggestions for the reform and construction of libraries, so as to further improve the status of Chinese Libraries in the era of big data and provide high-quality library services.

**Keywords:** The Age Of Big Data; Digital Libraries; Opportunities; Challenges

## 1. INTRODUCTION

Big data has profoundly changed the world we live in, changed the way people access to a variety of information resources, so that people can access library information resources in a more convenient way. In practice, we should fully realize the opportunities and challenges brought by big data to the library construction, and take corresponding measures to provide better services for the society and promote the reform and upgrading of the library in the new era..

## 2. OPPORTUNITIES FOR LIBRARIES

### 2.1. Resource construction

The new library uses big data and other information technology to promote the reform and upgrading of its own resource construction. It is necessary for the library to use big data as a new technology platform to expand its resource scope. By integrating the Internet resources and the original resources of the library, we can improve the resource storage of the library, provide more diverse choices for the majority of readers, and meet the needs of readers' learning and life. Break the existing concept, innovate the mode of library using big data, clarify the methods and objectives of library reform and construction, firmly grasp the opportunity of big data era, and establish a clear goal of big data library resources construction. Library is the most effective link between academic resources and readers. We should make full use of the technical conditions of big data era, establish effective links for all kinds of academic resources, expand the resource construction of library, and facilitate readers to use these resources. In the era of big data, the library should always take the readers as the core, make use of the past library service experience, increase the mode of providing academic resources, and improve the readers' satisfaction.

### 2.2. Technology upgrades

With the promotion and application of big data, the library can not be limited to processing local data, but to processing more complex wide area data. The digital construction of the library will greatly enrich the library

information resources, the statistical methods of resources will also develop towards diversified channels, the information processing capacity of the library will be greatly improved, and the resource information reserve in the library will also be greatly improved. The integration of big data and other related technologies into the library construction field, the scientific use of big data and other new technical means can systematically analyze the needs of readers, automatically and reasonably allocate the resources in the library, reduce errors and improve work efficiency. Using semantic technology, data clustering technology and retrieval technology hatched by big data can not only provide convenience for the construction of library information resources, but also provide convenience for readers to obtain library information resources [1].

### 2.3. Service improvement

With the development of social economy and the improvement of people's living standards, people pay more and more attention to the improvement of cultural level, and the demand for library resources is also developing towards diversification. The original literature information of the library is not only inefficient but also difficult to retrieve, which can not meet the needs of readers. Now the library users not only need the legitimate paper book information, but also need the image, audio, video and other information. By using big data and other technologies, we can make targeted analysis on users, fully understand readers' reading habits, and create customized products and services for them. Give full play to the role of the Internet, integrate all kinds of information resources through big data and other technical means to meet the diverse needs of readers. Through the construction of digital library, we fully realize the shortcomings of the original service, analyze the reading hobbies of different readers, scientifically and reasonably allocate the existing resources of the library, meet the needs of readers at different levels for literature resources, improve the intelligent level of the library, and provide high-end library products.

### 2.4 Correct positioning

The use of big data and other information technology can make the library find its own accurate positioning in the process of providing services. Library managers should break through the original service thinking and establish a new service concept within the framework of digital library. In the key links of library work, we should establish the awareness of big data, have the courage to undertake various opportunities and challenges, conform to the development trend of the times, find the reasonable positioning of the library, and promote the service quality of the library.

### 3. CHALLENGES FACED BY LIBRARIES

#### 3.1. Literature resources

The development trend of library is more data-based resource analysis. A large number of structured and standardized information of readers enter mobile terminals such as mobile phones and social networks along with information networks. A large number of unstructured and other valuable data hidden in user information are waiting for library to excavate. Digital library should give full play to its advantages and integrate and analyze the information accumulated in the process of providing services for a large number of readers for a long time. We should transform the highly reliable and professional non structural data into the endogenous power to provide high-quality services for readers, continuously promote the horizontal expansion of the library's resource system, improve the economic performance of existing data, and meet the increasingly diverse knowledge needs of readers. Under the background of big data, the library can not simply understand the technology integration as the technical requirements of data update and resource sharing, but make good use of its own data advantages, fully tap the information connotation and potential value, and provide better service strategies for the library according to the results of big data analysis [2].

#### 3.2. Talent shortage

The information generated by the analysis and application of big data platform is different from the original data statistics mode. The data warehouse and other means used by the library in the past can not meet the development requirements of big data platform application. In view of the current development trend of big data application in library services, big data needs to integrate the technological achievements of artificial intelligence, digital algorithm, visual analysis and other multidisciplinary fields. The traditional library management personnel have lagged behind this kind of technical level. The management personnel needed by the digital library are not only limited to mastering the business ability and statistical ability, but also should master the professional big data information processing ability, as well as the ability to clean up and collect data information. Digital library grasps a large number of unstructured and scattered data with low value density, but these unstructured data can reflect the real needs of readers. Therefore, a large number of digital libraries need to master the library management ability and be able to skillfully use the professional ability of big data platform, and be able to deeply mine the hidden data of readers, put the fragmented data together, accurately portray the readers, and comprehensively improve the technical ability and service level of the library.

#### 3.3. Service content

At present, the library ignores the ability of resource integration and the content of information service is not perfect. Some libraries do not pay attention to the improvement of innovation ability, do not grasp the application of big data and other new technologies, the basic situation of literature resources is not clear, and the

ability to improve the service level according to the needs of readers does not grow effectively. The library should conform to the development of the times, according to the real needs of readers, promote the development of library services towards the integrated mode. According to the subject categories and the core needs of readers, the specific book information will be integrated, and the literature resources with academic value will be collected together to provide professional retrieval and navigation services for readers. It is very important to establish a modern service concept. The disadvantages of traditional library services need to be improved through the big data technology platform. In the process of providing services, we should give full play to the initiative of the library, fundamentally optimize the service quality, further improve the management efficiency, and promote the efficient and sustainable development of the digital library [3].

#### 3.4. Information needs

At the present stage, the demand of library users is developing towards a more diversified trend, and the requirements for the integrity of resource construction are higher and higher. Some libraries do not pay attention to the investigation and research of readers, and fail to provide personalized and professional services for readers. Using mature push technology to provide professional services for readers. The so-called push is to provide relevant information to readers through the Internet and other information networks according to the technical standards and protocols between the library and users, so as to meet the diversified needs of users. Under the background of big data, the library has more and more information resources, which provide readers with rich choices and difficulties in accurate choice. Under certain circumstances, readers can not quickly choose the resources they really need. In this case, the push service is also very necessary, the library through a user's access to information in the library, through accurate analysis of big data, find out the most suitable book resources for the reader, and provide them to the reader by push. In the process of this service, it can not only save readers' time, but also provide readers with the best quality service, meet the personalized needs of readers, enhance the connection between readers and the library, facilitate readers' access to and use of resources, and truly achieve the goal of "taking readers as the core".

### 4. CONCLUSION

To sum up, in the era of big data, digital library construction is facing both opportunities and challenges. In this context, we should give full play to the technical advantages brought by big data, conform to the development trend of the times, constantly enhance the endogenous power of library reform and innovation, realize readers' expectations for library construction, and meet readers' personalized and high-quality service needs.

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# Analysis of English Audio-Visual and Oral Independent Learning Mode Based On "Iflytek FIF Intelligent Teaching Platform"

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**Abstract:** English as one of modern science, the further reform and innovation in the education environment of environment constantly promote the development of fusion, and in the process of gradually into the information society, English teaching is the integration of advanced science and technology, developed a set of audio-visual autonomous learning mode, under modern technical support, It better promotes the students to improve their comprehensive English ability in the process of independent exploration and research, and changes the single boring problem in the traditional teaching mode.

**Key Words:** Intelligent Teaching Platform; English; Audio - Visual - Speaking Autonomous Learning Model

## 1. INTRODUCTION

In the education environment of English as a unique foreign language, under the background of our country's education career development for a long time to stable development, in the process of education environment to promote the reform to English majors also gradually formed a set of audio-visual three-dimensional autonomous learning mode, and with the help of a network multimedia software science and technology to improve the English audio-visual space, In this paper, the application of "iFlytek FIF Intelligent Teaching Platform" in English audio-visual and spoken learning will be combined to conduct in-depth research.

## 2. RESEARCH ON ENGLISH AUDIO-VISUAL AND SPEAKING INDEPENDENT LEARNING MODE BASED ON "IFLYTEK FIF INTELLIGENT TEACHING PLATFORM"

Set in the process of learning English listening, speaking, reading and writing ability of five kinds of translation, which is one of the most important of the core content is the development of the hearing, is the key to promote English continued ascension, only based on good listening can promote the study of students' autonomous learning, to master English ability the connotation of the core, It can be built mainly from the following aspects.

### 2.1 Increase independent audio-visual

On the basis of changing the previous teaching environment, it is necessary to combine modern scientific and technological means to build a richer learning space, so as to let students walk out of the boring barriers of traditional teaching. Based on English listening class is less, the content is more complicated in a wide range of features, the present construction is difficult to combine the actual situation for the students in the campus more rich course content, causes students to the development of

English listening ability in finite time of ascension, and put forward in the new outline about the English hearing ability the development goal of ascension The teaching requirement is to focus on the students to master the basic listening ability, so that students can understand, speak, and truly master the teaching connotation of English. Can't just rely on limited, therefore, English teaching materials and classroom teaching time, based on the development of modernization construction, and can combine information technology means to establish a more comprehensive study time, "xunfei FiF wisdom teaching platform of autonomous learning can provide students with more enough time to teaching, a teaching platform can realize mobile To make students more free time in ascension of audio-visual, video watching English courses on the platform or the course that follow platform, can strengthen the students' listening skills, on the basis of strong extracurricular teaching, can effectively improve the students' listening level, thus more adapt to era development change, the actual demand for talent.

### 2.2 Expand learning content

Combined with the investigation and research of domestic English courses at the present stage, it can be found that the audio-visual and speaking courses built in most schools are based on some foreign news reports or hot events and other relevant English content, "Listen to This" course. Although the content covers a wide range, Topics covering history, culture, health, education, economy, science and technology, entertainment and other aspects can help students to strengthen their English horizons to a certain extent [1]. But in the development of English teaching for a long time, English teaching materials are not able to timely in combination with the development of The Times change, between which involved to update the content, leading to the inherent teaching material content mostly old boring, do not have strong sense of, motivate a student to an appetite for the actual teaching, can effectively improve their English level. And for this issue, "xunfei FiF wisdom teaching platform" to keep pace with The Times, can use the power of information technology, computer network platform to carry on the organic integration of modern teaching resources, to strengthen the more abundant teaching environment, make up for the disadvantages in traditional teaching, provides students with more abundant teaching resources at the same time, Further enhance the content of interesting and practical knowledge, and with the help of such advanced and flexible teaching platform, provide students with more chance to choose, can encourage students according to



their own actual situation and the individuality demand, in which learning is more suitable for their own knowledge of English, to strengthen the English audio-visual training, a better understanding of the society, In the process of independent learning, my vision has been broadened, which is more in line with the current English teaching philosophy.

### 3. STRATEGIES FOR CONSTRUCTING ENGLISH AUDIO-VISUAL AND SPEAKING INDEPENDENT LEARNING MODE BASED ON "IFLYTEK FIF INTELLIGENT TEACHING PLATFORM"

#### 3.1 Realize hierarchical audio-visual practices

In order to promote the application in English teaching in the process of "xunfei FiF wisdom teaching platform" better realization of students' autonomous learning research, you need to combine actual rob ore has more reasonable classification of learning strategies, the students on the platform of autonomous learning activities into the teaching plan, promote the teachers can better management students, The students' practice content, form, time and other aspects of the whole arrangement, combined with the actual situation of students. For example, for middle and lower grade students in universities, their daily teaching plan may require them to listen to the slow English news broadcast on iFlytek FIF intelligent teaching platform for half an hour. Dictation of three articles in combination with English news and broadcast every week, each article should be about 150 characters, and keep the sentence coherent; I will watch one original English movie on the platform every semester, and record difficult words based on the movie content, so as to reach the level of CET-4 and CET-6. In the network environment, students can reuse the video materials on the platform according to their own learning needs and learning speed, and combine their own interests and hobbies to conduct more selective audio-visual and speaking training.

#### 3.2 Establish interactive communication

It not only needs to increase audio-visual training content with the help of good network platform, but also needs to give full play to the advantages of network platform, release information on the platform, set up student groups with the same interests for research and study, or teachers can organize and lead students to show and communicate

the learning results in the stage. In such activities can strengthen the communication between students. First of all, on the platform release information for students to provide more abundant information access, strengthen students to talk about communication, under the same audio-visual hobby in pictures or video to watch based on the same problem after in-depth talk about communication, prompt students to improve listening skills and at the same time to raise their ability of oral communication, that is, "said" [2]. At the same time, independent learning on the platform can also promote the communication between teachers and students, and encourage students to communicate with teachers in a more cordial relationship in their spare time, so that problems arising in students' learning can be effectively solved in the first time. Through iFlytek FIF intelligent teaching platform, teachers are encouraged to manage courses more effectively, formulate learning contents, strengthen homework arrangement and writing among students, and encourage students to actively participate in learning in a more relaxed and happy environment.

### 4. CONCLUSION

To sum up, with the further transformation of educational environment in modern social conditions, it is also necessary to actively explore more advanced learning modes in English teaching, and provide students with a better learning platform by means of modern information technology and other scientific means, so as to effectively improve students' English learning ability.

#### ACKNOWLEDGEMENT

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# Analysis on The Construction Strategy of The Ecological Environment of Art Education in Colleges and Universities Based on Wechat Platform

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**Abstract:** With the rapid development of economy, people begin to pay attention to art while pursuing material. This paper explains how to construct the ecological environment of college art education based on wechat platform from several aspects. In college teaching, we should break the traditional mode, use the development trend of the Internet, introduce wechat platform for network teaching, innovate the ecological environment of education, and explore the application countermeasures of wechat teaching in art.

**Keywords:** Wechat Platform; College Art; Ecological Environment

## 1. INTRODUCTION

Compared with the traditional art education, the application of wechat platform mainly changes the educational ecological environment, and expands the channels for innovation of art resources and acquisition of knowledge. Through the rapid spread of wechat to create resource sharing, the educational environment is interactive, open and intuitive. By playing the role of science and technology, we can bring a more perfect new education environment for art education in Colleges and universities.

## 2. CHARACTERISTICS OF THE CONSTRUCTION OF THE ECOLOGICAL ENVIRONMENT OF COLLEGE ART EDUCATION BASED ON WECHAT PLATFORM

### 2.1. Break the limitation of space and improve learning interest

As we all know, the traditional teaching mode is mainly around teachers, which is boring and ineffective. Using science to apply the network to art teaching, teachers can share teaching resources with students at any time through wechat platform, and teach more comprehensive art knowledge to students combined with network materials, so as to enhance the communication between students and teachers. With the gradual deepening of the spread of art knowledge, students' fear of teachers in the traditional classroom is eliminated. Rich information knowledge can improve students' interest in learning, so as to further improve students' learning initiative and enthusiasm. In the wechat platform, the vivid and flexible art knowledge on the Internet turns learning into dynamic, changes the serious and stereotyped impression of teaching materials, presents the artistic situation characteristics of art, and makes students better accept and integrate into this artistic

conception. Finally, teachers can set teaching problems after teaching according to wechat platform, so that students can independently analyze teaching resources to stimulate students' curiosity and thirst for knowledge. The combination of "teaching" and "learning" should be established to realize the common progress of the two innovative teaching systems, so as to improve the quality of teaching, break the limitations of teaching space, and at the same time make students love learning art fundamentally.

### 2.2. Broaden students' vision and promote their development

The main content of the network ecological environment is more diversified, and it can make the various elements of teaching combine and influence each other, with high flexibility. Wechat platform can combine learning knowledge with the information of the times, so that students' learning way is no longer limited to closed teaching. Through this platform, open and characteristic teaching content can be created. For example, learning activities can help students expand their thinking, and students' learning ability can be comprehensively improved in the actual exercise and communication. In the art teaching of colleges and universities, teachers can share knowledge related to teaching through the WeChat official account from the special information platform, and then students will share knowledge and information with the students, and summarize the problems encountered in their study. In the official account or chatting way, teachers should be informed to exchange smoothly and share online, and then search for knowledge of art, so that all of them can be open in the whole learning process of WeChat platform. Teachers should teach students in accordance with their aptitude according to their learning situation, lead students to analyze their suitable learning methods from a professional point of view, and promote the innovation and personalized characteristics of art students, so as to achieve sustainable development and better prospects.

## 3. THE WAY TO CONSTRUCT THE ECOLOGICAL ENVIRONMENT OF COLLEGE ART EDUCATION BASED ON WECHAT PLATFORM

### 3.1. Realize resource sharing and strengthen the analysis of educational ecological environment

Generally speaking, art students in Colleges and universities will be constrained by the traditional system of basic education. Before formal learning, students do not

understand the whole art professional knowledge. In addition, in the school education, the curriculum arrangement in Colleges and universities lacks practical content, and does not give students a gradual acceptance process for the unfamiliar art major. Therefore, students are lack of basic knowledge, and teachers' common sense in the course also has one-sided characteristics. Therefore, in the wechat teaching platform, teaching can make up for the defects of teaching through this platform, increase the channels for students to contact with professional learning, and understand the basic professional knowledge as soon as possible in the discussion, and freely choose what they want to know in the art module course, so that students and teachers can have a better understanding of relevant knowledge. In Colleges and universities, most of the art teachers are experienced artists, most of them have the advantage of solid professional knowledge. But at the same time, because they are generally older, they don't know much about the times, and they lack good communication with students. Through wechat teaching, they can integrate social communication, strengthen the interaction between teachers and students, exchange learning and emotion, and make the learning process more smooth. In the actual construction of ecological environment, colleges and universities should be mainly based on the actual situation of teaching, and lay a stable foundation for the construction of teaching ecological environment of wechat platform [1]. Secondly, we should combine the characteristics of students, analyze the shortcomings of art teaching and the key and difficult points of teaching reasonably, and formulate more efficient teaching strategies to make up for the shortcomings of students' learning in the classroom.

### 3.2. People oriented, planning and constructing the content of ecological environment

In the actual design of teaching content, we need to fully consider the rationality of the educational ecological environment, and give full play to the role of wechat platform. The multimedia in wechat platform can make the teaching design more perfect, and modern multimedia means can meet the healthy growth of students from many aspects according to the needs of students' all-round development. The information of wechat platform has the characteristics of meticulous and scattered knowledge, which is not conducive to students' intuitive learning. Therefore, in the teaching design, we must pay attention to the pertinence and integrity of the information. Teachers can integrate the scattered knowledge to a certain extent, so as to prevent students from being confused by the disordered knowledge when they are learning, and can not clearly understand the learning ideas.

Secondly, in the process of learning, due to the different content of each class, teachers need to analyze and introduce the correct way of thinking. We can use the way of thinking introduction and scenario creation to carry out group teaching, stimulate students' diversified learning, improve learning efficiency and subjective initiative.

### 3.3. Implementing specific operation to improve the ecological environment of Art Education

In WeChat platform, effective information means can be accelerated, such as friends circle, official account, group chat and one to one chat. Teachers should fully understand the use of these functions. Using these methods can not only help solve students' learning problems, but also give care in life, effectively promote the feelings between teachers and students, and shorten the distance. At the end of the course, teachers should understand the completion of students' works, put forward suggestions for revision, and supervise the revision process of students. In the background management of official account, the whole teaching content should be customized, and the teaching contents should be divided into modules to show to students. In addition, information about famous works in fine arts and Museum of art will be released in time to make necessary measures for students to expand their knowledge and learning channels. [2] After students understand the information, teachers can classify students according to their learning personality and understanding tendency, and use positive and appropriate teaching methods to help students learn more efficiently and promote a good ecological learning environment.

## 4.CONCLUSION

According to the above analysis, wechat platform can promote the improvement of students' learning level. Including official account, group chat and one to one chatting, promote teaching methods innovation, and introduce this way into teaching, so as to create a new teaching plan for art teaching in Colleges and universities. Art knowledge is fully covered among students to promote students' interest in learning and communication between teachers and students, and create a good ecological environment for students' art education.

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# Analysis on Teaching Reform Strategy of Environmental Engineering Under the Background of Engineering Education Accreditation

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**Abstract:** Engineering education professional certification is an internationally accepted qualification evaluation, which can provide basic guarantee for the quality of engineering education. On this basis, it can also realize the international mutual certification of engineering education international and engineer qualification. Through the engineering education professional certification, the process of engineering professional education can be continuously standardized and improved, and the teaching level and quality can be improved. This paper makes a specific analysis of the professional teaching reform strategy under the background of engineering education professional certification for reference.

**Keywords:** Engineering Education Certification; Environmental Engineering Major; Teaching Reform; Strategy

## 1. INTRODUCTION

At this stage, although China has a large number of engineering and technical personnel training, the number of qualified engineering personnel is still not ideal. In China's higher education, there are some problems in engineering teaching, such as students' lack of practical ability, the education they receive can not meet the needs of society and so on. Therefore, in order to continuously improve the teaching quality in environmental engineering education, it is necessary to take the engineering education professional certification as the guidance and thrust to continuously promote the teaching reform[1-2].

## 2. THE NECESSITY OF PROFESSIONAL CERTIFICATION OF ENVIRONMENTAL ENGINEERING IN CHINA

Environmental engineering is an interdisciplinary subject, which is related to many subjects, such as biology, civil engineering, meteorology, sociology and so on. Environmental Engineering evaluates the impact of human production and social activities on the environment, and then through specific planning, engineering and management measures, effectively controls the problem of environmental pollution, realizes the protection effect of natural resources and environment, and promotes the coordinated and sustainable development of economy, society and environment. Therefore, environmental engineering, as an emerging discipline, has a relatively complex knowledge system and a wide range of disciplines. It requires that the students of this major can

have good innovation ability and social practice ability through professional education, so that the trained talents can meet the needs of the current society. In order to achieve the construction of environmental engineering specialty with characteristics, through the engineering education professional certification, we can make clear the talent training objectives and education standards of this specialty in the professional teaching process, and firmly grasp the future development direction. Moreover, it can also improve the quality of school education, establish a fair and objective credibility in the society, education field and relevant departments, so as to provide basic guarantee for the students to meet their learning needs in knowledge and skills. To carry out the construction of professional certification in environmental engineering, we should refine and clarify the training objectives, constantly improve and optimize the curriculum system, integrate teaching resources, enhance the teaching staff and the overall quality of education, promote the healthy development of environmental engineering, and make the trained talents have stronger professional ability and market competitiveness in employment. Therefore, in order to meet the needs of the professional development, improve the competitiveness of environmental engineering, and constantly improve the quality and level of education, it is necessary to promote the professional certification of engineering education.

## 3. TEACHING REFORM STRATEGY OF ENVIRONMENTAL ENGINEERING UNDER THE BACKGROUND OF ENGINEERING EDUCATION ACCREDITATION

### 3.1 Planning training plan

For colleges and universities, it is necessary to design the knowledge content, practice teaching, curriculum system and relevant reference indicators of the major on the basis of the practice and reform of the professional talent training mode. And further qualitative description and quantitative provisions of the professional education content, teaching requirements, personnel training objectives, quality standards, etc. Professional certification puts more emphasis on the quality and professional ability of students in talent training. Environmental engineering specialty has strong engineering applicability, so in the orientation of talent training objectives, we should start from the talent training concept, social talent demand, students' development space and potential. In addition, in determining the goal of

personnel training, we should also focus on the comprehensive environmental engineering personnel training under the guidance of the "big environment" construction. Driven by the development needs of the industry, according to the engineering professional certification standards, the environmental engineering professional organic whole is established, and its advantages are fully displayed.

### 3.2 Optimize the curriculum

For the environmental engineering major, in the course setting, we should consider the professional training objectives, to ensure that students can master and apply the future employment skills through the course learning and professional education, and adapt to the job faster. The curriculum system of environmental engineering specialty should not only include the basic contents required in the certification standards, namely engineering basic courses, professional basic courses, professional courses and natural science courses, but also add some selected courses to further reflect the characteristics of the specialty. In addition, because students will directly face the talent market and serve enterprises when they are employed in the future, they should also invite experts from enterprises and the industry to participate in the discussion when setting up the professional curriculum system. In this way, we can grasp the current market and enterprise employment needs and standards, and make the required curriculum system more scientific and reasonable.

### 3.3 Strengthen practical teaching

Through practice teaching, students can further improve their practical ability and practical ability by combining theory with practice on the basis of grasping scientific theories and methods. For the engineering education certification, it further highlights the status of practice teaching inspection, emphasizes the construction of a perfect practice teaching system, and improves the requirements for the cultivation of students' engineering application ability. The course of environmental engineering has strong practicality, so in the process of professional education, we should always infiltrate the cultivation of students' practical ability. First of all, it is necessary to optimize and integrate the advantages of disciplines and build a diversified platform for cultivating engineering practice ability. For example, professional laboratories can be opened, science and technology competitions can be held, and students can make full use of their spare time to improve their scientific research ability by participating in the research of some contents in Teachers' scientific research projects. Secondly, we should promote the cooperation between schools and enterprises, strengthen the construction of practice base, constantly enrich and expand social resources, so that students have more and better opportunities to carry out engineering practice. Finally, in the cultivation of students' practical

ability, graduation design is one of the key links, so we should constantly improve the quality of students' graduation design.

### 3.4 Improve the professional quality of teachers

In order to ensure the high-quality training of talents, it is necessary to strengthen the construction of teachers, and constantly improve the professional ability and quality level of teachers. Only when teachers have strong practical ability, can they give positive and correct guidance to students when they carry out on-site practice. Therefore, under the background of professional certification, the teaching reform of environmental engineering specialty should also continuously improve the teaching quality and level of teachers, and enhance their practical and scientific research ability. The school should let teachers have more opportunities to participate in enterprise practice and exercise, and let teachers accumulate practical experience, so that they can continuously infiltrate engineering consciousness and thinking methods in the actual course teaching. Thirdly, the school can regularly invite some professionals with rich engineering experience and scientific research background to guide the teaching practice of teachers and students, so that teachers and students can fully learn from the rich engineering experience of professionals.

## 4. CONCLUSION

To sum up, under the background of engineering education professional certification, it is necessary to achieve the goal of personnel training, improve the level and quality of professional education, and constantly enhance students' practical ability. To make students have greater competitiveness in employment, it is necessary to promote the teaching reform of environmental engineering, so that the trained talents can fully meet the social needs.

## ACKNOWLEDGMENT

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# Comparative Analysis of English And Chinese Idioms Based on History and Customs

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**Abstract:** Because idioms contain more contents of history and customs, how to effectively compare English-Chinese idioms based on history and customs has become an important aspect to be paid attention to in order to have a good quality of English-Chinese translation. This paper briefly expounds how to compare historical-based English-Chinese idioms with historical context, events and allusions, and how to reasonably compare English-Chinese idioms based on customs through regional customs, religious beliefs, holiday customs, and behavioral etiquette, with a view to providing reference for improving the quality of English-Chinese translation.  
**Keywords:** History; Customs; English And Chinese Idioms; Idiom Comparison

## 1. INTRODUCTION

As the essence of culture, idioms can be a key means to help people understand different national cultures, at the same time, idioms also contain a large number of history and customs, English and Chinese translation, we must have a deep understanding of the contents. It can be seen that it is particularly important to pay attention to the contrast between English and Chinese idioms based on history and customs, and how to correctly compare English and Chinese idioms based on history and customs has become an urgent need to pay attention to.

## 2. A COMPARISON OF ENGLISH AND CHINESE IDIOMS BASED ON HISTORY

### 2.1. Historical context

Because of the differences in expression between different languages, the context of the content is also different, the translator in the translation of the target language, if only understand the meaning of the sentence and vocabulary, the translated content is often relatively rigid, lack of good language aesthetics. Simply put, it is difficult for people to understand the meaning of language quickly by failing to express it from the context in which the speaker is located. Thus, in the translation of English and Chinese idioms, we should pay attention to the use of historical context, in order to facilitate the understanding of others, for example, "Stratagem of the empty city - presenting a bold front to conceal a weak defense", this sentence is mainly used to express the "empty city plan", however, if only face-to-face translation, it is difficult to match the original words expressed in the mood, ideas, would make it impossible to understand what this part really meant. Or, in the expression of a particular city, through integration into the historical context, the translated content will be expressed according to cultural color and connotation, for example, when expressing Xi'an, Luoyang and other cities, can be described as "historical ancient capital", so as to show the meaning of translation content, but also the use

of cultural heritage, characteristics and so on to enhance the aesthetic language<sup>[1]</sup>.

### 2.2. Events and allusions

Events and allusions are also the more frequently used content in English and Chinese idioms, through the use of these events and allusions can not only elaborate specific ideas, but also show cultural characteristics, for example, in Chinese idioms, "refers to deer as horses", "guilty of jingling" and other idioms contain many events and allusions, the use of English translation for "Refer to a deer a horse", "to offer a humble a" and so on, can be found by comparison, Chinese language, mainly to the four-word dynamic guest style as the main structure, which also contains the structure of the multi-word main predicate guest. Through this form, we can not only express multiple meanings, but also fully display the cultural connotation, and the overall structure is flexible. In contrast, English idioms are mainly composed of prepositions, pronouns and moving elements, and are mostly active in translating content.

## 3. A COMPARISON OF ENGLISH AND CHINESE IDIOMS BASED ON CUSTOMS AND CUSTOMS

### 3.1 Regional customs

Because the English-speaking countries and China's geographical environment is different, there are also relatively large differences in customs, for example, China has been agriculture-based countries since ancient times, and agricultural-related idioms are: "Wugu Fengden", "wind and rain" and so on, and agricultural-related idioms are also Contains a lot of content: "the land is not dependent, the play is not dependent on the play, the land in the human species, the play is sung in the people", "the hoe has water, the shantou has fire" and so on, these idioms and proverbs show that agriculture occupies an irreplaceable position in our regional customs, It is also the core of the development of society. In contrast, English-speaking countries in terms of geographical location and China is far away, and there are large differences in the environment, of which the adjacent sea area is the most important geographical characteristics, therefore, the resulting idioms are naturally also closely related to water, for example, "have an oar in 'everyman's boat" means a lot of business, "ship in the pass in the night" means ping shui meet people. Through these contents, it can be seen that there are great differences between different languages in terms of regional customs, and when translating language content, it is necessary to base on the corresponding actual situation in order to express the true meaning of idioms.

### 3.2 Religious beliefs

In English and Chinese idioms, the proportion of religious belief is also relatively high, when in a specific context,

through the use of idioms to express different ideas, attitudes and so on. However, English-speaking countries differ greatly from our country in terms of religious beliefs, for example, Christianity is the religion of English-speaking countries in the West, and from an ideological point of view, idioms related to Christianity include "God helps who help you" meaning "God helpers", "Judge not, and you may not be judged" meaning not to talk about others, lest others be judged. In contrast, Our Country Has Five Thousand Years Of Cultural History, Buddhism, Taoism On China'S Culture Has A Very Far-Reaching Impact, The relevant idiomS Are Also Many, Such As, "Both CauseS, Then Get ResultS, Everything Is Doomed", "Thick Moral Load, There Is Tolerance Is Big", "Prefer To Die For Good, Not For Evil" And So On. It can be seen that Chinese idioms pay more attention to inclusiveness<sup>[2]</sup>.

### 3.3 Holiday customs

There are also great differences between Chinese idioms and English-speaking countries, in which the expressions are also unique, for example, as a festival of worship and remembrance of deceased relatives, the most common English idiom is "All Saints' Day" Halloween "Trick or Treat!" It means that if you don't invite, you'll make trouble, and the custom of the day is for young children to knock on doors door-to-door to ask for candy in fancy dress. As for our country is the Qingming Festival, Zhongyuan Festival and many other festivals, in such festivals, people mainly to sweep the tomb to sacrifice ancestors, youth tour, kite flying and swings as the main activities, and, Qingming belongs to one of China's traditional twenty-four knots, with obvious seasonal characteristics, more "before and after qingming rain,

wheat must be good harvest" and other idioms to express people's thoughts and feelings.

### 3.4 Behavioral etiquette

Behavioral etiquette in English idioms also have many differences, for example, when the two sides meet to say hello, China's behavior etiquette is mainly after the two sides meet each other salute, greetings, the content of the conversation is to ask each other "have you eaten?" "Wait, this kind of behavior nowadays usually applies to greeting, whether the two sides "eat or not" is not the key point. Conversely, in English-speaking countries, translate "Have you had your meal?" directly. Will be mistaken for the other person is very concerned about "eating" this matter, or will make the other person feel that they will be invited to eat.

### 4. CONCLUSION

To sum up, because English and Chinese idioms contain many aspects of history and customs, in order to better realize high-quality English-Chinese translation, we must pay attention to the content of the comparison of English-Chinese idioms based on history and customs, so as to better grasp the differences between English and Chinese culture, so as to provide a solid foundation for the accurate translation of English and Chinese.

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# The Impact of The Epidemic on Cross-Border E-Commerce Business Promotion

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**Abstract:** In the new situation, with the in-depth development of Internet technology and information technology, the rapid rise of cross-border e-commerce business, many enterprises follow the trend of The Times and social development, seize the development opportunities of e-commerce business, actively cooperate with e-commerce, carry out cross-border e-commerce business. However, the sudden COVID-19 has caused a serious impact on cross-border e-commerce business. Many import and export trade cannot be carried out normally, and e-commerce business is at a standstill. Based on this, this paper mainly analyzes the impact of COVID-19 epidemic on cross-border e-commerce business promotion.

**Key Words:** Covid-19 Epidemic; Cross-Border e-Commerce; Impact And Measures

## 1.INTRODUCTION

In recent years, along with the advancement of globalization and the rapid development of Internet technology, continuous cross-border electricity business has been rapidly expanding and development of cross-border business transaction is domestic and international electricity has been widely promotion and application, promoted the development of China's foreign trade economy, directly improve the economic benefits of enterprises in our country, promoting the development of our national economy. However, the COVID-19 has caused a certain impact on the promotion of cross-border e-commerce business, and hindered the smooth progress of cross-border e-commerce business to some extent. However, there are also new development opportunities in the crisis. Therefore, this paper mainly analyzes the adverse impact and development opportunities of COVID-19 on cross-border e-commerce business.

## 2. THE ADVERSE IMPACT OF THE EPIDEMIC ON CROSS-BORDER E-COMMERCE ENTERPRISES

### 2.1 Production supply chain is tight and market supply and demand change

During the epidemic period, due to the closure measures taken at home and abroad, most of the enterprises were in a state of shutdown, resulting in the production supply chain tension, import and export trade could not be carried out, seriously affecting the economic benefits of enterprises. In the middle of the outbreak, COVID - 19 outbreak gradually spread to many countries around the world, has been rapidly spread throughout the world, further adding to the business's determination to keep factories and workers idle and on cross-border e-commerce caused serious influence, but in our country in the middle of the epidemic development take timely measures to isolate, many enterprises began to recover the

production in the medium term, but in the process of production, Demand for raw materials as well as the demand for machinery and equipment cannot be satisfied, can't or imported from abroad for study, and many overseas orders also had to be postponed or cancelled, causes our country's many enterprises will be the focus of the development and sales to the domestic market, and take measures for the domestic market share of only, Cause the market supply and demand of our country produced remarkable change. In addition, due to the effect of COVID - 19 outbreak, many cross-border electricity business enterprise faces a shortage of raw materials, sold out of stock, in the short term will cause directly to the economic benefits of enterprises and the serious influence, will directly affect the economic benefits of the enterprise and the staff wages, even some enterprises to loan from the bank or fill a shortage of funds, Selling expired or low-quality products lost consumers' trust and led many businesses to go bankrupt or go bankrupt during the epidemic.

### 2.2 Strict epidemic control and obstruction of cross-border logistics

During the epidemic period, the overseas epidemic situation was grim and the COVID-19 epidemic was highly infectious. In order to ensure the safety of Chinese people's lives and property, China took certain measures to close the city, which affected international logistics to a certain extent and led to the continuous reduction of international flights. During the SARS epidemic, except our country many cities and countries also have to take the measures to seal sealing the city, and strictly limit the customs import and export, directly lead to cross-border business can't be, cross-border logistics is hampered by a serious, caused many cross-border electricity enterprise products in the inventory backlog, serious impact on the development of cross-border electricity, resulting in a large number of unmarketable products, The shortage of capital chain, even after the epidemic, many cross-border e-commerce enterprises have no way out of the crisis, foreign orders continue to decrease, the shortage of working capital, leading to many cross-border e-commerce enterprises have to conduct domestic business.

### 2.3 Decline in consumption power during the global economic downturn

Because of the influence of the outbreak of COVID - 19, many enterprises are forced to keep factories and workers idle and not only is the enterprise is not able to obtain economic benefits, the staff also does not have the corresponding salary and remuneration, lead to the consumers on the market shrinking, the global economic downturn, consumption is declining, and even many enterprises in order to reduce costs, increase its economic



benefits, during the outbreak of layoffs, With the rising unemployment rate, many workers have sufficient funds in order to maintain their normal life, and many people will save their only salary to reduce economic expenditure and economic activities, resulting in a market slump and a serious decline in consumption capacity [1].

### 3. DEVELOPMENT OPPORTUNITIES FOR CROSS-BORDER E-COMMERCE ENTERPRISES IN THE EPIDEMIC

3.1 The growth rate of cross-border e-commerce is faster in the later period of the epidemic

In the new situation, the in-depth development of Internet technology and information has changed the original sales channels and sales models. Many people prefer to use online shopping, which is more convenient and safe. During the outbreak due to keep factories and workers idle and national city sealing measures, many consumers to shopping, not to buy in the store, and during the period of the outbreak, because can't afford to huge pressure to rent, many offline stores have closed or even collapse, this has brought the development of e-commerce opportunities. E-commerce has the characteristics of openness, globality and interactivity, which can break the space-time limitation of the original sales channel, provide consumers with massive product information, and integrate the existing resources to provide consumers with more convenience. Therefore, many consumers will continue to buy online after they adapt to the sales model of e-commerce. Therefore, in the late stage of the epidemic, the market share of cross-border e-commerce will continue to increase at a faster pace, which will unleash the current purchasing potential.

3.2 Product demand preference changes

Influenced by the COVID-19 epidemic, many people pay more attention to life, health and safety, and pay more attention to improving their physical quality. When buying products, they will shift to products related to health and safety and learning, which will lead to a steady increase in sales of such products. Secondly, affected by the COVID-19 epidemic, many people will change their consumption concepts and become more rational. They will purchase the corresponding products according to the actual needs in real life and reduce the probability of impulse consumption. Therefore, cross-border e-commerce should actively respond to the development trend of society and The Times, grasp the development opportunities in the epidemic period, continue to carry out cross-border e-commerce business, and formulate reasonable

development strategies and plans according to the current market supply and demand to ensure the sustainable development of cross-border e-commerce enterprises.

3.3 Cross-border e-commerce faces political difficulties in the late stage of the epidemic

During the epidemic period, some countries launched trade wars in order to shift their economic pressure and alleviate domestic enterprise conflicts. There were well-known events such as Sino-US trade friction and pork price rise, which brought certain obstacles and threats to the development of cross-border e-commerce enterprises. Some countries have adopted corresponding policies to increase logistics costs and customs requirements during import and export. As a result, tax on many products will be increased when they are sold abroad, which will increase the price of the products, reduce the sales volume of the products and affect the development of cross-border e-commerce enterprises. Therefore, in the later stage of the epidemic, Chinese enterprises should actively respond to the national call, follow the pace of national and social development, implement the One Belt And One Road strategy, improve the awareness of a community with a shared future for humanity, fulfill social responsibilities, and reduce the impact of the epidemic and political issues on cross-border e-commerce enterprises [2].

### 4. CONCLUSION

In conclusion, the COVID-19 epidemic has a certain impact on the promotion of cross-border e-commerce business, but it also provides a certain development opportunity for cross-border e-commerce business. Therefore, under the new situation, cross-border e-commerce enterprises should actively seize the development opportunities, meet the challenges, and constantly take optimization measures to promote the sustainable development of cross-border e-commerce enterprises.

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# Study on The Development of Children's Creativity and The Countermeasures of Education and Teaching

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**Abstract:** Children in early childhood are in the embryonic stage of intelligence, which is characterized by plasticity. It is necessary for kindergartens to adopt scientific teaching, guide children and stimulate their creativity, formulate reasonable teaching plans for them, improve children's cognition of the outside world, and obtain learning experience to enhance their intelligence. Combined with early childhood education to improve the effectiveness of teaching, this paper based on children's creativity to stimulate children's potential, combined with the actual situation of children to develop teaching programs, to lay a solid foundation for the development of children's creativity.

**keywords:** Early; Childhood

## 1. INTRODUCTION

Creativity is an important factor to promote personal development. For children, paying attention to improving children's creativity and constantly tapping children's potential can promote their better development. Children's psychological development in early childhood is immature, curious and unable to concentrate, so teachers need to actively guide children. Through mastering the characteristics of children, carrying out targeted teaching and choosing appropriate scientific education programs, children's creativity can be improved more effectively.

## 2. THE DEVELOPMENT CHARACTERISTICS OF YOUNG CHILDREN IN CREATIVITY

2.1 Children's creativity is based on the state of change but balance

Children's creativity in early childhood is characterized by constant change, but based on change to maintain a balance. And has the advantage of easy to shape, outside people or things will have an impact on it. For adults, children have more creativity, based on creativity can effectively improve children's psychological quality, with the continuous growth of children, all aspects have been greatly improved. In real life, children's activity ability and scope brought by creativity are constantly expanding. Children can expand their creativity from activities and add personality charm to activities. This kind of creativity can also gradually evolve from personal trend to social value in the process of children's development.

2.2. Children's creativity belongs to the category of expression creation

The category of children's creativity is to show through expression. For the creativity of expression, we need to define a specific environment for children, so that children can better maintain a relaxed state in the environment.

Children's way of thinking has the characteristics of individuation, but it only exists in the stage of concretization, and can't imagine things of abstract logic. And children's age is too small, lack of autonomy in learning, making the corresponding basic knowledge reserves insufficient, resulting in the lack of comprehensive development of creativity, it is difficult to reflect the social value.

2.3. The creativity of young children has a strong initiative and spontaneity

In the process of creative interaction, people tend to create actively, which makes creation with task view. That is to say, creative activities are based on people's subjective consciousness and have higher requirements for personal quality. Although children have high creativity, they lack self-awareness and creativity in dealing with things. The main factors are imagination and curiosity psychology. Only by scientifically integrating the two factors into teaching can children's creativity be comprehensively improved.

## 3. TEACHING COUNTERMEASURES FOR THE CREATIVITY OF YOUNG CHILDREN

3.1. Game activities stimulate students' creativity

The game has the novel characteristics, can stimulate the imagination of children. During the course of the game development, during the development of the game activities, through the combination of entertainment and children's creativity, the educational mode of "teaching in music" is realized, and the teaching task is completed. In a relaxed atmosphere, improve children's creativity. Children in the game constantly explore, stimulate creativity to improve, the game to deal with flexibly. The combination of game and creative teaching can stimulate children's divergent thinking, which aims to ensure children's creativity adapts to the game, constantly adapts in the game and deeply stimulates the creative potential of children [1].

Therefore, it can be said that the game is not only a fun activity for children, but also a good way to learn. Games can effectively improve children's abilities. For example, kindergarten has the game of building blocks. Teachers can put forward thinking questions for children in the process of building their own children: "how to match blocks can ensure that the built house does not collapse and ensure stability?" Children will think positively in game activities based on problems, and improve their creativity and imagination. Children will try to build a variety of ways, and seek to ensure the balance of building blocks, through the game to effectively exercise children's

thinking, improve creativity. Teachers should pay attention to the process of educating children and leading children's activities. Children will have hesitation and thinking when facing the untouched things, but it also helps to improve the initiative and creativity of children. Teachers should not prompt children at the first time, but give proper guidance to guide them to solve problems. Give children more time to think about themselves, further expand their creativity and ensure the role of game to stimulate creativity.

### 3.2. Carry out comprehensive creative activities

At present, creative education for children focuses on creativity itself. In the actual teaching, teachers ignore the cultivation of personality, which leads to the phenomenon that it is difficult to effectively fit between the teaching concept and the promotion of creativity. In the cultivation of children's creativity, we should pay attention to the cultivation of creativity and creative personality, and carry out comprehensive training activities. Based on creativity, enhance children's creative personality. For example, in life, aesthetics and other fields to carry out comprehensive activities to protect children's creative growth.

In terms of art, we can guide children's creativity through art, music and other teaching as children's creative exploration activities, and through the use of tool skills and actions. Children based on music and art pictures, with the formation of their own music interested in singing, or through art teaching, to form their own cognition, their own abstract consciousness of the object embodied. Through comprehensive teaching, improve children's creativity, according to children's imagination to carry out activities, so that children become the real master of the game. Based on comprehensive teaching, we can rely on children's spirit to carry out activities, enrich education theory for teachers, break the boundaries between disciplines, and better establish creative teaching activities.

### 3.3. Carry out special thinking training

As the core of creativity, the promotion of divergent thinking requires teachers to strengthen the training of children in their daily teaching activities. Take a variety of teaching methods to guide children to think actively.

Asking questions to guide children's thinking, combined with real life questions, can promote children to combine life with creativity, improve personal creativity, and constantly stimulate divergent thinking. Creativity is based on life, and many things are waiting for children's observation and imagination [2]. Thinking and asking are the key points of cultivating children's creativity. Teachers should not ignore children's own questions. Children's questions hide the creative thinking of Wushu, and they need to patiently answer children's questions. Otherwise, it will stifle children's creative thinking. We should not interfere with children's behavior too much. We need to guide children to explore independently and create on the basis of original knowledge. At the same time, teachers should also pay attention to the way of encouragement. Children's emotional fluctuation after being encouraged is more conducive to improving creativity, realizing the effective operation of the brain, and ensuring the further improvement of creativity.

## 4. CONCLUSION

To sum up, children are an important period in their whole growth process. It plays a decisive role in children's future development. In the actual education process, we need to strengthen the scientific education program, teachers and parents actively guide children, enhance children's creativity, and expand children's creative thinking. To provide a good environment for children's growth, promote children's creativity and lay the foundation for future growth.

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# On Constructing the Collaborative Mechanism of Ideological and Political Education in Colleges and Universities in The New Era

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**Abstract:** Collaborative mechanism is a collaborative education strategy based on collaborative theory, with ideological and political education as its connotation, combining with the key points of ideological and political construction in colleges and universities in the new era and taking it as its extension. Constructing the collaborative mechanism of ideological and political education can promote the continuous innovation of ideological and political education in colleges and universities. This paper analyzes the collaborative mechanism of ideological and political education in colleges and universities in the new era for reference.

**Key Words:** Ideological And Political Construction; Ideological And Political Education; Collaborative Mechanism Construction Strategy

## 1. INTRODUCTION

Higher education is not only an important position for the ideological and political construction of our country, but also a cultural and scientific position to achieve the goal of cultivating morality and educating people, and to cultivate ideal, responsible and hopeful trendsetter of The Times. Therefore, it is necessary to integrate the elements of ideological and political construction in the new era and strengthen the innovation and reform of ideological and political education in order to construct the pattern of all-round education. Considering the promoting effect of the synergistic mechanism on ideological and political education, it is necessary to explore effective strategies for the construction of the synergistic mechanism on the basis of actively facing the current problems and difficulties.

## 2. FACTORS INFLUENCING THE EFFECTIVENESS OF THE COLLABORATIVE MECHANISM CONSTRUCTION OF IDEOLOGICAL AND POLITICAL EDUCATION IN COLLEGES AND UNIVERSITIES IN THE NEW ERA

At present, some colleges and universities do not have a comprehensive and full understanding of the concept of collaborative education in ideological and political education. Therefore, there are some problems in the effectiveness of the implementation process, and there are many influencing, hindering and interfering factors in the implementation, mainly reflected in the following three aspects:

### 2.1 Insufficient synergy among educational subjects

Moral education is the fundamental task of higher education, and it is also the goal of ideological and political education in the new era. All the faculty and staff in colleges and universities shoulder the important

mission of teaching. But some colleges and universities management organization still exist at present stage of unclear understanding of education main body, make the teachers lack of coordination in the process of education practice of interaction and communication, lead to ideological and political education concept not closely combined with other professional disciplines, students and teachers in the interaction of teaching and learning activities in conjunction collaborative force is insufficient, even out of line. In addition, some teachers do not fully develop and utilize ideological and political education resources in classroom teaching, which frequently results in repeated and inefficient classroom contents, resulting in insufficient synergistic power of subjects and affecting the effect of synergistic mechanism construction.

### 2.2 Lack of cohesion in the educational process

Ideological and political education results can only be shown in the process of education by continuous efforts, so it must be carried out, sustained and connected in the process of the educatees' growth. In the current education process, colleges and universities generally pay attention to the ideological and political education of new freshmen, and carry out a series of theoretical education and practical activities at the beginning of the term. Although the freshman period is the key period to pay attention to the ideological and political education, the ideological and theoretical guidance for the second, third grade or senior students is obviously insufficient. Such a fault in the process of education is not conducive to the lasting effect of education and the connection of externalization.

### 2.3 Lack of power of education platform

Ideological and political education in colleges and universities only stays in the classroom, which is the main reason that affects the effectiveness of the present stage. Ideological and political work should not only be based on the classroom, but also extend to the outside of the classroom. Campus culture, network platform and education management service are all hidden ideological and political education classroom. Therefore, it is necessary to strengthen communication and cooperation at all levels, strengthen the linkage between platforms, and work together to improve the overall effect and quality of ideological and political education in colleges and universities [1].

## 3. STRATEGIES FOR CONSTRUCTING COLLABORATIVE MECHANISM OF IDEOLOGICAL AND POLITICAL EDUCATION IN COLLEGES AND UNIVERSITIES IN THE NEW ERA

### 3.1 Cooperation of educational subjects

In the new period, the ideological and political construction of colleges and universities must take effective measures according to their actual conditions, so as to continuously strengthen the specific functions of the administrative departments in the ideological and political education work, implement the key points of the ideological education work in the specific work, and build an educational subject of collaborative education. University internal management system of the party committee, legal, administrative department and other agencies to realize own take on the responsibilities of the important education education, to intensify the sense of mission, the new age efficient khalid ents constantly firm political position and direction, can ensure that constantly improve the management of political consciousness and individual accomplishment, for ideological education work on the right track, Steady progress in the right direction. Only on this basis can we further open up the block chain between the Party departments, ideological and political teachers, the student union of the Communist Youth League, class cadres, etc. to coordinate ideological and political education resources and provide necessary and sufficient conditions for the organization of a scientific and efficient education system and excellent teachers.

### 3.2 Collaborative teacher training

Without the active participation of all the teachers in colleges and universities, the realization of the ideological and political education goal of moral education in colleges and universities can only be an empty talk and a mere formality. Teachers of both ideological and political courses and other professional courses are important human resources to ensure the effectiveness of the synergistic mechanism. Therefore, building a team of teachers with firm political stance, solid professional theoretical knowledge and excellent personal comprehensive quality is also an important content of the construction of the synergistic mechanism of ideology and politics. The administrative departments of colleges and universities must first build a community of teachers' cooperative training, and do a good job in the ideological mobilization of the teaching staff, which can shape the ideological and political level of the teaching team from the aspects of comprehensive quality, political accomplishment and professional ability. Secondly, ideological and political education and research experts can be invited to take the lead and organize regular on-the-job training and a series of theme activities to broaden the political vision of the teachers and raise their education level. In addition, it is necessary to strengthen the post responsibility education of the teaching staff. For example, on the basis of full investigation, a series of scientific, standardized, perfect and feasible evaluation mechanisms should be developed and the teacher service platform should be upgraded to provide a strong guarantee for the main force of ideological and political education in colleges and universities.

### 3.3 Overall planning coordination

The perfect and systematic planning of ideological and political education determines the rationality and

feasibility of the direction of the construction of collaborative mechanism. In the process of formulating stage or overall development planning, colleges and universities should include the planning of ideological and political education work. On the one hand, it is necessary to combine its own actual situation and school-running characteristics to formulate programs in line with long-term development and current development, so as to provide more help for the effective, stable, long-term and orderly development of ideological and political education in the future., on the other hand, according to the spirit of the education of institutions of higher learning course construction guidelines ", earnestly implement the "three education" and under the new situation of "education and" talent cultivation path, a clear goal of ideological and political education work, and make the corresponding division of labor and specific management measures, for example, in the ideological and political quality assessment, We should not only take students' ideological and political achievements as the standard, but also observe the performance of students' participation in relevant activities, and constantly improve the systematization of ideological and political education through the coordination of overall planning [2].

### 3.4 Cooperation of educational carriers

Education carrier is an important method and effective way to exert the influence of synergistic mechanism, and also a platform to integrate multi-channel resources and ideological and political education elements. We can rely on the current information technology and media power to build an all-media ideological and political education platform with the school as the main work and the media such as Learning China, WeChat public account, Bilibili, Weibo as the support; Can also give full play to students' party branch, the league of student and the class of youth leadership, through the organization of the ideological and political education activities, as an ideological education classroom main position of the auxiliary power, thorough student groups, polymerization in dormitory, class of ideological education, dig into daily life situation, to build all of the dot, line, face and body position ideological construction pattern.

## 4. CONCLUSION

To sum up, with the high-quality reform and all-round promotion of ideological and political construction in colleges and universities in China, the effectiveness of ideological and political education in colleges and universities is increasingly affected by the synergistic mechanism. Must, therefore, on the basis of fully understanding the concept of cooperative education, face up to the factors influencing cooperative mechanism to implement, build all-round education of colleges and universities education coordination mechanism, through the joint education main body, training the teachers troop, with education carrier such as strategy, strengthen the overall planning, open new pattern for construction of higher education ideological instruction.

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# Research on The Construction Path Of "Double Teachers and Double Abilities" Teaching Staff In "Transformation" Pilot Universities

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**Abstract:** In this paper, from the accurate grasp of the "double teacher" and "double ability" connotation, enhance the "double ability" of teachers, improve the evaluation and supervision mechanism. From three aspects, this paper analyzes the construction path of "double teachers and double abilities" teachers in "transformation" pilot universities, aiming to improve the theoretical literacy and practical ability of university teachers, keep up with the development requirements of the times, and cultivate more application-oriented talents. Realize the transformation and development of colleges and universities, and promote the education industry towards high quality and sustainable development.

**Key Word:** Transformation Pilot Universities; The Construction Of Teaching Staff; Double Division

## 1. INTRODUCTION

With social progress and economic development, China's "transformation" pilot colleges and universities also began to strengthen reform and innovation. We should strengthen the construction of "double teachers and double abilities" teaching staff, and promote the "transformation" Pilot Universities to combine their own regional characteristics and develop their own characteristics. Actively adopt a variety of ways to improve the professional level and professional ability of teachers, so as to better meet the needs of the development of the times, and promote the progress of education and social development.

## 2. CORRECTLY GRASP THE CONNOTATION OF "DOUBLE TEACHERS" AND "DOUBLE ABILITIES"

In order to realize the construction of "double qualified and double able" teachers in the Pilot Universities of "transformation", the key lies in the correct understanding of the connotation of "double qualified and double able" teachers, so as to better carry out the construction of teachers in accordance with the actual situation of universities. In 2015, the Ministry of education, together with a number of departments, issued the guiding opinions on guiding some local universities to transform into application-oriented universities (JF [2015] No. 7), which clearly put forward the concept of "double qualified and double able" teachers, and promoted the construction of "double qualified and double able" teachers to become the focus of attention [1]. It should be noted that "double qualified and double capable" teachers are not a unified concept, but should fully consider the situation and teaching objectives of colleges and universities, formulate

targeted development programs, so as to better carry out the construction of teachers" "Double teacher and double ability" teachers fully implement the concepts of "double teacher" and "double ability". Among them, "double teacher" is a kind of qualification certification, which requires teachers not only to have the qualification of professional lecturer, but also to have the qualification of engineer. However, teachers with both teacher qualification certificate and professional skill certificate are different from "Double Teachers". Double certificates are only an external manifestation of "Double Teachers". The "Double Teachers" are not only limited to the qualification certificate, but also the professional level and ability of university teachers. Only when teachers' ideological quality meets the requirements of "Double Teachers", can they really be "Double Teachers". The "dual ability" is mainly the combination of theory and practice, which requires teachers not only to have professional theoretical teaching knowledge, but also to enrich personal work experience, and to be able to vividly explain the raw book knowledge to students, so that students can master better theoretical knowledge and technical skills.

Therefore, the construction of "double teachers and double abilities" teaching team in "transformation" Pilot Universities puts forward higher requirements for teachers. In order to improve the professional level of teachers, the first thing is to strengthen the understanding of the concept, correctly understand and grasp what is "double teacher" and "double ability", so as to better formulate targeted measures and build a first-class teacher team.

## 3. ENHANCING TEACHERS' DUAL ABILITIES

As the above analysis said, "dual ability" is not only the professional theoretical level, but also refers to the teaching practice ability. However, some university teachers are lack of practical experience in enterprises. Although they have a lot of theoretical knowledge, they seldom have relevant enterprise work experience. At the same time, many teachers have great differences in education experience, life background and professional interest. It is very difficult to achieve unified management and professional improvement by collective management. In this case, the construction of "double teachers and double abilities" teaching team in "transformation" pilot universities can focus on young and middle-aged teachers, make full use of the characteristics of young and middle-aged teachers' energy and rich experience, and promote young and middle-aged teachers to enter the first batch of

"double teachers and double abilities" teaching team [2]. First of all, according to the policy and the situation of teaching staff, colleges and universities should formulate a relatively perfect teacher training plan, and can refine the training objectives of each stage. Through a variety of training methods, young and middle-aged teachers in Colleges and universities are organized to better learn professional theoretical knowledge and advanced education experience, so as to realize self growth and self transcendence, and improve the level of theoretical teaching..

Secondly, colleges and universities can actively promote the construction of industry university research practice platform, and promote the "dual ability" of teachers through school enterprise cooperation. Through business cooperation with local colleges and universities, colleges and universities actively encourage teachers to go to enterprises for business practice and professional training, so as to cultivate application-oriented teachers. Colleges and universities can also build the corresponding training mechanism to give all teachers equal opportunities to exercise and study, so that college teachers can go to different enterprises for centralized training and practice according to the professional categories and their own teaching situation, so as to make up for the vacancy of limited practical experience. For the situation of tight curriculum arrangement in Colleges and universities, colleges and universities can make full use of winter and summer vacation time to organize teachers to work in various enterprises, so that teachers can achieve self-improvement in limited time. It should be noted that the training of teachers in enterprises is not only limited to the surface, but also requires teachers to hold a positive attitude, arrive at the front-line positions of enterprises, find and solve problems, broaden new ideas and put forward new ideas. In order to put forward more scientific research projects that keep pace with the times and feed back theoretical knowledge through teaching practice, it can also strengthen college classroom teaching to a certain extent, so that teachers can actively use a variety of technical means to lead students to learn..

Thirdly, colleges and universities should strengthen the introduction of talents, and appropriately improve the welfare treatment, so as to attract more excellent technical talents from domestic and foreign enterprises to colleges and universities. To act as a "double teacher and double ability" teacher guide, to make up for the lack of existing teachers. Germany, the United States, Switzerland, Australia and other countries have hired professional teachers with enterprise work experience and professional work experience to teach in Colleges and universities" "Transformation" pilot colleges and universities can also use this experience to break the shackles of traditional teacher recruitment mode, broaden the channels of talent team construction, and promote more experienced technical talents to enter colleges and universities for teaching.

#### 4. IMPROVE THE EVALUATION AND SUPERVISION MECHANISM

To build a "double qualified and double capable" teaching team, we need not only to strengthen the professional level of teachers, but also to improve the evaluation and supervision mechanism, dynamically evaluate the work performance of teachers, and promote the standardization of all work. Specifically speaking, first, set up a special teacher assessment organization, according to the work performance of university teachers, according to the specific project indicators for grading assessment, using the way of professional skills assessment, for teachers who meet the requirements of "double teachers and double abilities" to be certified. Secondly, based on the construction of colleges and universities and the teaching staff, we should broaden the assessment methods, combine the theoretical research of teachers with professional skills, and focus on the achievements of teachers leading students to participate in the competition experiments. To promote college teachers to more in-depth enterprise front-line positions, rich work experience. Third, we should constantly improve the supervision mechanism of university teachers, strengthen the cooperation of various functional departments of the school, and promote the smooth progress of the evaluation work.

#### 5. CONCLUSION

To sum up, it is of great significance to analyze the construction path of "double teachers and double abilities" teachers in "transformation" pilot universities. In the face of the structural reform of higher education, it has become the focus of the current development to cultivate "double teachers and double abilities" teachers. In order to better promote the construction of teachers, we should correctly understand the connotation of "Double Teachers" and "double abilities", strengthen the comprehensive quality of teachers, improve the evaluation and supervision mechanism, and promote the transformation and upgrading of colleges and universities.

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# Discussion on Urban Public Space Design Based on Tod Development Mode

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**Abstract:** The accelerated process of urbanization, but also makes the city size has been improved, but the city public space has been further compressed, in the city development and construction of the design of the city public space is particularly important. Based on this, this paper starts from TOD development mode, analyzes its influence on urban public space design, and discusses urban public space design based on TOD development mode, in order to provide some references for the application of urban public space.

**Key Words:** Tod Development Mode; Urban Public Space; Urban Design

## 1. INTRODUCTION

TOD development mode is a public transport-oriented urban development mode. As an internationally representative urban community development mode, it is also one of the most representative modes of modern cities, which has been widely used in urban space design.

## 2. THE INFLUENCE OF TOD DEVELOPMENT MODE ON URBAN PUBLIC SPACE DESIGN

Emerging countries urbanization construction at present, a large number of population into the city, urban building increased, progressively reduce urban public space and brings the problems such as the urban space, traffic congestion, and as people public life space, produced great changes in People's Daily life and demand, this is not conducive to social development. The TOD development model, which emerged from the United States, has made significant contributions to the planning and construction of major cities in the United States and has also been adopted by other countries in the world. The TOD development model plays a guiding role in the design of urban public space in China. There are many excellent aspects and contents worth learning from. Combined with the actual situation of China and the specific situation of cities, it can optimize the design of urban public space in China, make urban planning more reasonable and reduce traffic jams.

Urban public space design is complicated. In addition to the basic design and planning, streets, squares, parks and other public Spaces should be designed in a more reasonable way to exert a certain influence on people's life and work. In the design of urban public space, the TOD development mode should not only avoid the chaotic phenomenon in the past. We should also enhance the influence and practicality of urban public space and promote the beneficial role of urban public space in social development and people's lives.

## 3. URBAN PUBLIC SPACE DESIGN BASED ON TOD DEVELOPMENT MODE

### 3.1 Street Network

The TOD development model itself is designed based on public transportation. As the traffic structure of urban public space, street network has a significant impact on the design of urban public space. The main factors affecting the design of street network are the frequency of use of the street, the level of service, the surrounding environment, and also need to consider the commercial economy, people's culture and behavioral ability, that is, the design of street network should adhere to the people-oriented, combined with the people's living habits to plan. There are three basic types of street networks. The first is the grid type of urban streets. According to the design drawings, most of the streets in this kind of street network are rectangular and relatively orderly, with appropriate distance between the main roads, similar to the shape of a checkerboard. The grid design has a clear sense of direction and a good control of the plot scale. But it does not respond well to the natural environment and urban concentration. The most famous square-shaped urban streets in Barcelona, New York and Beijing also adopt the typical grid layout. It is not difficult to find that most of these cities are located in plain areas and have a broad space for development. Good control of the street network is the primary principle of urban public space design.

The second is the radial street network, which is based on the city center or the center of the district and is surrounded by radioactive arterial roads. This kind of street network has distinct levels and clear connections between urban Spaces, which helps to strengthen the function of the central node. However, the diagonal road design can easily produce some difficult to use triangular plots. Paris is a representative of radial street network design. The radial trunk road centered on the Arc de Triomphe extends to the city periphery, combining roads, squares, green Spaces and memorial buildings into a complete public space.

The third model is a street network design, network structure, also known as the irregular street network is combined with the terrain and landscape environment for design, can well adapt to natural environmental conditions, is used for slope and riverside areas, the variability of the street can be resolved effectively transport, relatively difficult to identify the direction, Some irregular streets also affect the layout of buildings. For example, Chongqing, with mountains on three sides and a river running through it, can only adopt this kind of street network design basically [1].

### 3.2 City Square

The city square under the TOD development model is defined as the focus of urban public space, which can provide a place for people's public life. The design of urban square based on TOD development mode should

conform to two basic principles. Firstly, the design principle of human-text should be adhered to. The design of urban square should start from people's behavior and psychology, and meet the needs of users as far as possible, rather than planning an empty area. The cultural content of a city should be reflected in the design of a city square. For example, Charles de Gaulle Place, which is famous for its Arc de Triomphe, is a typical cultural spirit design of a city square. China's urban public space should also reflect the cultural style, in the square design into the local culture, color and form.

The design of city square should pay attention to scale and form. The scale of the square will affect people's social interaction, and has a certain relationship with the social economy, political culture. Generally speaking, squares of more than 1 hectare are quite impressive, but the width and depth of a city square still need to be taken into consideration. Xinghai Square, for example, covers an area of 1.76 million square meters, which is far more than 1 hectare. However, as a landmark building in Dalian, it not only improves the city's cultural quality, enriches the cultural life of the people, but also promotes economic development. The form of the city square is mainly based on squares, triangles and circles, while others, such as rectangles and ellipses, are extended. The square square has the characteristics of stability, which is conducive to people's gathering, and also has a certain exhibition space. The triangular square is dynamic and active, which is very suitable for use at the street junction; The circle, with its distinctive centripetality, is also considered to be the best square shape and can be used in a variety of occasions.

### 3.3 Outdoor space

Outdoor space refers to the external public space of commercial or public buildings, which is a new concept of urban public space. High-quality outdoor space can be matched with urban public space, providing a richer experience for urban traffic and urban culture. The design

of outdoor space should be based on the principle of commercial economy, which should not only be able to undertake part of the urban public space functions, but also stimulate more consumption behaviors. This is more common in all kinds of large shopping malls. The combined development of buses, subways and commercial buildings has reserved more areas for urban public space. Based on TOD mode of outdoor space more notice to maintain people's participation, facilities, content, action should be to strengthen the appeal of abortion, diversified and signature, when building outdoor space and walking space or public transportation together will gradually formed in the mall, commercial plaza and other areas, and the current sharing space, sharing the practice of economy, It also helps promote the expansion of urban public space [2].

### 4. CONCLUSION

In the process of urban construction and development, urban public space planning and design provide support for urban sustainable development. With the help of TOD development model, the urban street network, urban square and outdoor space of buildings are analyzed and studied. It makes clear the role and effect of TOD concept in urban design in China, plays a promoting role in the rational planning and design of urban public space, and shows the scientific nature and development of urban public space design.

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# Study on Urban Street Design Based on Tod Concept

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**Abstract:** TOD design concept is based on public transportation as the direction of development and design. In the design and planning of business district or residential area, TOD design can make full use of public transportation system to carry out all-round planning and design. This paper expounds the principles of urban street design under TOD design, lists the advantages existing in TOD design mode, and expounds the relevant design points from the aspects of spatial planning, land resources and travel mode.

**Key words:** TOD concept; City streets; Design research

## 1. INTRODUCTION

The design concept of TOD emphasizes the rational use of urban land, advocates scientific planning, and compactly develops urban space along public transport routes. Public transportation mainly includes plane, train, bus, subway, light rail and other rail transportation methods. In this design concept, citizens are encouraged to walk or take public transportation to realize the construction of green transportation city to the greatest extent, so as to realize the ecological and efficient modern city construction.

## 2. URBAN STREET DESIGN PRINCIPLES UNDER THE TOD CONCEPT

TOD design is a Development planning method based on Transit orientation, which is the abbreviation of Transit Oriented Development. The application of TOD design concept can effectively relieve the pressure of urban traffic environment, accelerate the construction of ecological city, reduce automobile exhaust emissions, and play a positive role in solving urban inherent problems and planning the direction of urban development. The TOD design concept creates a scientific, convenient and safe walking environment for urban residents through the transformation and upgrading of urban public transportation [1]. In the process of design of concrete, TOD design follows the basic principles of public transit oriented, high standards of construction of city public traffic facilities and related services, limited construction of public transportation systems, urban residents are encouraged to use public transportation, thus reducing the private vehicle usage, agreed to improve urban traffic environment, the protection of urban ecological purpose. TOD design guarantees the people-oriented planning principle, because the person is the main part of the urban space, the city street planning and design for people's travel demand as the prerequisite conditions, to create livable urban planning, makes the appropriate direction of urban public space become residents, in the concrete construction, street planning should refer to the city history and geographical features, retain the original characteristics, Enhance the sense of belonging of the city,

make residents have emotional resonance, show the humanistic spirit of urban planning and design care.

## 3. ADVANTAGES OF TOD DESIGN PATTERN IN URBAN STREET DESIGN

TOD design promotes pedestrian-based travel mode in urban central streets and secondary roads with dense population, and inherits the appropriate control of space in the traditional street design mode, so as to enhance the vitality of urban streets and relieve traffic pressure. In addition, TOD design can further alleviate the contradiction between people and vehicles in urban streets, build green ecological environment landscape in urban streets, improve urban environmental quality, make up for the design defects in traditional planning mode, and build more scientific, safe, environmentally friendly and comfortable urban streets in the new era. The advantage of TOD design concept also lies in that it can ease the relationship between people and vehicles, create a harmonious city, further reduce noise pollution and exhaust pollution brought by vehicles, advocate civilized and safe travel, and build a low-carbon and environmentally friendly life concept. At the same time, the TOD concept also adheres to compact planning, gives full play to the mixed use of land, carries out centralized construction planning for commercial, entertainment, living and other architectural places, further improves the level of surrounding traffic, realizes the rich diversity of urban streets, and creates more leisure activity space for urban residents. It can also change the single function of the street in the traditional planning, build the node landscape of the street, add the residents' rest area, make full use of land resources from multiple angles, and create more platforms for people's life, travel and entertainment.

## 4. ANALYSIS OF DESIGN POINTS OF URBAN STREET DESIGN UNDER THE CONCEPT OF TOD

### 4.1 Reasonable spatial planning and design

In urban street planning and design, reasonable space scale design is very important. Rational space design can make urban streets cleaner and more elegant, and facilitate urban residents to travel. In the planning and design, to realize urban green walk into as the basis of the design conditions, carried out on the street pedestrian area space scales science and rational development and construction, planning good street space design of section at the same time, and solve the problem of integral space jam street, and as a whole in the whole space facilities elements ratio, further to beautify the city streets. On urban space planning process, the designers should fully recognize the street space in the design of the establishment of the feeling of comfort and areas need to be set up for space in urban residents in the heart of affinity and sense of identity, and thus build a can improve the quality of life activities

and activity space, at the same time increase the city walking commuters in places to stay and consumption desire, Then enhance the city's economic vitality, development prospects and power. This is because in urban street design, it is necessary not only to guarantee its traditional architectural form and regional characteristics, but also to carry out spatial innovation, and create fresh activity routes while inheriting residents' lifestyle and habits, so as to realize a new chapter in the development of urban streets.

#### 4.2 Focus on people-oriented design direction

In TOD design concept, people are the fundamental consideration of planning. On the basis of paying attention to the scale design of urban street space planning, urban residents' action trajectory should be properly considered. Urban street space is the place where residents live. Streets arise and exist because of people's living needs. In urban street design, we must pay attention to people's safety and basic needs. In the actual urban planning, the TOD design concept insists on the priority of pedestrians in the urban traffic sequence, emphasizes that they are the most important form of traffic participation in the street space, promotes the basic characteristics of slow-first in the street traffic, reasonably adjusts the structure of traffic vehicles, and reduces the ecological pressure. In the construction planning, the TOD design concept is used to fully implement the humanized planning and express the full humanistic care for the society and urban residents, so as to establish a safe and ecological urban planning in the new era [2].

#### 4.3 Efficient use of land resources

In the urban planning and design, should be fully attaches great importance to the unreasonable use of land resources in the city, in order to guarantee the sustainable development of the urban demand, in the design should focus on study of urban land and residents activities of track changes in urban space, clear logic, urban planning for the integration of more scientific utilization of city land resources. At the same time, the efficient use of land can also relieve the pressure of urban traffic and improve the available construction space. TOD compact design concept for urban planning advocates the processing, the

layout of urban functions to advocate mixed use, efficient political planning and construction, reduce meaningless traffic time, idle land planning into residential, entertainment, work, shopping and other functions in one comprehensive commercial area, at the same time promote the urban economic growth.

#### 4.4 Advocate green transportation

TOD design mode is a travel planning and design mode with pedestrianization as the main mode and motor vehicles as the secondary mode. It transforms the design based on public transportation in concept and explores a new direction with green transportation system as the goal. In the specific planning, besides the traffic system, the street planning also involves the ecological environment construction projects on both sides of the street. In order to guarantee the green ecological environment of the city, the planning and construction of energy-saving and environment-friendly buildings and facilities should be actively carried out to reduce the impact of urban energy pollution and environmental pollution to the minimum range.

#### 5. CONCLUSION

To sum up, in order to build a modern livable city, the TOD design concept can be adopted to create travel conditions based on public transportation and realize ecological and natural urban space design. In the street design under the TOD design concept, it is necessary to abide by the spatial planning principle, pay attention to the people-oriented design concept, rationally plan the land, adopt compact layout, develop the overall slow traffic system, reduce energy consumption, and promote the urban ecological development.

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# Cultural Consideration and Exploration of College English Education

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**Abstract:** Language is the "key" to open a civilization. As a language subject, English education will inevitably be influenced by language culture in the process of learning. Especially for English, it has a strong influence in the world and has a profound western culture. In this article, will be in English education as the core, in full consideration under the premise of teaching practice and cultural background, systematically expounded positive influence and negative influence brought by the English culture, and put forward feasible optimization on the basis of the improvement measures, to ensure quality of college English education in China to further improve.

**Key Words:** College English; Education; Culture

## 1. INTRODUCTION

Language is not a simple communication application tool, but a carrier of civilization and culture behind. If you want to learn a language well, you must have a deep understanding of the culture behind the language, and on this basis, accumulate enough cultural deposits. At the same time, in the process of language learning, it is inevitable to be eroded by the culture of the other side, which will have a great impact on their own values. Especially for English education, as the mainstream language of the western world, it is an important bearer of the western universal values. In view of this, in college English education activities, we should not only learn English culture, but also avoid the infringement of students' wrong ideas in English culture.

## 2. THE INFLUENCE OF WESTERN CULTURE ON COLLEGE ENGLISH EDUCATION

### 2.1 Positive influence of western culture

First of all, students' English ability can be further improved. After learning any language to a certain extent, students will have mastered the basic vocabulary and grammar, and then they will fall into the "bottleneck period" of language learning. Only learning the culture behind the language can support the further growth of students' language ability. Secondly, it can effectively expand the horizons of students. Although Chinese culture has a long history, it does not mean that other civilizations have no redeemable features, nor does it mean that it is enough for students to be familiar with Chinese culture. Only with the help of language as a "bridge" can students see a broader world. Finally, different cultures have different underlying logic, which can inspire students' thinking [1].

### 2.2 Negative influence of western culture

First of all, it is not conducive to the improvement of national cohesion and the centripetal force of civilization. The country and civilization themselves do not exist entities and are the "product" of the common thoughts of

countless people. The invasion of western culture will certainly reduce the influence of Chinese culture to a certain extent, thus reducing the national cohesion. Second, can cause damage to college students' spiritual world, though, college students have adult, but had been living in the "ivory tower" on campus, with shallow social experience and discrimination ability is poor, both the "essence" of western culture, also has the "trash", such as "hedonism" "consumerism", etc., will harm the values not yet forming students groups, Make it be induced by the bad culture, in the wrong path gradually go far. In addition, the collision between western culture and eastern culture, while producing positive effects, will also sow more hidden dangers and contradictions, resulting in extremely bad negative effects [2].

## 3. EFFECTIVE MEASURES TO OPTIMIZE AND IMPROVE COLLEGE ENGLISH CULTURAL EDUCATION

### 3.1 Strictly audit the teaching content and cut off the channels of bad culture transmission

In China's English education system, textbooks have been carefully designed by numerous experts and scholars, and reviewed by relevant institutions. The probability of quality problems is very small, and it is unlikely to be infiltrated by inferior culture. However, in the Internet era, informatization has become one of the hot projects of education reform. In order to further improve the richness of teaching activities and give more interesting and substantive teaching contents, teachers can draw "nutrition" from the treasure house of Internet resources and retrieve more novel and interesting English information resources. But the Internet as an open platform for all tolerance and storage, the net culture thought, in build a diversified environment, contribute to thought field "flowers" pattern formed at the same time, the different means of Internet information quality varies, there are a large number of useful culture already, there are many harmful culture. If it is not discriminated and bad culture is allowed to flow into the classroom, it will certainly lead to the abnormal development of students' values [3].

### 3.2 Inject excellent traditional Chinese culture

China has a civilization history of five thousand years, and is the only "ancient civilization country" in the world without cultural fault. It not only has rich cultural deposits, but also has strong cultural attraction. Teachers can inject traditional cultural factors in English education, for example, the Dragon Boat Festival is a traditional festival in memory of Qu Yuan in China, praise Qu Yuan's noble feelings, teachers can write an article describing the Dragon Boat Festival, on the one hand, can let students strengthen the cognition and understanding of Chinese

traditional culture, in order to improve the centripetal force of civilization, So that students will have a stronger resistance to western culture; On the other hand, college students are the future of the motherland, but also the "main force" of the socialist modernization drive, which helps to expand the social influence of traditional culture, and can be passed down from generation to generation, which is conducive to the inheritance and development of traditional culture.

### 3.3 Enhance students' ability to distinguish the advantages and disadvantages of western culture independently

As the saying goes, "You need to be hard to make iron." In modern society, with the continuous improvement of the Internet application system, various information media emerge in an endless stream, and students have different ways to obtain information. In addition, Western countries are keen on cultural transmission, and the representative of "Hollywood movies" has a wide influence among young people. Under this premise, it is not only unrealistic but also inconceivable to completely eliminate the influence of western bad culture on students. Only by fundamentally improving the discrimination ability of college students can we effectively distinguish the "essence" and "dregs" in western culture. In view of this, teachers can take the way of presenting facts and giving examples to explain the hypocrisy and unreliability of western bad culture to students., for example, in recent years, along with the social climate change, the consumerism becomes more popular, some college students by its bewitch, blind consumption, comparison, stained with bad behavior habits, both also squandered the parents hard-earned money, there are even students into dilemma "borrowed" campus, teachers can collect information on the Internet, shows the dangers of excessive consumption to all students, It is suggested that

students consume rationally and moderately.

### 4. CONCLUSION

Generally speaking, language and culture complement each other and are an inseparable whole. Under this premise, in the process of learning English, students can not only learn language skills, ignoring the importance of English culture. Teachers should take this as a starting point to show students the splendid culture behind English, so as to broaden students' horizons. At the same time, it is also necessary to guard against the "invasion" of western culture, help students to establish correct values, enhance the ability of students to distinguish the "essence" and "daggers" of western culture, so as to ensure that students can effectively absorb the "nutrients" of western culture and avoid the "poison" of western culture.

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# Analysis of The Application of Block Chain Technology in The Logistics and Express Industry

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**Abstract:** Under the new situation, with the issuance of Bitcoin, blockchain technology presents to everyone's vision as the underlying core technology. This way, as one of the distributed shared database technologies, embodies the characteristics of decentralization, distrust and transparency. It has not only been widely used, but also improved the corresponding core competitiveness. Blockchain technology has shown unique advantages in the logistics and express industry. It can help the development of the industry, find the pain points, analyze the focus of application, and make it become the "golden key" to reshape the operation mode of the industry. Therefore, this paper first proposed the need to explore the main content, and then, according to the current situation, put forward the solution, and increase the application value of the industry.

**Keywords:** Blockchain Technology; Logistics And Express Delivery Industry; Application

## 1. PROBLEM PRESENTATION

In the important period of socialist transformation, the booming development of e-commerce and the huge demographic dividend of online shopping have come to an end in 2016. Blockchain technology is the underlying technology of the Bitcoin system. Blockchain technology has the characteristics of transparency, traceability and automation. The construction of blockchain technology principle is mainly based on the constitution of blockchain, blockchain network and cryptographic system principle of blockchain, to maintain the authenticity of data sources and improve the accuracy of data information [1]. In view of the problems existing in the logistics and express industry, the distribution efficiency is low, flexibility is low, autonomy is not strong. Under the influence of manpower, infrastructure, weather, and online shopping peak season, too many packages are accumulated in the warehouse, and the problem of bag loss and warehouse bursting is easy to appear [2]. The punishment for leakage is not strong enough, the crime cost is low, many employees "steal", user information leakage problems often appear. Traditional documents are pain points. The documents at each node may be different and may be tampered with. Inadequate compensation mechanisms make it difficult to trace transactions once information is lost or destroyed. In view of this, how to use the block chain technology effectively to improve its applicability in the logistics and express industry? Under the current situation, the public needs to pay attention to the focus and difficulties.

## 2. THE APPLICATION OF BLOCKCHAIN TECHNOLOGY IN THE LOGISTICS AND EXPRESS INDUSTRY

In the process of practice, teachers need to make a reasonable overall planning, and solve the problems and difficulties. Analyze the main problems of disclosure of user privacy, information isolation, information authenticity, compensation mechanism, etc. At this point, we need to make reasonable overall planning based on the superiority of blockchain technology, improve service efficiency and service quality, and update the service concept of the logistics and express industry. The main application scenarios can be divided into the following aspects: First, block chain technology can be well used in the alliance chain to improve the distribution efficiency. And on the basis of multi-directional and digital transactions, develop express alliance chain, improve the construction of sharing platform, establish a common distribution center, reduce costs and empty rate. In addition, it is also necessary to use the mode of automatic continuous photo and cloud recording, establish high-quality transportation training, improve the supervision of outsourcing of small and medium-sized express delivery enterprises, and maximize the efficiency of distribution. Second, blockchain technology can be used to improve traceability and solve the problem of parcel loss in express delivery. That is to say, reasonable overall planning is required under the vision guaranteed by digital signature technology. It is necessary not only to maintain the authenticity of data, but also to maintain realistic supervision and tracking. On an objective basis, the information of logistics process can be clearly presented to everyone [3]. Under the two-way benefit, analyze the logistics direction, maintain the online and offline thinking logic of security construction, maintain the interests of dealers, and achieve the construction effect of security configuration. For Courier receipt to delivery point or Courier have their own unique private key, query block chain before they can deliver, in no case, cannot be forged, can minimize the problem of collecting package, you can even improve satisfaction, solve the problems of the complaints, increase the effective construction of the system, keep the extension and development of the scientific. Third, the use of block chain technology, increase connotation construction, on the basis of decentralization, to solve the problem of user information maintenance. In other words, it is necessary to find a scientific calculation method on the basis of reasonable nodes, and in this way, it is necessary to maintain

reasonable rights and interests. Moreover, based on the distributed system, it is necessary to expand the strength of trust between nodes, so that each node can be kept in a wait-and-see or direct access state. If you want to get some more private information, or is the sensitive information of the enterprise, then you need to use another algorithm. No matter which algorithm it is, it can clearly perceive the different thinking logic. It is necessary to solve the technical problems of big data analysis under the distributed storage, resolutely prevent the leakage of personal information, protect the standardization, but also maintain the refined construction of the content. Fourth, we can effectively use blockchain technology to establish a real-time cloud platform, verify our identity cards, and increase the effective construction of electronic signatures. In a reasonable way of thinking, keep the real transactions or information can not be tampered with, maintain the scientific concept of information development, to pick their own construction logic and thinking attributes. Your own information can be obtained by yourself, while others' information needs authorization from others. Only with your own private key can you increase sharing and keep it very constructive, so as to maximize the level of security and trust. AI and big data can also maintain real-time forensics respectively, thus achieving the effective construction of consensus mechanism [4]. Fifth, reasonable use of block chain technology, the establishment of smart contract to solve the price compensation service. On the basis of the alliance chain, a reasonable overall planning should be carried out to trigger the insurance contract, establish a complete insurance process, and find different thinking logic. When the connection is triggered, the smart contract will appear to minimize the occurrence of the process. Sixth, the block chain technology can also be used to establish a blacklist alliance chain. That is to say, on the basis of the integrity information management system, some logistics enterprises that do not keep the integrity need to be isolated. Even some of the integrity of the enterprise can be presented to the system in an intuitive way. In the face of these contents, we can well maintain the sharing of information under the joint supervision of the government, public security and the industry, and maintain the

standardization of the logistics industry to the maximum extent. The information flow, logistics, capital flow and other organic integration together, maintain digital management, increase innovative construction. Avoid wrong delivery and other problems, according to the characteristics of the logistics industry, to maintain information security.

### 3.CONCLUSION

With the progress of society, the application of blockchain technology in the logistics and express industry is not able to solve all the problems. Continuous innovative technology is also needed to improve consumer satisfaction and increase the real investment in pre-cooling technology. In addition, based on the state equation of freshness, a reasonable overall planning is needed to establish a new database technology and balance the degree of decentralization and system performance. Achieving "double Pareto optimization" to maximize economic and social benefits.

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# The Analysis of Professional Associations In Colleges And Universities To Enhance The Innovation And Entrepreneurship Ability Of College Students

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**Abstract:** With the implementation of enrollment expansion policy in Colleges and universities, the number of graduates is increasing year by year. Due to the limited jobs in the society, most college students need to face employment problems after graduation. This paper will analyze the role of professional associations in improving college students' innovation and entrepreneurship ability, and put forward corresponding measures, so as to improve college students' innovation and entrepreneurship ability, and lay the foundation for the future development of college students.

**Keywords:** Community Activities; College Students; Innovation And Entrepreneurship

## 1. INTRODUCTION

Professional associations are an important way for college students to participate in school activities. Participating in professional associations can not only develop college students' interests, but also improve their practical ability and comprehensive quality. Through the unique learning atmosphere of professional associations, improve the innovation and entrepreneurship ability of college students, so that students can quickly adapt to different jobs and social environment after graduation, and provide security for subsequent employment.

## 2. THE ROLE OF PROFESSIONAL ASSOCIATIONS IN PROMOTING COLLEGE STUDENTS' INNOVATION AND ENTREPRENEURSHIP

### 2.1. Improving the comprehensive quality of College Students

People with observation ability, innovation spirit, teamwork ability, self-management ability, questioning spirit and critical spirit are talents in innovation and entrepreneurship. College students joining professional associations can not only improve their professional knowledge and stimulate their interest in learning, but also improve their enthusiasm and competitiveness through the selection of associations. In the process of joining a professional club, college students can exercise their language skills and psychological quality, and communicate with club members in the management of the club. And then improve the management ability, logical thinking ability and team cooperation ability of college students, so as to improve the comprehensive quality level of college students and the success probability of innovation and entrepreneurship.

### 2.2. Enhance the innovation and competitiveness of

### College Students

As the number of graduates of college students is increasing year by year, the relevant enterprises and employers have improved the employment standards. It is more and more difficult for college students to find a suitable job after graduation. A simple resume can no longer meet the needs of enterprises for talents. Enterprises and employers have higher requirements for the comprehensive quality and ability of employees, and pay more and more attention to practical ability, professional ethics and innovation and entrepreneurship. Therefore, college students can actively participate in professional associations, and communicate with students who have common interests and goals, so as to improve their professional knowledge level. In addition, college students in the process of participating in professional associations to improve their innovation and competitiveness, and strengthen their psychological quality ability, so that students can quickly adapt to different jobs and social environment after leaving the campus.

### 2.3. Make college students set up good professional values

The association in Colleges and universities is a group of college students who have common interests and hobbies. It is a kind of group organization for college students to carry out free activities through independent registration. Associations in Colleges and universities can attract college students with the same interests, and improve the cohesion of associations by carrying out ideological and political work and collective activities. Professional associations in Colleges and universities can not only enrich the campus life of college students, but also meet their interests and development needs, so that college students can find their own strengths and improve their ability by participating in professional associations. Participating in professional associations can not only help college students find their own strengths and make a reasonable positioning, but also test their ability by participating in the management of associations, so that their professional knowledge and interests can be brought into full play, and lay a solid foundation for their future development path and career planning, so as to establish good professional values [1].

## 3. MEASURES OF PROFESSIONAL ASSOCIATIONS IN COLLEGES AND UNIVERSITIES TO IMPROVE COLLEGE STUDENTS' ENTREPRENEURSHIP AND INNOVATION ABILITY

3.1. Strengthen the guidance of professional associations  
Because the active students in professional associations are all freshmen, although freshmen have just entered university life, they have sufficient energy and novel creative ideas, but they do not have good conditions for innovation and entrepreneurship, and lack of relevant ability and experience, so they can not use and practice good creative ideas. Based on this situation, professional associations can invite relevant teachers to guide innovation and entrepreneurship, and provide relevant suggestions and help according to the actual situation of college students. In addition, professional associations should invite some teachers who have the same interests and standpoint with the associations for guidance. This can not only make teachers quickly integrate into the activities of associations and give scientific guidance, but also make teachers and college students progress together, so as to effectively improve the ability of college students to innovate and start businesses.

### 3.2. Create a good atmosphere for innovation and Entrepreneurship

Creating a good atmosphere for innovation and entrepreneurship can not only exert a positive influence on the behavior and development of college students, but also stimulate students' interest in innovation and entrepreneurship, which lays a foundation for the development of professional associations. Professional associations can publicize the concept of innovation and entrepreneurship, change the impression of college students on innovation and entrepreneurship, add some successful cases in the process of publicity, and carry out colorful campus activities to shorten the distance between college students and innovation and entrepreneurship. Professional associations can provide opportunities for college students to understand innovation and entrepreneurship by carrying out innovation and entrepreneurship competitions, speeches, exhibitions and other activities, so as to stimulate college students' interest in innovation and entrepreneurship and actively participate in professional associations. In addition, the members of professional associations can also act as Cultural Ambassadors on campus to spread the relevant knowledge of innovation and entrepreneurship, so that college students can accept the spirit of innovation and entrepreneurship, so as to create a good atmosphere for innovation and entrepreneurship, so as to fully mobilize the enthusiasm and initiative of college students.

### 3.3. Carry out community practice activities and expand the ways of innovation and Entrepreneurship

In the process of participating in professional associations, college students can improve their practical ability by carrying out community practice activities. And based on the relevant practical activities, the management, organizational ability and development mode of professional associations are upgraded and improved.

Encourage college students to actively participate in the management and practical activities of professional associations, and set up corresponding practice groups according to the actual situation of students of different grades, so as to shorten the distance between college students. This way can not only improve the enthusiasm and initiative of college students, but also exercise their ability of communication and exchange, and improve the innovation of professional associations by carrying out practical activities, so as to improve the entrepreneurial and innovative ability of college students, so as to provide a certain guarantee for the smooth employment of College Students. In addition, in the process of the establishment of professional associations in Colleges and universities, we need the support of the school, society, funds, teaching reform and other factors, and we need the major colleges and universities to combine the actual situation of society and the employment situation of college students, based on the actual situation of social employment, establish relevant professional associations, and expand the ways of innovation and entrepreneurship. For example, we can improve the ability of College Students' innovation and entrepreneurship through college students' innovation and entrepreneurship Association, college students' employment platform and innovation and entrepreneurship group, so that college students can understand their advantages and recognize their shortcomings, so as to lay a solid foundation for the smooth employment after graduation [2].

## 4.CONCLUSION

In a word, professional associations in Colleges and universities can improve the comprehensive quality level of college students, enhance their innovation and competitiveness, enable college students to establish good professional values, and strengthen the guidance of associations. In order to improve college students' ability of innovation and entrepreneurship, we should create a good atmosphere for innovation and entrepreneurship, carry out community practice activities and expand ways of innovation and entrepreneurship.

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# Analysis on the Construction and Implementation of Ideological Education in Intensive Reading Course for English Majors

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**Abstract:** The construction effect of curriculum thought politics in modern English curriculum teaching is not ideal, in order to realize the rapid improvement of students' own comprehensive quality, the precision course teaching of English major should be adjusted. This paper explores the construction and implementation of curriculum thinking in the teaching of intensive reading courses in English majors, analyzes in detail the concrete measures to strengthen the effect of curriculum thinking and politics teaching in English courses, and aims to provide some reference suggestions for relevant educators.

**Key Word:** English Major; Intensive Reading Courses; Course Thinking And Political Construction

## 1.INTRODUCTION

Curriculum thought and politics teaching has a strong influence on the construction of campus and the development of students' comprehensive quality, in order to improve students' moral education level, teachers should properly carry out intensive reading curriculum teaching in the process of English professional teaching, and constantly improve the overall teaching effect, at the same time, so that students' moral education quality can be effectively improved. In English curriculum, teachers should integrate ideological and political education into it to help students establish a correct world view and promote their further development.

## 2.THE SIGNIFICANCE OF STRENGTHENING CURRICULUM THINKING AND POLITICS TEACHING IN ENGLISH MAJORS

The essence of curriculum thinking and politics is Lideshu people, in the process of teaching penetration of moral education, so that students in the study of cultural knowledge at the same time, their personal quality level can be improved simultaneously, strengthen the training of talents, so that students can form a correct outlook on life and world view, and then for the development of the motherland to make their own contribution within their ability.

It is of great significance to strengthen the teaching of curriculum thinking and politics in English major, first of all, for students, the learning interest of students is not high in english intensive reading curriculum, which leads to the teaching effect of the whole curriculum can not meet the standard requirements. The infiltration teaching of curriculum thinking and politics can change the students' view in the subconscious, and penetrate the content of thought politics through teaching and interaction, so as to educate and influence the students, so that they can

effectively improve the comprehensive quality level. Secondly, for schools, the teaching of thought and politics can improve the moral education quality of students and teachers, reduce the possible hidden dangers and problems, and effectively improve the level of moral education in schools. Finally, for the country, curriculum and political teaching is an effective way to train outstanding talents, which is conducive to making full use of the resources in the school, and promoting the development of the overall comprehensive strength of talents.

## 3.SPECIFIC MEASURES TO STRENGTHEN THE TEACHING OF CURRICULUM THINKING AND POLITICS IN THE PRECISION COURSE OF ENGLISH MAJOR

### 3.1Innovative English intensive reading curriculum curriculum thinking and political teaching methods

Precision course teaching in English curriculum refers to the in-depth reading and analysis of the teaching materials of the whole English professional curriculum, and a firm grasp of the basic knowledge of the course can not only strengthen the training of grammar and listening and speaking ability, but also improve students' oral ability. The main purpose of implementing intensive reading courses in professional courses is to enhance students' practical mastery of English knowledge. Incorporating the content of moral education into the intensive reading curriculum can greatly improve the efficiency and interest of the overall curriculum, so that students can learn and master the course teaching in depth.

In the past English professional teaching, many students do not know enough about the English major curriculum, feel that the course is more boring. In the process of learning, lack of interest in curriculum learning, resulting in learning efficiency can not be effectively improved. At the same time, when students learn the content of curriculum thinking politics, the course of thinking and politics teaching is more dull, most teachers according to the content of the course of thinking and politics, for students to put out a line of truth, so that students have no intention of learning, so the combination of the two effect is not ideal.

In order to improve students' English level and moral education quality simultaneously, curriculum thinking and political ability and English professional teaching can achieve a perfect integration. In the course of teaching, teachers should innovate the specific wayof curriculum thinking and politics teaching in English intensive reading course according to the actualsituation. Teachers should change their minds and take students as the main body of

the classroom. In the process of learning, from the perspective of students, design easy to understand the teaching methods. In the process of learning, we should integrate the teaching of thought and politics into the curriculum, and make use of the environment or teaching behavior to have a positive impact on students, so as to promote the overall promotion of their quality English knowledge.

3.2.To construct a proper teaching system for the curriculum of thought and politics

At present, the teaching of English intensive reading course is influenced by environment and other factors, and its actual construction effect has not reached the ideal state, resulting in the poor teaching effect in the process of integrating into curriculum thinking and politics teaching, in the final analysis, it is due to the imperfection of the current English professional teaching system in Our country, which affects the overall construction and development [1].

In order to achieve the perfect integration of English professional teaching and thought and politics teaching effect, in the process of teaching, we should construct the corresponding curriculum teaching system according to the actual way of thinking and politics teaching, constantly improve the overall teaching effect, and build a diversified teaching system. In his speech, General Secretary Xi said that in the process of teaching, students should strengthen the concept of "love and practice" on the basis of the Lideshu people, and jointly build a reasonable teaching system[2]. English professional teachers should establish a shared platform with curriculum teachers, improve english teachers' understanding of the teaching of thought and politics, through the friendship exchange and discussion between the two sides, enhance english teachers' understanding of the corresponding knowledge, and then integrate moral education knowledge into English teaching, implicitly carry out quality education for students, improve students' acceptance effect, in the process of rising quality, its corresponding learning speed of knowledge can also be effectively improved, and thus form a win-win situation. For example, in intensive English reading teaching, teachers can first carry out in-depth analysis of teaching topics and content, naturally extended to moral education, according to its content and bias, for students to show the corresponding details, can effectively enhance the overall teaching of the political effect.

3.3.Focus on improving the comprehensive literacy of teachers

In the teaching of English intensive reading curriculum, the true level of teachers directly determines the teaching effect. In many schools, teachers' English teaching ability meets the standards, but they know less about the knowledge of curriculum thinking and politics, and they can't educate students on ideology and morality, and the

content of curriculum thinking and politics is difficult to penetrate naturally. Even many teachers have some defects in their own comprehensive quality, which makes it difficult to improve the effect of final teaching.

In order to make the teaching of curriculum thinking and politics in the precision teaching course of English major be carried out effectively, on the one hand, we should strengthen the education of teachers' thought and politics. Many teachers' lack of understanding of curriculum thinking and politics leads to their inability to start even if they want to educate their students about moral education. Therefore, the corresponding training lectures are organized by moral education teachers to explain to English professional teachers and improve their reserve ability of moral education knowledge. On the other hand, English teachers should strengthen the effective integration of moral education knowledge and English knowledge. Such as in the intensive reading curriculum, teachers will generally focus on the basic knowledge of teaching materials, teachers should be based on the content of teaching materials knowledge, moral education knowledge into English knowledge, or through the corresponding activities, in the activities to guide students to develop a virtue, virtue learning behavior habits, fully improve their comprehensive quality, improve the efficiency of learning. In the process of teaching, teachers should take the thought and politics curriculum as a means to assist English teaching, with their help, make students more correct attitude towards learning, and then realize the improvement of overall learning efficiency.

#### 4.CONCLUSION

In summary, in the English major intensive reading courses to carry out curriculum thinking and politics teaching, in order to improve the quality of students' moral education, we should make the content of thinking and English knowledge can be fully integrated, in the classroom to penetrate each other, improve the learning efficiency of students, to achieve the improvement of students' comprehensive quality, and then for the country to train more outstanding talents.

#### ACKNOWLEDGEMENTS

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# Analysis on The Application of Cultural Creative Product Design in Sichuan Opera Communication

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**Abstract:** As far as cultural and creative products and Sichuan Opera are concerned, they are closely related in many aspects, such as culture. In the design of cultural and creative products, Sichuan Opera can provide the source of design, while in the communication of Sichuan Opera, cultural products are indispensable carriers, both of which can produce good artistic effects. Based on this, this paper first analyzes the characteristics of cultural and creative product design (including cultural and artistic, national and regional, times and economy). Then it explores the use of cultural and creative product design (including the role of fun design, function expansion design, life design), in order to provide reference for the relevant people.

**Keyword:** Cultural and creative products; Spread of Sichuan Opera; Design features

## 1. INTRODUCTION

For cultural and creative product design, it is often based on cultural or creative ideas, which belongs to the materialized performance of designers. Creativity is closely related to the products they face, especially the cultural elements and phenomena. In this design, people play the main role, carrying two aspects of comfort, namely the spiritual world and the soul. In terms of cultural and creative products, it is the unity of multiple values, such as use value. In addition, there is also experience value. With the progress of the times, higher requirements are put forward for cultural and creative products. They should meet people's material needs, and more importantly, they should meet people's psychological and spiritual needs..

## 2. DESIGN FEATURES OF CULTURAL AND CREATIVE PRODUCTS

### 2.1 Cultural and artistic

For the design of cultural products, we should start from its cultural nature. Its product design should reflect the tradition of folk culture, the characteristics of the times, the social value orientation and people's cultural identity. Based on the cultural nature of the product, we should also make it full of artistry. Artistry originates from Marx's theory and is fully implemented in artistic creation, artistic appreciation and artistic works. Through the cultural and creative products as a link, product designers and consumers are organically linked to make the cultural beauty and artistic beauty of their products. It can be expressed in the form of materialization, and it can also enhance the distance between consumers and improve and innovate the designed products through the feedback of consumers.

### 2.2. Nationality and region

From the perspective of the development of human history, because human beings are the form of group living, their local conditions and customs, as well as communication language and working conditions and other factors, promote people to gradually form their own group characteristics, which is the reason for the formation of nationality. For cultural and creative products, their nationality can fully reflect the cultural identity of designers and consumers, which is the source of product design. Regionality is the result of division according to the characteristics of geographical environment. For different geographical environment, its culture is also different. This lays a foundation for the differences and characteristics of product design. Therefore, the regionality of cultural and creative products is also a very important factor in product design.

### 2.3. Time and economy

For cultural and creative product design, it is a new category of design, which can fully combine design, sociology and culture. In the performance of product connotation at the same time, it can also enhance the people's sense of experience, make them deeply feel the cultural and national characteristics of cultural and creative products, and make them conform to the characteristics of the times. Only in this way can we better meet the needs of the audience, rather than designing cultural and creative products through imitation and replication. In the design of cultural and creative products, its epochal nature will be able to distinguish it from other imitations and reproductions, which is a distinctive feature. For the design of cultural and creative products, we should also pay attention to economic factors. We should fully grasp the needs of consumer groups for cultural and creative products, fully understand their consumption ability, and fully consider economic factors for the selection of materials and processes of cultural and creative products. In terms of the characteristics of cultural and creative product development, culture is its root, and it has a series of characteristics, such as nationality. Through the design of cultural and creative products, some more abstract cultural elements can be further transformed to form cultural products. Taking culture as a common condition and characteristic, and with the help of creative techniques, we can organically combine cultural elements in the process of product design, so as to realize the promotion and cognition of culture.

## 3. APPLICATION OF CULTURAL AND CREATIVE PRODUCT DESIGN

For the application of cultural and creative product design, this paper mainly explores from the interesting design of the role, function expansion design, life design and other aspects, hoping to provide reference for relevant people..

### 3.1. Interesting design of characters

As far as the stage performance of Sichuan Opera is concerned, it can provide sufficient resources for the development of cultural and creative products. Each play of Sichuan Opera has representative characters. For these characters, they have a series of remarkable characteristics, such as full image and unique shape. Based on the current design concept, they are consistent with the requirements of modeling design. Combined with the stage performance of a dream of Red Mansions, we explore the development of cultural and creative products, implement the role modeling of pseudo materialization, highlight the characteristics of characters, and compare people with things, which not only shows the image, but also adds interest.

### 3.2. Function extension design

Based on the performance of Sichuan Opera, combined with the needs of the plot, different props will be displayed. To analyze these props, there are many values, such as aesthetic and artistic value. In fact, as far as the design of cultural and creative products is concerned, these props are not cultural and creative products. They should be endowed with certain features, such as functionality, to make them have use value. The development of such products, based on the existence of props form, to carry out creative design, in order to improve the utilization of props characteristics. Such features include many aspects, such as the color and shape of props, fully combined with people's specific needs, according to the use function, organically integrate it with artistic beauty. For example, the Pearl Tower, which is used as a prop, links the details of the whole play and analyzes the plot development, plays a key role. Based on the "Pearl Tower", the development of cultural and creative products has great practical significance for the promotion of drama.

### 3.3. Life oriented design

In the process of Sichuan opera performance, in addition

to roles and props, there are many elements that can be integrated into the design of cultural and creative products, such as clothing and scenes in Sichuan opera performance. As long as the culture of Sichuan Opera is taken as the center to meet the aesthetic needs and use needs of the audience, all elements of Sichuan Opera can be combined with cultural and creative products, so as to form communication benefits, promote the spread of Sichuan Opera, and realize the economic benefits of cultural and creative products. For example, the widely popular cultural and creative products are useful categories, life categories and interaction categories. Among them, products include bookmarks and postcards, life includes scarves and cups, and interaction includes expression bags and motion pictures. In its design, the characters in Sichuan Opera and the dance elements formed in the performance process can be integrated into it, and the elements can be combined by using the design language, so as to make it a unique cultural and creative product.

## 4.CONCLUSION

As far as Sichuan Opera and cultural and creative products are concerned, the encounter between them belongs to cultural exchange and collision, which can achieve mutual assistance and win-win situation in communication. The combination and symbiosis of art, based on the background of the new era, provides a new channel for the development of Sichuan Opera, and integrates new elements in the research of cultural products.

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# Research on Enterprise Financial Management Innovation Model Under Hainan Free Trade Port Policy

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**Abstract:** Since reform, small and medium-sized foreign trade enterprises to export enterprises rapid growth, wide distribution, involving industry, become an important part of national economy, but also has certain problem, the most of them are private enterprises, and with labor type set is given priority to, in terms of management, particularly in terms of enterprise financial management value degree is not enough, the enterprise's financial control is not perfect, the financing ability is poor, The use of funds is relatively casual, so that financial management is faced with many difficulties.

**Key Words:** Reform Of Free Trade Port; Enterprise Financial Management; Innovation

## 1. THE CURRENT SITUATION OF ENTERPRISE FINANCIAL MANAGEMENT UNDER THE REFORM OF HAINAN FREE TRADE PORT

Under the free trade port in hainan reform, enterprise if you don't want to be eliminated, it must to do a good job of enterprise financial management, financial management has become a popular education, professional enterprise, the demand for financial management work is also increasing, gradually standardize enterprise financial management work, allows businesses to keep up with the pace of The Times, keep up with the demand of the market, in order to solve the restriction factors, the development of the enterprise Make the road of enterprise development more broad[1-4].

## 2. INNOVATION PROBLEMS FACED BY THE REFORM OF HAINAN FREE TRADE PORT

Financial management plays an important role in the development of enterprise work. Many jobs, it involves the company up and down the high side to convey to the enforcement policy recommendations and requirements as well as the supervision over the enforcement work and requirements and can say he plays an essential role in the enterprise, the enterprise obtains the good economic benefit in order to achieve long-term development cannot leave the financial management system, for enterprise financial management mechanism, Can be from the president to the executive deputy general manager to the director to carry out the implementation of responsible agencies, to develop a scientific and reasonable, perfect supervision system. However, most of the current professional implementation of the poor awareness, each department can not perform their own duties of enterprise financial management, can not be carried out in an orderly way, and ultimately promote the realization of poor economic efficiency of the enterprise.

## 2.1 Theoretical Innovation

Financial management is an important part of enterprise management, is an important support for the healthy and orderly development of enterprises, to enhance the core competitiveness of enterprises must take corresponding measures to strengthen the construction of small and medium-sized foreign trade enterprises accounting system, enhance the status of financial management in enterprise management.

## 2.2 Practice Innovation

The financial management of most enterprises is still in the stage of accounting management, which is far from the theme requirements of the market economy. The uncertain factors are mixed with them. The government management lags behind the economic development, and the financial management needs to experiment and innovate.

## 3. Opportunities and challenges of enterprise financial management innovation under the reform of Hainan Free Trade Port

With the acceleration development of free trade port in hainan reform across the economy has made great development, at the same time, also met with economy, many problems and challenges of the need to work together, to face and solve it is under this background, the traditional operation management and problems of Chinese enterprises and production and marketing need in order to achieve the long-term development of enterprises, The financial management of enterprises has become a top priority.

### 3.1 Professional personnel training

Financial management professional social demand is big, but in our country are facing a lot of problems in the financial management personnel training, for example, the cultivation of professional talent concept lag, enterprise financial management professional positioning fuzzy etc, for the enterprise, to solve these problems can greatly promote the ability of employees, for the development of the company has a good help.

In order to strengthen the training of enterprise financial management talents, we can make improvements from the following aspects: update the training concept, build the cutting-edge training system, improve the enterprise management, cultivate the ability to solve practical problems, reform the mechanism, build a scientific talent quality evaluation system, increase salary and grade, etc. For professional financial management professional talent training also must change ideas, cultivate their comprehensive development, has a solid financial

management theory knowledge and skilled use of financial software's ability to complete the financial management and accounting work, from the basic ability, the specialized basic ability cultivation, deep into the professional core ability and development ability.

### 3.2 Professional model system

Enterprise financial management personnel to focus on the training of comprehensive organization and coordination ability strong financial professional foundation and high level of foreign language and language expression ability of senior financial management talents. The financial management personnel of the enterprise should systematically master the modern financial professional theory and practical operation methods, master the professional knowledge of financial securities and other related fields, be familiar with the dynamics and development of financial management at home and abroad, and be able to effectively organize the scheduling and use of enterprise funds.

To master the core of enterprise financial management, enterprise personnel should be familiar with the Hainan Free Trade Port market from the key point of view to find channels and directions for enterprises. Understand the reform environment of Hainan Free Trade Port, adapt to the environment and transform the environment, correctly respond to the corresponding economic policies, financial market laws and policies, and aspire to serve the enterprise. In order to improve the administrative skills of enterprise personnel, enterprises can take planned measures to train students to practice in the society. To understand the real situation of financial operation in other markets, to analyze and solve the problems of corporate financial management in Hainan, and to expand the knowledge of management experiments, so as to drive the development and research of corporate financial cases to provide material for future corporate financial management cases.

### 3.3 Construct a practical teaching system that ADAPTS to the development of The Times

In today's world has entered the information age of enterprise financial management, if people already can not adapt to the needs of the development of era, focusing on data cannot be updated in a timely manner, will inevitably cause business affairs report summary is not timely, enterprise financial manager is one of the top talent, based on the market demands the construction of practical teaching system is the essence of financial management requirements, It is also the main way to cultivate the ability of talents.

The establishment of practical teaching system can effectively overcome and even reverse the helpless situation of financial management major in response to

market demand, and successfully keep the cultivation of professional ability away from the textbook mode. As the saying goes, it is useless to learn on paper. Therefore, in the practical teaching system, students can get close to, or even devote themselves to, the actual phenomenon of enterprise financial management, Through their own thinking and practice, learning for practical use, strengthen their professional ability, to become talents to meet the needs of society, to make contributions to the enterprise government management.

The construction of practical teaching system is to pay attention to the cultivation of practical ability and the accumulation of practical experience while paying attention to the study of theoretical knowledge, integrate two experimental teaching links in the teaching content of enterprises, consider the practical teaching of cultivating employees' comprehensive practical ability as a whole, work out the practical teaching plan and outline, build the comprehensive practical ability and the overall training target system, Through the implementation of each link to ensure the realization of the overall goal, to achieve the optimal training effect.

## 4. CONCLUSION

This article mainly discusses the reform of the free trade port of the south China sea under the analysis of the present enterprise financial management to make the enterprise from the enterprise personnel, personnel training and so on many Angle of a detailed study, further explained the government affairs management of the importance of enterprise development, put forward the corresponding countermeasures for the existing problems, in order to improve enterprise economic benefits, promote the orderly development of the enterprise.

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# Research and Practice of Online and Offline Mixed Teaching Mode of Ideological and Political Course in Colleges and Universities

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**Abstract:** With the rapid development of Internet technology, the mode of higher education is constantly improving. This paper analyzes the advantages of online and offline mixed teaching mode of Ideological and political course in Colleges and universities, and studies the application strategies of online and offline mixed teaching mode in Ideological and political course, hoping to help students understand and absorb the content of Ideological and political course efficiently.

**Keyword:** College Ideological And Political Course; Mixed Teaching; Online And Offline

## 1. INTRODUCTION

Ideological and political course is the key course for college students to study and practice ideological and political before they enter the society. In order to let students really participate in the study of Ideological and political course and get the best teaching experience, the online and offline mixed teaching mode of Ideological and political course in Colleges and universities has important practical significance, and it is also a new benchmark of Ideological and political education in Colleges and universities in the future.

## 2. ANALYSIS OF THE ADVANTAGES OF ONLINE AND OFFLINE MIXED TEACHING

Online and offline hybrid teaching mode is a kind of teaching mode that combines the advantages of traditional course teaching and Internet online teaching. The purpose of online and offline hybrid teaching mode is not to replace traditional classroom teaching, but to make full use of Internet technology, build diversified and digital teaching resources, meet students' personalized needs, stimulate students' interest in learning, provide students with online interaction, discussion, question answering, evaluation and other platforms, and effectively improve students' learning effect and depth. The purpose of Ideological and political course in Colleges and universities is not to test, but to let college students practice the socialist core values, recognize and correct the existing wrong ideas, so that college students can better face the social problems and be patriotic, law-abiding people. Because the content of Ideological and political course in Colleges and universities is boring, too theoretical, abstract, and the teaching form is single, many college students feel that the ideological and political course is like a castle in the air. The online and offline mixed teaching mode uses the Internet information technology platform to extend the ideological and political course to the information internet, and then analyzes and

discusses the online current affairs and current politics, so that students can better understand the ideological and political knowledge and learn deeper knowledge in the traditional classroom. Online and offline mixed teaching mode mixed teaching mode should adhere to the teaching concept of "student-centered, teacher led", make rational use of teaching resources and technology, and organically integrate online teaching and offline Teaching [1].

## 3. APPLICATION STRATEGY OF ONLINE AND OFFLINE MIXED TEACHING MODE

### 3.1. Establishing the resource bank of Ideological and political courses in Colleges and Universities

The construction of network teaching platform is the basis of online and offline mixed teaching mode, and the establishment of teaching resource database is the core of network teaching platform. There are three kinds of resources for ideological and political courses in Colleges and Universities: in class resources, extracurricular resources and constructive resources. In class resources refer to the development of teaching resources according to the teaching tasks: Ideological and political course syllabus, ideological and political examination syllabus, curriculum plan, teaching material ppt. Extracurricular teaching resources refer to related teaching resources outside textbooks: pictures, animations, movies, teaching videos, real teaching cases, question bank, homework bank, test question bank, literature, etc. Constructive resources refer to students' achievement resources, such as thesis, research report and practice report, which are completed by students according to the requirements of the school or teachers after learning the course. Through the network teaching platform, teachers can make and upload teaching resources of Ideological and political course, launch online topic discussion, publish online homework, evaluate students' learning achievements, and complete students' homework evaluation. Students can view teaching videos, courseware and related materials, complete online homework and online assessment examinations, participate in online discussions, and conduct course evaluation through the university network teaching platform. Therefore, the development and establishment of multi type and high-quality ideological and political teaching resources is the basic condition for teachers to successfully carry out online and offline mixed ideological and political teaching. At the same time, schools and teachers should make and update teaching resources regularly to ensure that teaching resources meet the needs of students and keep pace with the times.

### 3.2. Strengthening the construction of teaching design for

teachers

The essence of online and offline mixed teaching mode of Ideological and political course in Colleges and universities is to integrate teaching resources, teaching strategies and teaching mode, so as to change students' impression of the past ideological and political course, guide students to find the fun of Ideological and political course, and enhance the enthusiasm of active learning. In the process of teaching design, we should make clear the teaching objectives, select teaching resources reasonably and carry out teaching design step by step in a planned way according to the actual interest needs of students. Step 1: give the questions about the ideological and political issues, guide the students to independently search the relevant information through the Internet before class for thinking and analysis, or set up tasks such as pre class test, pre class online discussion, pre class data preparation through the school network teaching platform. Step 2: in the actual classroom explanation, when explaining the theoretical content of the textbook, the teacher should combine the teaching methods such as group discussion, current affairs analysis, random questions, and classroom tests to improve the teaching effect, and specifically embody the abstract ideological and political theory knowledge, so that the students can learn and think, and understand the knowledge content in the classroom at a deeper level. Step 3: after completing the classroom teaching objectives, teachers should timely arrange assignments on the network teaching platform and urge students to complete them on time. Generally speaking, the teaching design should take "student-centered, teacher led" as the basic idea, let students through online preview, bring problems to offline classroom learning, and then return to online problem solving.

### 3.3. Improve the course evaluation and scoring mechanism

In order to accurately grasp the process and effect of Ideological and political education in Colleges and universities, and get the real evaluation of students after ideological and political education, schools and teachers should actively improve the course evaluation and scoring mechanism. The assessment of Ideological and political course in Colleges and universities can be carried out through the combination of "course assessment", "practice assessment" and "open book examination assessment". The assessment content includes not only students' mastery of basic ideological and political theory knowledge, but also students' ability to discover, think and solve relevant ideological and political problems in society. Compared with the pressure of closed book examination on students, curriculum assessment can truly and objectively reflect the effect of students' Ideological and political learning, and practical assessment can make students aware of their own shortcomings and correct them and enhance their self-confidence. Students can carry out examination and test through the network teaching platform, make curriculum evaluation, and put forward their own opinions or teaching suggestions to the school and teachers. Every time students complete a course assessment on the online teaching platform,

teachers can refer to the students' course evaluation and assessment test results, comprehensively analyze the problems existing in the teaching process, timely adjust the teaching design, and constantly improve the way of Ideological and political education according to the actual needs of students. The online and offline mixed teaching mode of Ideological and political course in Colleges and universities enhances the effectiveness of Ideological and political course, and the online and offline mixed assessment mode constantly promotes the optimization and improvement of Ideological and political course in Colleges and universities..

### 3.4. Practice and reflection of Blended Teaching

In the practice of online and offline hybrid teaching, teachers use the Internet platform for face-to-face classroom communication teaching, and students use the network teaching platform to complete the development of autonomous learning and online testing. For teachers, the emergence of online and offline mixed teaching mode makes the ideological and political course teachers change from a single "preacher" to a learning promoter. It not only helps students understand basic theoretical knowledge, but also allows students to take the initiative to learn and think about problems. In the online and offline mixed teaching, teachers should be good at guiding students to discover the significance of Ideological and political course, encourage students to ask questions, and help students analyze and solve problems. For students, online and offline hybrid teaching mode promotes the development of students from passive learning to active learning. In the online and offline mixed teaching, teachers should guide or organize students to participate in such practical activities as "subject reading activities", "hot spot analysis of current affairs" and "theme seeking activities" in combination with students' attention to social hot spots or current affairs, so as to give full play to students' subject role and get deeper development. The construction of a teaching system that integrates online and offline, combines theory and practice, and pays equal attention to process and result will provide an important guarantee for students to be happy to learn and to be successful in learning [2].

## 4. CONCLUSION

The online and offline mixed teaching mode is applied to the ideological and political teaching in Colleges and universities to help students obtain high-quality ideological and political teaching resources and improve the enthusiasm of students' autonomous learning. To improve the efficiency of the classroom, consolidate and practice the knowledge of the course, shape themselves, and gradually realize the students' Self-worth, so as to make the ideological and political education in Colleges and universities to a higher level.

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teaching mode of Ideological and political course in

# To Explore the Effect of Pain Nursing Intervention in Patients with Gastric Cancer After Resection

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**Abstract:** Objective To explore the effect of pain nursing intervention on patients with gastric cancer after resection. Methods 80 cases of gastric cancer patients treated in our hospital were selected for the study, and randomly divided into control group (n=40) and experimental group (n=40), the control group for routine nursing, the experimental group for pain nursing intervention. The degree of pain at the same time was compared between the two groups. Results The VAS scores at 12, 24 and 48 hours after surgery were significantly lower in the experimental group than in the control group, and the difference was statistically significant ( $P < 0.05$ ). Conclusion Pain nursing intervention after gastrectomy can greatly reduce the pain feeling of patients, and it is worth carrying out widely.

**Key Words:** Pain Nursing Intervention; Gastrectomy; Analgesic

## 1. INTRODUCTION

Gastric cancer is a clinically common digestive system tumor disease. At present, gastrectomy is the main clinical treatment for this disease. Due to the large scope of operation, it will cause great trauma to the body and lead to intense postoperative physiological pain [1]. Pain is a normal protective signal of the body, but severe pain will cause great pain to the patient physically and mentally. In addition, severe pain will stimulate the sympathetic nerve, cause a series of adverse symptoms, interfere with the normal operation of the body organs, and ultimately affect the prognosis [2]. Therefore, it is necessary to take reasonable nursing intervention to help patients relieve pain after gastrectomy. This paper will analyze the effect of pain nursing intervention in patients with gastrectomy, and the specific report is as follows.

## 2. OBJECTS AND METHODS

### 2.1 Subjects

Eighty cases of gastric cancer patients undergoing surgical treatment in our hospital were selected to be included in the study, with the time range from October 2019 to October 2020. The random number table method was used for grouping. Forty patients were included in the control group, including 23 and 17 men and 17 women, aged between 47 and 73 years old, with an average of  $(53.23 \pm 3.62)$  years old. In the experimental group, 40 patients were included, including 25 males and 15 females, aged between 45 and 70 years old, with an average of  $(53.49 \pm 3.25)$  years old. The contents of this study were verified and approved by the ethics committee of our hospital. All patients and their families were informed of

the research content and signed the agreement. In terms of basic information, there was little difference between the two groups of patients ( $P > 0.05$ ), which could be compared.

### 2.2 Methods

Patients in both groups received gastrectomy, and the control group received routine nursing, monitoring the changes of vital signs, and certain diet, medication and life guidance.

On the basis of the above measures to implement pain nursing intervention,

2.2.1 Explain pain related knowledge to patients after surgery, inform patients that pain is a normal phenomenon, relieve psychological pressure of patients, make them have a correct cognition of postoperative pain and actively face the pain feeling. Inform the patient of the importance of using an analgesic pump, explain that it does not affect the body, and teach them how to use the equipment properly. Videos, reading and other ways can be used to distract attention and give patients humanistic care.

2.2.2 Grasp the cultural background of patients and give relaxation training. Play traditional melodious, smooth, slow and soft songs, decibel control at a reasonable level, while performing relaxation training.

2.2.3 Instruct patients to place reasonable body positions, minimize changes in body positions, and avoid severe pain caused by deep breathing and coughing. The patient's recovery was assessed and early movement training was performed, usually one to two days after surgery, with the patient instructed on bed training, starting with limb movement and gradually expanding the range of movement according to tolerance. 3 days after the operation, the patient was instructed to turn over on his own and conduct whole-body and sitting training at the bedside. If there was no discomfort, the patient could be encouraged to get out of bed.

### 2.3 Observation Indicators

Visual analogue scale (VAS) was used to compare the postoperative pain of the two groups at different time periods. The total score was 10, with 0 being no pain. On a scale of 1 to 3 for mild pain; Moderate pain on a scale of 4 to 6; Severe pain on a scale of 7 to 9; 10 points for unbearable severe pain.

### 2.4 Statistical analysis

SPSS21.0 software was used to study and analyze the data. ( $\pm s$ ) was used to represent the measurement data,  $t$  was used to test the data between groups,  $[n (\%)]$  was used to represent the counting data, and  $\chi^2$  was used to test the data between groups. The results showed that  $P < 0.05$  was the difference, which was statistically significant.

### 3.RESULTS

The VAS scores of the experimental group and the control group at 6 h after surgery had little difference ( $P > 0.05$ ),

and the VAS scores at 12 h, 24 h and 48 h were significantly lower than those of the control group, with great difference ( $P < 0.05$ ), as shown in Table 1.

Table 1 Comparison of postoperative pain in different time periods between the two groups ( $\pm$ s, points)

group	The number of cases	6	12	24	48
The control group	40	6.36 $\pm$ 1.78	5.14 $\pm$ 1.61	3.64 $\pm$ 0.69	2.74 $\pm$ 0.71
The experimental group	40	6.34 $\pm$ 1.81	3.20 $\pm$ 1.21	1.59 $\pm$ 0.31	1.14 $\pm$ 0.23
<i>t</i>		0.050	6.092	17.140	13.559
<i>P</i>		0.960	0.000	0.000	0.000

### 4. CONCLUSION

After gastric cancer resection, the presence of pain causes abnormal levels of hormones and enzyme system in the body, which accelerates the catabolism of tissues and triggers the stress response of the body [3]. At this stage, if there is no effective pain relief measures, it is easy to lead to increased blood pressure, accelerated heart rate and a series of complications, which seriously affect the patient's respiration, wound healing and physical rehabilitation [4]. At the same time, pain will also bring greater psychological burden to patients. Negative emotions can reduce the secretion of endogenous pain suppressant substances, increase pain feeling, and lead to a vicious circle. Therefore, postoperative pain care is of great significance.

As can be seen from the results of this study, the VAS scores at 12, 24 and 48 hours after surgery in the experimental group were significantly lower than those in the control group, indicating that pain nursing intervention can effectively relieve the pain feeling of patients with gastric cancer resection. In the pain nursing, through early activity training, the formation of deep vein thrombosis of lower limbs can be effectively avoided, and the patients can get out of bed as soon as possible. Explain pain knowledge to patients, so that they can establish a correct understanding of pain, can better face the pain. Reasonable use of analgesic drugs can relieve patients' tension and anxiety on pain, improve the body's ability to cope with pain, and increase patients' comfort after

reducing the dosage of analgesic drugs. Relaxation training for patients to divert attention can improve the effect of pain relief.

In conclusion, the application of pain nursing intervention in patients after gastrectomy is conducive to reducing pain feeling and has good clinical promotion significance.

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# Impact of Interest Rate Liberalization: Analysis on Bank Liquidity Creation

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**Abstract:** As Existing studies have shown, Excessive liquidity is the biggest source of financial risk, monetary policy and interest rate liberalization affect Liquidity Creation both in the short term and in the long term. In order to prevent financial risks, it is necessary to understand how interest rate liberalization affects liquidity creation. Based on the panel data of 145 banks in China over 1997-2015, this paper empirically studies the relationship between interest rate liberalization and liquidity creation. The results show that there is a nonlinear relationship between interest rate liberalization and liquidity creation. With the improvement of interest rate liberalization, liquidity creation increases first and then decreases. This conclusion is robust after overcoming endogenous problem, changing the proxy variable, and considering the influence of bank heterogeneity. Further, we investigate the influencing mechanism based on the mediating effect tests, and find that the interest rate liberalization affects liquidity creation through bank risk taking. This paper provides some enlightenment for China to further promote interest rate liberalization reforms and prevent financial risks from Excessive liquidity.

**Key Words:** Interest Rate Liberalization; Bank Risk Taking; Liquidity Creation

## 1.INTRODUCTION

China's financial reform is still advancing and deepening now. Interest rate liberalization is one of the important contents of financial reform in China. After the regulation of deposit and loan rates cancelled in 2015, China's reform of interest rate liberalization starting from 1996 had made substantial progress. The interest rate liberalization has a wide and far-reaching impact on the whole economic and financial system. Under the current financial structure in China, the banking system is obviously the most affected by interest rate liberalization. Therefore, an immense number of literatures have discussed the effect of interest rate liberalization on banks, but most focus on bank loan pricing, bank spreads and risk. There is little literature to explore the influence of interest rate liberalization on liquidity creation. Liquidity creation is one of the two core functions of banks (Diamond, 1984; Berger and Bouwman, 2009), which means that banks can provide liquidity to the economic system by playing the role of financial intermediaries. On the one hand, liquidity creation is closely related to the economic output. Liquidity creation on the asset side of bank balance sheet provides the credit for the real economy, thereby promoting economic growth. Liquidity creation on the liability side not only

helps consumers smooth the intertemporal budget constraint in consumption, but also makes the payment activities more convenient so as to reduce the friction in economic activities. Liquidity creation off the balance sheet also plays an important role in supporting economic growth, for instance, through loan commitments. The influence of liquidity creation off balance sheet is increasing in China. On the other hand, liquidity creation also has an impact on financial stability. From the perspective of micro prudential, excessive liquidity creation may lead to liquidity risk of individual institutions (Fungáčová et al., 2013). From the perspective of macro prudential, excessive liquidity creation may also result in asset price bubbles, or even financial crises (Acharya and Naqvi, 2012; Berger and Sedunov, 2015).

The effect of liquidity creation on economic growth and financial stability has been paid more and more attention. However, there is no literature exploring the impact of interest rate liberalization on liquidity creation, especially in China. This paper attempts to take the first step to answer the following questions: does the interest rate liberalization in China affect liquidity creation? If so, what is the possible mechanism of the affect?[1-16]

## 2.LITERATURE REVIEW

As one of the most important financial intermediaries in modern financial system, Bank's function of liquidity creation has always been the concern. The importance of liquidity creation is mainly reflected in two aspects. First, liquidity creation can promote economic growth. The positive impact of liquidity creation on economic output has been supported by evidence from different countries. Berger and Sedunov (2015) studied the relationship between liquidity creation and the real economic output in the United States, finding that liquidity creation could significantly promote the growth of economic output, and this relationship is widely existed in various industries, especially in industries considered to be more bank-dependent. Fidrmuc et al. (2015) studied the impact of liquidity creation on economic growth in Russia over 2004-2012. The results showed that liquidity creation promoted Russian economic growth, and this effect remains during the financial crisis. Secondly, bank liquidity has an impact on financial stability. The empirical literature showed that the impact of liquidity creation on financial stability is also significant. Fungáčová et al. (2013) showed that excessive liquidity creation significantly improved the possibility of bank's bankruptcy. Horváth et al. (2014) showed that there is a trade-off between financial stability and liquidity

creation.

In China, the research on liquidity creation started late, and the results are still not abundant. The literature focused on the impact of monetary policy on liquidity creation (Li et al., 2014; Wang and Wang, 2016), the effect of the financial system on liquidity creation (Li and Chang, 2015), and the relationship between bank capital and liquidity creation (Xie, 2016).

Generally, interest rate liberalization is regarded as a dimension of financial liberalization in developed countries, and the impact of interest rate liberalization on banks has been mainly studied in two aspects. One is to study the impact of interest rate liberalization on bank loan pricing and spreads. Feyzioglu et al. (2009) discussed the impact of interest rate liberalization on bank lending rates through building a banking monopoly competition model. Porter and Xu (2013) showed that the cancellation of deposit rate will lead to the decline of interbank lending rate. He and Wang (2014) pointed out that the effect of loosening deposit rate on loan rate is uncertain, depending on the competition between banks and the degree of capital account openness. Ji, et al. (2015) set up a two track interest rate model, and studied the equilibrium with the upper limit of the deposit interest rate by means of parameter calibration and nonlinear optimization. The study showed that the loosening of the upper limit significantly increased the deposit rate and significantly reduced the loan rate. Li (2015) and Peng (2016) studied the impact of interest rate liberalization on bank net interest margin.

The other aspect is to study the impact of interest rate liberalization on bank risk. Diaz-Alejandro (1984) studied the process of financial liberalization in Latin American countries and the financial crisis along with it, and showed that financial liberalization might cause moral hazard of banks, and even lead to banking crisis. Based on panel data of cross countries, some literature found that there is a positive correlation between the financial liberalization and banking crisis (Demirguc-Kunt and Detragiache, 1998; Ranciere, 2006; Yin and Bian, 2016; Wang, 2016), while others showed that the above correlation was not significant (Daniel and Jones, 2007; Shehzad and Haan, 2008; Angkinand, et al., 2010). Zhang (2012) specified the year dummy variable of 2004 as the proxy variable of interest rate liberalization, and studied bank risk behavior under the background of interest rate liberalization based on data of 14 banks from 1998 to 2010. The empirical results showed that the influence of interest rate liberalization on bank credit risk is not significant, but might enhance the bank's business risk.

In summary, the existing literature has reached a consensus on the role and impact of liquidity creation, and began to explore the factors that influence liquidity creation. However, there is no literature about the impact of interest rate liberalization on liquidity creation. In order to deepen the research on the basis of the existing literature, this paper empirically studies the relationship between interest rates liberalization and liquidity creation based on the panel data of 145 banks in China

from 1997 to 2015 by using the FGLS method, and analyzes the mechanism of interest rates liberalization affecting liquidity creation.

### 3. RESEARCH DESIGN

#### 3.1 Model Construction

The literature has indicated that China's interest rate liberalization may have a nonlinear effect on the banks (Peng et al., 2016), so in order to capture the nonlinear impact of interest rate liberalization on liquidity creation, we introduce the square of interest rate liberalization, and set up the regression model as follows:

$$LC_{it} = \alpha_0 + \alpha_1 IRL_{it}^2 + \alpha_2 IRL_{it} + X_{it}\delta + u_i + e_{it} \quad (1)$$

where  $LC$  is liquidity creation, and  $IRL$  is the index of China's interest rate liberalization.  $X$  is the vector of control variable, and  $u$  captures the individual effect that does not vary with time, and  $e$  represents the residual item. The sign of  $\alpha_1$ , the parameter to be estimated can depict the nonlinear relationship between the interest rate liberalization and bank liquidity creation. Specifically, if  $\alpha_1$  is positive, there is a U-shaped relationship between interest rate liberalization and liquidity creation. Otherwise, if  $\alpha_1$  is negative, then there is an inverted U-shaped relationship between them.

#### 3.2 Variables Description

##### 3.2.1 The Dependent Variable: Liquidity creation

Berger and Bouwman (2009) proposed the first comprehensive measure of liquidity creation. The liquidity creation they measured is the weighted sum of all the items on and off bank's balance sheet, where the weights are based on category or maturity. They use a three-step procedure to construct the measure of liquidity creation, and calculate 4 measures of liquidity creation: CATFAT, CATNONFAT, MATFAT, MATNONFAT. Here we calculate China's liquidity creation based on the CATFAT measure. The specific formula is as follows:

$$\begin{aligned} \text{Liquidity creation} = & 0.5 * \Sigma(\text{illiquid assets} \\ & + \text{liquid liabilities} + \text{illiquid off} \\ & - \text{balance sheet items}) + 0 \\ & * \Sigma(\text{semiliquid assets} \\ & + \text{semiliquid liabilities} + \text{semiliquid off} \\ & - \text{balance sheet items}) - 0.5 \\ & * \Sigma(\text{liquid assets} + \text{illiquid liabilities} \\ & + \text{liquid off} - \text{balance sheet items}) \end{aligned}$$

Considering the particularity of China financial structure and financial system, we follow the practice of Zhou and Chen (2013) and Li (2014) when classifying the items on and off bank's balance sheet as liquid, semiliquid, and illiquid. Measure the liquidity creation, and then divided by the total assets as the dependent variable  $LC$  of the model (1).

##### 3.2.2 The Key Independent Variable: Interest Rate Liberalization

Interest rate liberalization is the key independent variable of this paper. On the measurement of the interest rate liberalization, the literature has not yet reached the consensus. Wang and Peng (2014) constructed an index of interest rate liberalization based on an index system. The index system consists of indicators on the four levels: deposit and loan interest rates, money market interest rates, the bond market interest rates and financial products yield rates. The indicators can be divided into 12 more detailed indicators, as shown in table 1.

Table 1 –Measurement of interest rate liberalization

Index	Indicator of Level 1	Indicator of Level 2
Interest Rate Liberalization	Deposit and loan interest rate	RMB loan interest rate
		RMB deposit interest rate
		Foreign currency loan interest rate
	Money market interest rate	Foreign currency deposit interest rate
		Interbank lending rate
	Bond market interest rate	Discount rate of bill
		Bond issue interest rate
		Bond repo interest rate
	Financial product yield rate	Coupons trading interest rates
		Bank financial products yield rate
		Monetary fund yield rate
		Trust product yield rate

On the basis of Wang and Peng (2014), we extend the interest rate liberalization index to 2015 as our key independent variable IRL in model (1), update China's interest rate liberalization data to 2015, and use this index as an alternative measure for interest rate liberalization (IRL ALTER), which is used for robustness test.

### 3.2.3 Control Variables

Referring to Berger and Bouwman (2009) and Li (2014), we introduce the following control variables:

ASSET: the natural logarithm of bank assets. The scale of bank assets can reflect the ability of liquidity creation to some extent.

ROA: return on assets .Higher return on assets can motivate banks to make more aggressive mismatches and create more liquidity.

EFFICIENCY: operation efficiency, the ratio of bank operation cost to total income. It is generally indicated in the literature that bank operation efficiency will also affect liquidity creation.

LEVERAGE: the ratio of equity to total assets. The higher is the ratio of equity to the total assets, the lower the leverage ratio of the bank is.

GDP: the annual growth rate of GDP. It is used to control for the macro factors.

## 4. EMPIRICAL RESULTS

### 4.1 Data And Sample

Our sample is from the Bankscope database, where we get the unbalanced panel data for 183 commercial banks in China over 1997-2015. After eliminating the banks whose observations are less than two years, we eventually have a sample of 145 banks, consisting of 970 observations.

### 4.2 Statistical Description

We winsorize all the variables at 1% and 99% quantile, in order to reduce the influence of abnormal values.

Table 2 –Statistical Description

Variable	Mean	Std.Err	Min	Max
LC	0.411	0.171	-0.012	0.820
IRL	0.749	0.167	0.209	1.000
IRL ALTER	2.409	0.678	0.000	3.000
ASSET	18.545	1.814	14.430	23.402
ROA	0.014	0.006	-0.003	0.031
EFFICIENT	38.459	11.738	18.109	115.660
LEVERAGE	0.068	0.028	0.018	0.420
GDP	9.036	1.945	6.900	14.200

Table 2 shows the Statistical Description results of the

variables.

As can be seen from table 3, the average value of liquidity creation in the sample is 0.411, indicating that the bank's 1 rmb assets can create 0.411 rmb liquidity.

### 4.3 Regression Results

Considering that there may be correlations between banks, we regress the model with the comprehensive feasible generalized least squares (FGLS) estimates.

Table 3 –Benchmark regression results

	(1)	(2)	(3)	(4)
	LC	LC	LC	LC
IRL <sup>2</sup>	-0.460***	-0.663***	-0.626***	-0.578***
	(0.072)	(0.067)	(0.081)	(0.080)
IRL	0.347***	0.952***	0.953***	0.929***
	(0.116)	(0.110)	(0.138)	(0.137)
ASSET		-0.073***	-0.090***	-0.088***
		(0.004)	(0.007)	(0.007)
ROA		2.699***	3.317***	4.274***
		(0.356)	(0.566)	(0.478)
EFFICIENCY			-0.000	0.000
			(0.000)	(0.000)
LEVERAGE			-0.617***	-0.545***
			(0.122)	(0.126)
GDP				0.007***
				(0.001)
CONSTANT	0.401***	1.724***	2.125***	1.980***
	(0.060)	(0.106)	(0.157)	(0.148)
N	983	976	970	970

Standard errors are in parentheses. \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% levels, respectively. Fixed effects are not listed for brevity.

Table 3 shows that, the coefficients for the square of IRL are all significance in different columns. This also indicates that the degree of collinearity is small, thus the model is robust to an extent. We can see that both the coefficient of IRL and that of the square of IRL are significant, and the latter is negative, indicating that, the relationship between liquidity creation and interest rate liberalization is inverted U-shaped.

### 4.4 Robustness Tests

In order to overcome the potential endogeneity problem, test the robustness of our model, and investigate whether the heterogeneity of banks will affect the regression results, We further optimized the model. The result shows that, we get results consistent with the benchmark regression after overcoming the endogeneity, the benchmark regression is robust to the proxy variable selection, and the heterogeneity of banks have no any affect on the regression results, suggesting the benchmark model is robust.

## 5. FURTHER DISCUSSION: THE MECHANISM OF INTEREST RATE LIBERALIZATION AFFECTING LIQUIDITY CREATION THROUGH BANK RISK TAKING

Next follows a key question: why is the impact of interest rate liberalization on liquidity creation nonlinear? What is the mechanism behind it? Further research on this issue will help us deepen our understanding of the relationship between interest rate liberalization and liquidity creation, and also provide a reference for the design and practice of financial regulation and reform policies.

### 5.1 The Mechanism: Theoretical Analysis



The latest research has provided an enlightening clue for us to explore the mechanism of the effect of interest rate liberalization on liquidity creation. On the one hand, it has been pointed out that banks have a positive incentive to bear risk due to interest rate liberalization. Lu et al.(2014) analyzed the impact of loan interest rate liberalization on bank risk, showing that a relatively high ratio of non-interest income to total income and excessive loan growth would cause an increased risk of banks. Based on a DSGE model, Guo and Peng (2015) found that in the effective range of interest rate change, the liberalization of deposit interest rate will have a greater impact on systematic risk. On the other hand, there is also literature supporting that liquidity creation is affected by bank risk taking. According to Angeloni (2015), the bank's risk-taking behavior may affect both the assets and the liabilities of bank's balance sheet. On liability side, bank risk taking will affect the choice of bank funding and leverage. When a bank takes more risk, the ratio of non-deposit liabilities to total assets will also increase (Angeloni et al., 2015, Li and Liang, 2015). In addition, in some special circumstances, bank risk taking may be reflected by off balance sheet activities (Hu et al., 2016) rather than information on balance sheet.

Based on the above research in the literature, we suggest that one of the possible way of interest rate liberalization affecting liquidity creation is through bank risk taking, in other words, interest rate liberalization leads to bank risk taking, and the latter results in changes in liquidity creation.

5.2The Mechanism: Empirical Tests

5.2.1Empirical Design and Result Analysis

Based on the theoretical analysis, we introduce bank risk taking as a mediating variable, and construct a mediating effect model to examine whether interest rate liberalization affects liquidity creation through bank risk taking. The mediating effect test includes three steps. The first step is to regress the dependent variables on the key independent variables. The second step is to regress the mediating variables on the key independent variables. The third step is to regress the dependent variables on both the key independent variables and the mediating variables. Therefore, the mediating effect model of this paper consists of three regressions:

$$LC_{it} = \alpha_0 + \alpha_1 IRL_{it}^2 + \alpha_2 IRL_{it} + X_{it}\zeta + \lambda_{1i} + e_{it} \quad (2)$$

$$RISK_{it} = b_0 + b_1 IRL_{it}^2 + b_2 IRL_{it} + X_{it}\eta + \lambda_{2i} + \epsilon_{it} \quad (3)$$

$$LC_{it} = c_0 + c_1 RISK_{it} + c_2 IRL_{it}^2 + c_3 IRL_{it} + x_{it}\vartheta + \lambda_{3i} + \xi_{it} \quad (4)$$

where RISK is bank risk taking, and here we measure bank risk taking with the ratio of bank risk weighted assets to total assets, according to Fang(2012). X is the vector of control variable, and  $\lambda$  captures the individual effect that does not vary with time, and  $e, \epsilon, \xi$  represent residual items. Equation (2) is also the benchmark regression model of this paper.

According to Baron and Kenny (1986), if  $\alpha_1, b_1, c_1, c_2$  are all statistically significant at the same time, the mediating variable plays the partial intermediary role. If  $\alpha_1, b_1, c_1$  are all statistically significant at the same time, but  $c_2$  is not significant, the mediating variable plays the complete intermediary role; if  $\alpha_1$  is not significant, the

mediating effect does not exist. Table 4 shows the regression results of models (2), (3), and (4).

Table 4 –Regression results for mediating effect tests

	(2)	(3)	(4)
	LC	RISK	LC
RISK			0.052*** (0.019)
IRL <sup>2</sup>	-0.578*** (0.080)	-0.194* (0.105)	-0.457*** (0.104)
IRL	0.929*** (0.137)	0.651*** (0.188)	0.658*** (0.184)
ASSET	-0.088*** (0.007)	-0.041*** (0.008)	-0.088*** (0.009)
ROA	4.274*** (0.478)	-0.639* (0.607)	3.204*** (0.860)
EFFICIENCY	0.000 (0.000)	-0.001* (0.000)	-0.000 (0.000)
LEVERAGE	-0.545*** (0.126)	0.990*** (0.114)	-0.724*** (0.153)
GDP	0.007*** (0.001)	0.008*** (0.002)	0.002 (0.002)
CONSTANT	1.980*** (0.148)	0.743*** (0.270)	2.163*** (0.200)
N	970	799	799

Standard errors are in parentheses. \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% levels, respectively. Fixed effects are not listed for brevity.

In table 4, the estimation results in column (2) are the same as the benchmark regression. In column (3), the coefficients of the square of IRL is significantly negative, and the coefficients of IRL is significantly positive, indicating that there is also an inverted U relationship between interest rate liberalization and bank risk taking. In column (4), after controlling for bank risk taking, the coefficient of the square of IRL is still significantly negative, and the coefficient of IRL is still significantly positive. This indicates that the inverted U relationship between interest rate liberalization and liquidity creation still remains. The regression results show that the bank risk taking plays a mediating effect in between the interest rate liberalization and liquidity creation. In other words, with the interest rate liberalization, bank risk taking first increases and then decreases, resulting in liquidity creation first increasing and then decreasing.

In China, that bank risk taking first increases and then decreases is easy to understand: in the early stage of interest rate liberalization reform, competition between banks is not very intense. Thus banks take more risks if driven by profit. This view has also been confirmed by the latest research. Guo and Zhao (2017) point out that when the banking competition is not fierce, the bank's profit is high and so is the risk tolerance. With the deepening of interest rate liberalization, competition between banks become more and more intense, and bank risk taking rises rapidly. Once bank risk taking goes beyond a threshold, the bank will face the constraints of financial supervision. More strict banking regulatory requirements thus constrain bank risk taking behavior (Guo and Zhao, 2017).

5.2.2Robustness Test

In terms of determining the significance of mediating

effect, Sobel Z test proposed by Sobel (1982) is also widely used in the literature. Therefore, we examine whether bank risk taking has played a mediating effect between the interest rate liberalization and the liquidity creation with Sobel Z test. The null hypothesis is "mediating effect is not significant". In our regression model, the Z statistic of Sobel test is 2.147, the corresponding p value is 0.032, so the null hypothesis is rejected. This indicates that the mediating effect of the model is significant, and bank risk taking played a mediating effect between the interest rate liberalization and the liquidity creation in China.

#### 6. CONCLUSION

In this paper, we empirically test the effect of interest rate liberalization on liquidity creation, based on the unbalanced panel data of 145 banks in China over 1997-2015. The results show that, firstly, interest rate liberalization has a nonlinear impact on liquidity creation, and the relationship between them is inverted U-shape. In other words, with the interest rate liberalization, liquidity creation increases first and then decreases. Secondly, through the mediating effect tests, we find that interest rate liberalization affects liquidity creation through bank risk taking. That is to say, interest rate liberalization leads to the changes of bank risk taking, thus resulting in the changes of liquidity creation.

The conclusion has the following policy implications. Firstly, the interest rate liberalization has a significant impact on liquidity creation, therefore liquidity creation should be added into the objective function of the interest rate liberalization reform in China. Secondly, the effect of interest rate liberalization on liquidity creation is nonlinear, so promoting the interest rate liberalization faces a trade-off, because excessive liquidity creation may lead to asset price bubbles, while too little liquidity creation may inhibit the economic growth. Finally, interest rate liberalization has a direct impact on bank risk taking, and it affects liquidity creation through bank risk taking. Therefore, interest rate liberalization must be included into the framework of macro-prudential supervision.

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# Cultural Differences and Handling Methods in Tourism English Translation

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**Abstract:** With the increasing influence of China in the world, more and more foreign tourists come to various regions of our country for tourism and sightseeing. However, due to the differences between Chinese and Western cultures, there are still some problems in tourism English translation that need to be effectively dealt with. This paper analyzes the cultural differences in tourism English translation between China and the West, and discusses the influence of these cultural differences on tourism English, and then puts forward the ways to deal with the cultural differences in tourism English translation for the reference of relevant personnel.

**Key Words:** Tourism English Translation; Cultural Differences; Analogy Method; Interpretation Method

## 1. INTRODUCTION

Since the beginning of the 21st century, China's comprehensive strength in economy, society and science and technology has been continuously enhanced. Especially in the last decade, the world's center of gravity has been gradually shifting to Asia, with China as the main player. At the same time, China has thousands of years of history and traditional culture, which makes it increasingly attractive to foreigners. Every year, a large number of foreign tourists come to China to visit and travel. But represented by Chinese language and Chinese culture represented by English there are huge differences between western culture, as a result, tourism English translation work difficulty is relatively large, so, must analyze the tourism English translation of the culture, and adopt reasonable processing mode, provide convenience for the majority of foreign tourists to fully understand the Chinese culture.

## 2. CULTURAL DIFFERENCES IN TOURISM ENGLISH TRANSLATION BETWEEN CHINA AND FOREIGN COUNTRIES

### 2.1 Differences in ideology and culture

Significant cultural differences gradually exist between China and Western countries, which have their own characteristics in every aspect from daily food, clothing, housing, transportation to ideological values and concepts. Therefore, great attention must be paid to these cultural differences in the actual process of tourism communication to avoid conflicts due to cultural differences. For example, "dragon" is a word that appears frequently. As for the meaning of this word, Chinese people believe that the Chinese nation is the descendant of the dragon. In Chinese society, the dragon represents many meanings such as nobility and majesty. Many tourist attractions in China have painted or carved images of dragons, such as the dragon chair in the Forbidden City in Beijing. But in the eyes of people in western society,

"dragon" is a symbol of evil. If foreigners are not familiar with traditional Chinese culture, they will find it difficult to understand the large number of dragons in various images when they travel to China. Chinese culture is extensive and profound, and there are many things that other countries do not have, so it is difficult to use appropriate English to translate. For example, the theory of yin-yang and eight-trigram in traditional Chinese Taoist culture is hard for even Chinese people to understand its true meaning, and it can't be explained clearly in just a few words, let alone translated into English. For another example, the Spring Festival is the most important Festival that Chinese people all over the world attach great importance to. If it is directly translated into English as "Spring Festival", foreigners can only understand the superficial meaning of the words. As a result, most foreign tourists who travel to China during the Spring Festival are surprised at the different customs in different parts of the country. For example, on the Dragon Boat Festival every year, Chinese people make and eat zongzi, but the English translation of zongzi is quite controversial. Some people translate it as "steamed glutinous rice wrapped in bamboo leaves", while others literally translate it as "rice dumpling". The first translation is slow, while the second translation is abrupt and does not have a close connection with the culture associated with zongzi.

### 2.2 Differences in language vocabulary

People in the western society mostly pursue liberalism, emphasize rationality, and generally have a more direct personality. In their aesthetic concepts, they usually focus on the intellectual and scientific aspects of things. Chinese people, on the other hand, attach great importance to emotion, and their personality is generally more reserved and introverted. They pay more attention to the connotation and artistic conception of things in their aesthetic concepts. Traditional culture has a profound influence on Chinese people and lays more emphasis on the principle of collective interests. These cultural differences are often fully reflected in the language vocabulary. For example, in the tourism introduction of Mount Hua, Chinese people prefer to use exaggerations and analogues to express the features of tourist attractions, such as towering rocks, precipitous walls and ink paintings. In traditional Chinese culture, this kind of words will make people feel more literary, if accompanied by some stories and legends and classic ancient poetry, it is more attractive. However, when introducing the tourist attractions to foreigners, if these flowery words are used, they may think that the introduction has gone away from the key point and seems rather slow, especially for some ancient poems and related allusions, foreigners can not understand. Therefore, due to the differences in language

vocabulary and way of thinking, there will be great differences in language application style and introduction methods used in the process of introducing tourist attractions to foreign tourists.

### 3. THE IMPACT OF CULTURAL DIFFERENCES BETWEEN CHINA AND FOREIGN COUNTRIES ON TOURISM ENGLISH TRANSLATION

#### 3.1 Generation of lexical gaps

Generally, the reason for the lack of vocabulary is that the cultural information contained in the original words is not deeply reflected in the translation process, and there is a certain deviation in the corresponding language. Lexical vacancy is embodied in two aspects: lexical vacancy and lexical vacancy. For example, Chinese words such as Qixi Festival and Qingming Festival contain cultural information that is unique to Chinese culture. The English translation of Qingming Festival is "Qingming Festival", which is the simplest way to translate it, but it omits many traditional cultural messages about the Chinese people sweeping tombs and paying respects to their ancestors. It can be seen from this that cultural gaps caused by cultural differences will certainly lead to lexical deviations in the process of English translation, which makes it difficult to fully convey Chinese cultural information to foreign tourists.

#### 3.2 The generation of Chinglish

The so-called Chinglish, usually refers to some language words mixed with Chinese and English that are not English or Chinese, and is often called English with Chinese characteristics. Chinglish is a language expression with mistakes in grammar, spelling and other aspects, often with Chinese customs. The appearance of Chinglish comes from the improper expression of English grammar that many English learners in China have been unable to get rid of the influence of Chinese when they are learning English. For example, when many Chinese express "you are welcome", they often directly translate it into "No thanks", while in English culture, "No thanks" means a polite refusal, namely "No need, thank you". And the correct English translation of "you are welcome" should be "It's nothing". In the face of these Chinglish, not only foreigners are difficult to understand and accept, even if we ourselves are also difficult to really understand the meaning.

### 4. EFFECTIVE MEANS TO DEAL WITH CULTURAL DIFFERENCES IN TOURISM ENGLISH TRANSLATION

#### 4.1 Analogical processing

The factors that affect the communication between different cultures not only include social and cultural differences, but also have a great relationship with the values and working attitude of translators. In the process of tourism translation, especially in the translation of tourist attractions with obvious Chinese cultural characteristics, it is inevitable to translate some relevant historical figures and the grades of officials of the corresponding dynasties. If the specific characters are simply introduced to foreign tourists, it is easy to make them confused. At this time, tourism translators can use the way of analogy to compare and introduce the

characters commonly known to foreigners, so that foreign tourists can easily understand Chinese characters and have a certain resonance. For example, the story of Liang Shanbo and Zhu Yingtai in China can be introduced by analogy with the widely spread "Romeo and Juliet" in western countries, and the Chinese Tanabata Festival can be introduced by analogy with the "Valentine's Day" in western countries.

#### 4.2 Interpretation Processing

In the process of translating some tourism materials, we often encounter the translation of folk expressions and names of traditional dishes. For Chinese people, most of these are common-sense knowledge, but foreign tourists can not effectively understand it. Therefore, in the process of specific translation, translators can fully grasp the characteristics of foreigners' way of thinking and directly use paraphrase to translate this part of the content. For example, the name of the dish "Stewed Pork Ball in Brown Sauce" can be translated as "Stewed Pork Ball in Brown Sauce"; And also: "Nothing ventured, Nothing gained." Translators use this way of explaining the meaning of things directly to translate, which can bring a clear feeling to foreign tourists.

#### 4.3 Additive translation processing

For some religious tourism resort, for foreign tourists to introduce the process, must to the corresponding place names, names and corresponding description of the historical and cultural background, etc, especially some religious historical allusion, must stand in the corresponding stage, in the perspectives of historical development to foreign tourism workers can be more profound understanding and cognition. For example, when introducing The Terracotta Warriors and Horses in The Mausoleum of Qin Shihuang, The introducers must first let The foreign tourists know The outline of The first emperor to reunite The whole nation in Chinese history. It tells the life track and historical achievements of Qin Shihuang to foreign visitors, and on this basis, makes foreign visitors understand Qin Shihuang's desire for immortality to some extent.

### 4. CONCLUSION

In a word, cultural differences in tourism English translation will greatly affect the accuracy of tourism English translation results, and also hinder foreign tourists from understanding Chinese culture. Tourism English, therefore, the translator must fully understand the various cultural differences that exist in the tourism English translation, and understanding the impact of these cultural differences in tourism English translation, and then take the literal translation method, analogy method and various flexible ways of translation interpretation method, etc. will contains the Chinese cultural connotation of tourist attractions related things introduced to foreign tourists.

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# The Significance of College Chinese Teaching to Campus Culture Construction in Higher Vocational Colleges

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**Abstract:** As an important link of modern education, higher vocational colleges have a great impact on students' learning, growth and later development. College Chinese plays a key role in the process of modern higher vocational teaching. On the other hand, it affects the progress and quality of campus culture construction. Therefore, in the actual teaching process, teachers and school administrators need to positive change traditional education idea, enrich teaching content, innovation of teaching mode, to create a healthier quality of campus culture, promote the rejection of the level of high-quality personnel training, for the healthy development of the whole industry of our country modern education to lay the solid foundation. The following is mainly to analyze and explore the significance of college Chinese teaching to the campus culture construction of vocational colleges.

**Key Words:** College Chinese; Higher Vocational Colleges; Construction Of Campus Culture

## 1. THE SPECIFIC STATUS QUO OF COLLEGE CHINESE TEACHING IN VOCATIONAL COLLEGES

### 1.1 Lack of attention to practical teaching

As is known to all, college Chinese is a basic and key course in the process of higher vocational teaching, which affects the improvement of the overall level of higher vocational teaching to a great extent. However, in the inside part of the higher vocational colleges, in order to ensure the students' employment rate, too much attention to develop the teaching of professional and technical aspects, ignore the importance of college Chinese teaching, which reduced the college Chinese teaching in the class, even as a part of the higher vocational college have no course, made a great impact on the comprehensive development of students' comprehensive quality. At the same time, it affects the progress and improvement of the teaching level of colleges and universities [1].

### 1.2 Lack of effective teaching content

At the same time, because the related teachers and school administrators to ignore, when the work of college Chinese teaching, its teaching content is too old, traditional and largely is given priority to with selected readings in classical literature classic works, and of the work of modern higher vocational education objectives, requirements, there is a big gap, at the same time, in the early part of the teaching content and content, from high school, unable to improve the students' language professional, It further affects the normal progress and development of college Chinese teaching in higher vocational colleges.

### 1.3 Insufficient professional teachers

In addition, higher vocational colleges in some university Chinese teaching work, lack of professional teachers will also existed, and the traditional teaching way too old, lead to classroom teaching atmosphere depressing, students lack interest in learning, and even in some problem such as classroom teaching process there will be a sleepy, greatly affecting the overall level of classroom teaching. Therefore, it has an impact on the overall quality of modern college Chinese teaching and higher vocational teaching

## 2. THE SIGNIFICANCE OF COLLEGE CHINESE TEACHING TO THE CONSTRUCTION OF CAMPUS CULTURE IN HIGHER VOCATIONAL COLLEGES

### 2.1 Guaranteed the balance between traditional culture and foreign culture

Research shows that when the work of college Chinese teaching, its main Chinese culture as the main content, to the excellent quality of its internal culture, spirit, moral, behavior and values carried on the inheritance and carry forward, at the same time, you can also use the application of college Chinese teaching, will be partial to absorb the essence of western culture, to form more characteristic of ideological and moral quality, To ensure that to the greatest extent to improve their own quality level, for their own healthy growth to lay a good foundation.

### 2.2 Cultivate students' innovative ability and humanistic spirit

Humanistic education plays an extremely important role in modern education and has a great influence on students' own growth and development. Therefore, in the process of modern vocational education and campus culture construction, relevant teachers and school leaders need to actively carry out college Chinese teaching, and cooperate with other institutions and units, organize a large number of practice and cultural activities, carry on the promotion of the national spirit of the students, and cultivate their own humanistic quality at the same time. In addition, by strengthening the development of college Chinese teaching, students' own innovation consciousness and ability can be cultivated, and the level and quality of campus cultural construction can be further improved [2].

### 2.3 Guide the direction of campus culture construction

In addition, in the modern university Chinese teaching work, the relevant departments need to improve the recognition of the work, and formulate the corresponding policy, ensure the smooth operation of the college Chinese teaching work and development, and guide the healthy growth of students, on the other hand can also to the

construction of campus culture in higher vocational colleges and education industry overall development direction to guide, To ensure the healthy development of students and teaching work as a whole.

### 3. SPECIFIC MEASURES TO STRENGTHEN THE APPLICATION OF COLLEGE CHINESE TEACHING AND THE CONSTRUCTION OF CAMPUS CULTURE IN HIGHER VOCATIONAL COLLEGES

#### 3.1 Strengthen the development of classroom teaching reform

The current period, in order to strengthen the college Chinese teaching in higher vocational campus culture construction, the application of the teachers and school administrators first need to change traditional education idea and way, fully realize the importance of college Chinese teaching, and according to the relevant departments of the policy, actively carry out classroom teaching reform, on the basis of training students' practical ability, Arousing the students' thinking and learning enthusiasm, and providing sufficient guarantee and promotion for the smooth progress of the later teaching process.

#### 3.2 Strengthen the optimization and integration of teaching content

Generally speaking, college Chinese teaching is a kind of public course in nature, with relatively few class hours, which cannot effectively complete the daily teaching process. In order to solve these problems, the related teachers need to joint management, optimize the teaching content integration, to develop in line with the student's knowledge level and the content of the psychological need, at the same time, can also according to the different content of humanism and thoughtful features classification unit teaching, combined with the literature appreciation courses, social etiquette, Promote the improvement of students' professional knowledge and comprehensive quality.

#### 3.3 Strengthen the reform and innovation of assessment methods

At the same time, the inspection in any of the terms are occupies a key position in the teaching process, and is the main stage after learning of students, clear their learning efficiency, quality and state of mind, and in the process of modern university Chinese teaching, in order to play a role in promoting the campus culture construction, the related teachers need joint management department, the examination way to reform the innovation, The students' knowledge level, practical ability, innovation consciousness and comprehensive quality are examined comprehensively, which lays a good foundation for the

healthy development of higher vocational teaching work.

3.4 Strengthen the enrichment of extracurricular activities  
In addition to the above measures, in order to have the aid of university Chinese teaching to strengthen the construction of campus culture in higher vocational colleges, the teachers also need to actively organize rich extracurricular activities, and to combine classroom teaching and extracurricular practice, widen students vision, improve their own practice and innovation ability, enrich students' extra-curricular life at the same time, the related teachers need to actively participate in, When problems arise, students should be guided and encouraged so that they can solve problems independently, so as to improve the level and efficiency of students' learning and thus promote the progress and development of students themselves and the overall vocational teaching [3].

### 4. CONCLUSION

To sum up, college Chinese plays an extremely important role in the teaching process of modern higher vocational education, which affects students' own growth and the development level of education industry to a great extent. Therefore, in order to improve the level of college Chinese teaching, optimize the development of higher vocational colleges to strengthen the campus culture at the same time, the related teachers and leaders of colleges and universities need to strengthen the transformation of the traditional teaching concept, strictly follow the relevant departments and the requirements of the new curriculum reform standard, and introduce a large number of modern teaching facilities, rich teaching content and mode, create a healthy good teaching atmosphere, It can stimulate students' interest in learning, broaden their vision, improve the efficiency and quality of daily learning, and thus promote the further development of modern vocational colleges and the whole industry.

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# Discusses the Curriculum and The Teaching Theory to Promote the Effective Study the Teaching Countermeasure

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**Abstract:** Curriculum and teaching theory, as a basic education theory, is an indispensable knowledge system in pedagogy. Under this theory, guiding and assisting activities and planning practical teaching are conducive to the overall optimization of classroom teaching level. At present, quality-oriented education pays more attention to the individualized development of students, strengthens the cultivation of comprehensive quality, and constantly implements the teaching work of cultivating people by virtue, so as to create an active and healthy teaching atmosphere for students. On the one hand, the reform and innovation of effective teaching based on curriculum and teaching theory can help teachers to establish modern education concept and increase the form of teaching activities. On the other hand, it can also promote the construction of education information, provide strong support for the completion of teaching tasks, and construct effective teaching classrooms. Therefore, this paper mainly discusses the curriculum and teaching theory to promote effective learning teaching strategies.

**Key Words:** Curriculum And Teaching Theory; Effective Learning; Countermeasures

## 1. INTRODUCTION

At present, the research on the theoretical basis and practice of effective teaching is deepening, but the application of the theory in practical work still needs a lot of practice to prove. Curriculum and pedagogical theory have far-reaching significance for guiding effective teaching practice, which covers various contents, such as teaching design, teaching connotation, practice scheme and course planning, etc., and plays an obvious role in improving effective classroom teaching [1]. In addition, curriculum and pedagogical theory has always been a hot topic in related research fields, and it is an important theoretical basis for China's modern educational reform. Therefore, this paper mainly analyzes the curriculum and teaching theory to promote effective learning teaching countermeasures.

## 2. CHARACTERISTICS AND RESEARCH SIGNIFICANCE OF CURRICULUM AND PEDAGOGICAL THEORY

### 2.1 Contemporary features of curriculum and pedagogical theory

Moral education belongs to the core guiding principle of curriculum and teaching theory. In recent years, the focus of quality-oriented education has gradually shifted to the improvement of students' moral cultivation, which mainly helps students to establish correct cognition and concepts.

Therefore, the most basic task of education reform is to cultivate people by virtue. At the same time, the effective integration of core development concepts in the teaching reform is still the key content of curriculum reform. At the present stage, the relevant educational concepts in China attach more importance to the cultivation of the core quality of educators, which is also a key concern in the curriculum and teaching industry. In the past, systematic teaching process and vocational and technical teaching stage focused on the construction of professional theoretical knowledge and applied practical skills, but now more attention should be paid to the cultivation of students' comprehensive quality, innovative ideas, team spirit and learning enthusiasm, and the planning of courses and teaching practice guided by core qualities. It provides a solid foundation for promoting the overall development and overall improvement of students [2]. As the key component of instructional theory, curriculum and instructional theory are of great help to the application of information technology in education industry. The circulation and sharing of information in modern society are constantly changing, leading to a great change in people's concepts and habits of receiving knowledge and transmitting information. The methods previously adopted in course planning and practical teaching can no longer meet the needs of education in the new era. More modern education methods have been widely used in the education industry, including maker, MOOC, and smart classroom.

### 2.2 Research significance of curriculum and pedagogical theory

As the main content of the knowledge system in the field of education, curriculum and pedagogical theory is a related discipline of educational theory gradually formed after the effective combination of scientific teaching ideas and practical experience in the continuous development of educational theory [3]. Curriculum and teaching theory cover a lot of content, such as educational theories, arguments, principles and practical experience, but also include a series of historical events, which can guide the reform and innovation of education in the new era, and make rational use of educational theory in teaching. On the basis of curriculum and pedagogical theory, a reasonable adjustment of subject education can, on the one hand, enhance the effectiveness of the theoretical guidance of teaching reform; on the other hand, it can effectively combine practical teaching and classical discussion of teaching history with the help of classic cases.

## 3. DEFICIENCIES IN EFFECTIVE TEACHING



3.1 Students' participation in teaching activities is formalized and programmed

In the course of course reform, although the teacher attaches importance to the participation of students, but at the same time also entered a certain misunderstanding, mainly reflected in the following aspects.

3.1.1 Many teachers take the time of students' discussion and interaction in class as the evaluation standard for their implementation of the new curriculum reform. Under the influence of such ideas, teachers are willing or afraid to speak, which greatly weakens the role of teachers.

3.1.2 During the actual teaching period, quite a number of teachers still adhere to the fixed teaching mode, which makes the teaching process that should be vivid and flexible become routine, resulting in a boring teaching process.

3.1.3 Teachers do not fully grasp the actual situation of students in teaching and set high standards for students, which leads to the phenomenon of up-grading teaching. If students fail to meet the requirements of teachers, they will gradually lose interest in learning.

3.1.4 In class, many students are deprived of their discourse power by a few students, and several students with good performance and strong expression skills become the leading roles in class, leading to elitist participation of students in class. The emotional experience of students mainly refers to the psychological involvement of students in class. In the process of teaching. Some students worry about questions or problems caused by the wrong answer classmates laughed at, and are not good at expressing and introverted, think to participate in activities to make learning time is reduced, therefore in the teaching activities occur when bored, rejection, and conflicting emotions, falling to participate in the enthusiasm of the classroom, teaching task is completed. In addition, some students have a low degree of behavioral effort in class. Behavioral effort is also the degree of behavioral participation, which is mainly reflected before class, during class and after class. Before class, many students do not prepare and preview well and think it is unnecessary to waste time. In class, when the teacher explains the knowledge, some students are more serious. On the other hand, due to lack of understanding and inability to keep up with the teaching progress, some students no longer listen to the class carefully or selectively, and only focus on what they are interested in. And when discussing related problems, some students think about the problems seriously, some students do not have any questions, at the same time, some students take the initiative to ask the teacher for help, even if there are questions, some students will not ask the teacher for help. After class, some students will complete the requirements assigned by the teacher, while some students will complete some or none.

3.2 The scope of student participation is not deep enough. The breadth of students' participation in teaching is mainly reflected in two aspects, the first is the length of participation, and the second is the number of participation. At present, there are still some problems in the process of teaching in China, such as short time and

insufficient number of students to participate. The length of participation time mainly refers to the duration of students' participation during the teaching period. Participation is an uninterrupted changing process, and the energy invested by different individuals in participating in activities changes with time. Therefore, students' own motivation and endurance have an impact on the participation time. When the students have good endurance, the longer they attend the class. At the same time, students who take learning interest as motivation have a longer participation time, while students who take praise from teachers and parents as motivation have a shorter participation time. In addition, the comprehensive quality of teachers and the relationship between students and other factors will affect the length of students' participation. In teaching engineering, only some students participate, which is related to students' personal interest, personality, family background and teacher-student relationship. We should consider the influence factors of all aspects, solve the influence of bad factors, give full play to the beneficial factors, and increase the scope of students' participation.

### 3.3 Deficiencies of activity teaching classes

Activity teaching covers two aspects: practical operation and thinking exploration. Compared with thinking exploration, practical operation takes longer time and puts forward higher requirements for teachers and students. At the same time, it also has certain security problems, so the practical operation at the present stage is less ideal than the thinking exploration class. There are various forms of activities in the textbook, but many teachers do not pay enough attention to them, and even directly convert them into written exercises, so that the teaching content of activities is seriously insufficient. At the same time, most of the activities in the classroom teaching are in the form of show, and the teaching process is superficial and false. In order to implement the new curriculum concept, many teachers have carried out a large number of teaching activities, some unnecessary teaching activities are also carried out, from the appearance of the bustling, but the essence is still a form. Some teachers think that questioning is part of the activity and they ask and answer in class, but this kind of practice is not conducive to students' participation and greatly affects the teaching effect.

### 3.4 Restriction of traditional educational concepts

Although the new curriculum reform continues to deepen at the present stage, the concept of exam-oriented education has been deeply rooted in the hearts of the people. Parents think that the content outside the classroom is not important; teachers think that quality-oriented education is only auxiliary; they still pay more attention to exam results; and students also think that redundant activities will occupy their study time. Therefore, at present, most people still pay more attention to students' performance, do not pay attention to the cultivation of students' psychological quality, emotional intelligence, personality and other aspects, the essence of which also reflects the neglect of students' participation.

## 4. CURRICULUM AND PEDAGOGICAL THEORY:

## TEACHING STRATEGIES TO PROMOTE EFFECTIVE LEARNING

### 4.1 Establish learning objectives and increase learning enthusiasm

When learning course chapters at the beginning of teaching, teachers should be lively and interesting in teaching guidance, promote learning to set corresponding learning objectives, improve students' sense of participation in class, increase their learning initiative, and gradually transform it into learning motivation [4]. For how to effectively transform students' learning motivation, we can start from two aspects: case analysis and teaching summary. First of all, relevant cases and questions are set up after each chapter of the course. Teachers choose classic cases to provide corresponding evidence support for the chapter content, and master the cases and problems in combination with the learning content. At the same time, the reasonable use of key knowledge, gradually establish their own understanding of the point of view, teachers through the use of case analysis, is conducive to the overall improvement of subject teaching level. Secondly, teaching synopses mainly refer to teaching guidelines and curriculum planning. The contents covered by the synopses are divided into two aspects: teaching objectives and teaching tasks. Teachers should plan phased goals according to teaching tasks, reasonably divide curriculum tasks, and correctly guide students to gradually receive in-depth knowledge.

### 4.2 Provide a good learning environment

In the current social environment, most people are influenced by modern educational concepts. The reform of educational curriculum should focus on the improvement of students' core qualities, including autonomous learning ability, practical ability and innovation ability [5]. In the past, in the teaching process, the examination results and test results are usually used as the evaluation criteria, which is a one-sided measurement model. Modern education philosophy believes that there are certain differences in classroom performance of each student, so more attention is paid to the individual development of students, to stimulate their potential, and to comprehensively improve their comprehensive quality. It can be seen that in order to improve the effectiveness of systematic education, it is extremely important to provide vivid and positive learning environment for students and guide students to actively participate in practical activities. Teachers should guide students to give full play to their own ability to deal with learning problems, establish innovative ideas, correctly recognize the curriculum content from multiple dimensions, and implement the task of quality-oriented education reform in the new era. At the present stage, with the continuous advancement of education development and reform, the application of curriculum and teaching theory as theoretical guidance should not be restricted by the field of knowledge education, but should be deeply promoted to the level of humanistic and moral quality, guide students to improve their core quality, and provide theoretical support for the education reform in the new era.

### 4.3 Expand students' independent learning space and

consolidate effective teaching foundation

It can be seen from the research on students' learning psychology that the consolidation of effective learning results can only be achieved through repeated practice. By means of diversified teaching and practice systems, students can be provided with more sufficient learning and practice space. In practical work, how to consolidate the training practice content can be carried out from the dimensions of curriculum summary, performance evaluation, feedback questions and knowledge expansion. Under the guidance of curriculum and teaching theory, practice teaching needs to closely combine the exercises and review summaries after each chapter of the textbook, so as to complete the corresponding teaching tests, effectively combine with the knowledge of previous chapters, preview the knowledge of the next chapter in advance, promote students' active learning, and also provide them with a broad space for practice. At the same time, in the process of reviewing the synopses, it is also necessary to sort out the basic structure of course teaching, conduct guiding exercises imperceptibly, and extract the key knowledge of the chapters. By reviewing the summary, students can more clearly grasp the important content of each chapter, improve learning efficiency and promote effective learning. And after the review is conducive to further consolidate the key concepts and principles, prompting students to take the initiative to check the learning content. Review summary is mainly to summarize the basic content and research characteristics, on the one hand can help students review for the exam, on the other hand can also help students to directly use knowledge in real scenes and topics. In order to make the layout smaller and more concise, and to make the learning and teaching process a formative learning process, eye-catching colors can be used to mark the summary contents in the body of each chapter.

### 4.4 Scientific use of network professional teaching resources

Along with the rapid development of information technology, is widely used in all walks of life, in order to solve the current of the contradiction between infinite demand and limited learning time and space, it is necessary to curriculum and teaching theory as a guide, set up the web digital learning environment, digging and using infinite network resources, to provide more courses and teaching content, teaching process network and information technology. At present, whether in the field of curriculum and teaching, or the field of education, network information technology is widely used, which provides new possibilities for the development of more new resources and new content. Many colleges and universities has been based on the theory of curriculum and teaching theory to develop the corresponding website and supporting network course, the essence of which belong to the specialized courses, teaching resources integration and research, you can ask the teachers, students, provide reasonable chapters of education resources, for the teachers and students to build up an online learning platform, eventually to consolidate learning difficult point content in the corresponding

technical support.

#### 5.CONCLUSION

To sum up, with the deepening of educational reform, under the influence of modern educational concepts and new technologies, the relevant research and learners of curriculum and teaching theory should correctly view the trend of educational reform under the new environment, effectively combine with modern teaching theory, and establish a sense of innovation. Starting from improving students' learning enthusiasm, creating a good learning atmosphere, paying attention to network education resources and other aspects, it breaks through the barriers of traditional teaching methods and promotes more efficient and systematic teaching.

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# Explore the Computer Application Based on Network Information Security Technology Management

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**Abstract:** Computer information security is an important basis to ensure the security of network information transmission, which has been a hot research topic in the field of computer application. In the continuous progress of network technology today, the computer and the Internet has entered the lives of thousands of households, and People's Daily life and learning has a close connection, computer network information security has been widely concerned. Therefore, this paper will analyze the main problems of network information security, and study the computer application strategy based on network information security technology management.

**Key Words:** Network Information Security; Technology Management; Computer

## 1. INTRODUCTION

Computer network information plays an important role in social development and production and life. At present, computer technology has been widely used in all walks of life and has an indispensable role. Although computer network information provides great convenience for people's work and life, there are still many problems in computer network information security, which threaten user information privacy and cause serious impact. Therefore, in the process of computer use, need to pay attention to network information security, use all means to reduce security risks. Therefore, this paper will analyze the main problems of computer network information security, and study the computer application strategy based on network information security technology management.

## 2. PROBLEMS EXISTING IN CURRENT NETWORK INFORMATION SECURITY

### 2.1 Computer software vulnerabilities

Software is an essential part of a computer system, but software inevitably has some vulnerabilities in the design process, and with the rapid development of computer information technology, software defects will gradually enlarge, giving criminals an opportunity to use software vulnerabilities to steal user information. In addition, in recent years, the number of computer users continues to rise, the number of computer software and the scope of use continue to expand, network information security risks rise, easy to lead to a series of computer network security problems.

### 2.2 Lack of high-level computer professionals

At present, computer technology is closely related to people's work and life. In order to ensure network information security, more computer related professionals

are needed, which is also an important basis to ensure computer network information security. But under the current environment, compared with developed countries, China's computer started late, the computer professional talent training system is not perfect, resulting in a lack of computer advanced talents, computer project research and development ability is insufficient, which directly leads to the inability to provide sufficient guarantee for computer network information security. In addition, there is a certain gap between Chinese computer companies and foreign companies for the treatment of computer talents, resulting in a large number of brain drain phenomenon, which greatly restricts the development of computer.

### 2.3 Lack of information security guarantee mechanism

Although computer technology is ubiquitous in People's Daily lives, the accompanying regulatory system is still in the development stage. At present, China's relevant laws and regulations for information security are still not perfect, the existing laws and regulations are not specific enough, the lack of detailed, practical information security guarantee mechanism. In this context, personal information and commercial information can not be protected by the network security system, which causes more network security problems.

## 3. COMPUTER APPLICATION STRATEGY BASED ON NETWORK INFORMATION SECURITY TECHNOLOGY MANAGEMENT

### 3.1 Firewall Technology

Firewall technology is a widely used network information security protection technology at the present stage. It mainly forms a protection barrier against the internal computer network, prevents the external network from accessing the computer without the user's authorization, reduces the network uncertainty, and improves the security of the internal computer network [1]. Firewall technology can effectively prevent user information leakage, reduce the risk of illegal intrusion. Firewall technology is mainly based on proxy services and state monitoring and other means to achieve security protection, the internal information in a closed state, according to user needs to open the internal information, effectively protect network information security, will not affect user operations.

### 3.2 Information encryption Technology

Information encryption technology is mainly based on physical or mathematical technology, and encrypts and protects computer information during storage and transmission [2]. Information encryption technology usually takes the form of software encryption, such as

computer keys, secure communication, anti-copy floppy disk, and so on. At present, CCEP algorithm and RSA algorithm are common encryption algorithms and systems. With the increasing complexity of network environment, information encryption technology has been widely used because of its advantages. It can effectively ensure the security of network information, ensure the integrity of computer network information, and improve the confidentiality of network information. In practice, the combination of information encryption technology and user - set password can further improve network information security.

### 3.3 Authentication technology

The authentication technology belongs to a new popular network information security protection technology, which mainly refers to that the computer authenticates the user's corresponding data through a specific identity identification technology, determines the user's identity information, and gives the user the permission to access and operate the computer [3]. Authentication technology attaches importance to the needs of user identity authentication, and forms a trust authentication mechanism between computer and user by verifying various parameter information and ensuring the accuracy of parameters. The authentication technology is mainly aimed at individual users. This kind of one-to-one authentication can help to avoid hacker attacks, prevent illegal intrusion and reduce the risk of user information leakage. At present, authentication technology can be divided into three categories: information authentication, object authentication and biometric authentication. Among the above three authentication methods, the biometric authentication technology has the highest security, which can maximize the protection of computer network information security. However, the cost of biometric authentication technology is relatively high, the operation is not easy enough, the popularization of application is limited, and the application is still few in real life. Therefore, at present, paper authentication of certificate password is still the main form of authentication technology.

### 3.4 Antivirus Technology

Antivirus technology is mainly built on the basis of the operating system, through the hardware to resist the virus, can effectively prevent the virus attack computer vulnerabilities, to ensure computer network information

security. Antivirus technologies are divided into three types: virus prevention, virus detection, and virus cleaning. Virus prevention technology belongs to a dynamic determination technology, using technical means to prevent the virus into the computer operating system or system disk, to prevent the system damage. Virus detection technology mainly refers to a comprehensive examination of the computer by technical means, detection, identification of the existence of viruses in the computer, and take corresponding measures. Virus detection technology can be divided into two different technologies, one of which is the verification technology of virus detection program, according to the virus keywords, program characteristic content, virus transmission route, etc. The other is the verification technology that does not detect viruses. It mainly checks some files or a piece of data, saves the corresponding results, and then checks again based on the results. If the file data is abnormal, it indicates that virus infection may occur, and then cleans viruses.

## 4. CONCLUSION

To sum up, the current network information security common problems include computer software vulnerabilities, computer viruses and hacker malicious attacks. In order to improve the security of computing applications, it is necessary to take targeted security protection measures according to the existing problems, reasonable use of authentication, firewall, anti-virus and other technologies, reduce the uncertain factors of the network, to ensure the security of computer applications.

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# Research on the innovation of cooperative education between Counselors and Political Teachers

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**Abstract:** Ideological and political education is the most important part in the teaching of higher education in China. Under the background of "three complete education" in the new era, in order to do a good job of Ideological and political education in Colleges and universities, we must innovate the collaborative education of the main body of Ideological and political work, and the most important thing is to do a good job of collaborative education between Counselors and ideological and political teachers. In the new era, the ideological and political education in Colleges and universities is faced with the disconnection of educational subjects, and the disharmony and unity of educational thoughts, ideas and methods. Therefore, it is necessary to study the innovation of collaborative education between the main body of education in Colleges and universities, especially how to do a good job of collaborative education for counselors and teachers of Ideological and political courses, and give full play to the main battlefield effect of Ideological and political courses in Colleges and universities. The establishment of collaborative education mechanism can promote the effect of College Students' Education in an all-round way, help college students establish correct values, and give full play to the powerful function of practical education.

**Keywords:** Counsellor; Political Teachers; Cooperative Education; Innovation

## 1. INTRODUCTION

From the Third Plenary Session of the 18th CPC Central Committee to the Fifth Plenary Session of the 19th CPC Central Committee, the party and the state have given great concern and support to the ideological and political education of college students in the new era. The opinion on strengthening and improving the ideological and political work in Colleges and Universities under the new situation emphasizes that we should "adhere to the whole process and all-round education". Under the background of the times, we need to strengthen the cooperation between the main body of education to achieve better education effect. In the main body of Ideological and political education of college students, counselors and ideological and political teachers are the two main forces. It is necessary to strengthen the research on collaborative education between Counselors and ideological and political teachers, so as to improve the quality of Ideological and political education of college students in the new era.

## 2. THE IMPORTANCE OF INNOVATIVE RESEARCH ON COLLABORATIVE EDUCATION BETWEEN

## COUNSELORS AND IDEOLOGICAL AND POLITICAL TEACHERS

According to the requirements of the party and the state for higher education, the ideological and political education of college students is the top priority. Universities should cultivate talents with both ability and political integrity, rather than "talents without morality". Moreover, in order to change this situation, we must change the way of personnel training, not only the professional education of college students, but also the ideological and political education.

In order to do a better job of Ideological and political education, counselors and ideological and political teachers should give full play to their own position advantages, work together, establish the education concept of "moral education", and strive to solve the fundamental problems of "who to cultivate, how to cultivate and for whom to cultivate". Therefore, it is particularly important to study the collaborative education between Counselors and ideological and political education.

## 3. UNDER THE NEW SITUATION, COUNSELORS AND TEACHERS OF IDEOLOGICAL AND POLITICAL EDUCATION ARE IN A DILEMMA

### 3.1 The Dilemma of educational concept

The teachers of Ideological and political theory course attach importance to theoretical preaching and lack the guidance of ideological value of the times; Counselors pay more attention to routine work than students' ideological value guidance and guidance. In this kind of educational environment, a vicious circle has been formed for a long time, which leads to the shortage of students' ideological value guidance and poor educational effect. The fundamental problem lies in the lack of innovation in the ideological and political education concept of colleges and universities. To fundamentally solve this problem, we must establish a sense of innovation and change the educational environment.

### 3.2 The dilemma of Ideological and Political Education

Ideological and political education is more complicated than other educational work. The working methods of Ideological and political education in Colleges and universities are different. All departments, professional teachers, ideological and political teachers and counselors "work in their own way". Their education methods are different. The degree of mutual cooperation between administrative departments and teaching departments is not enough. The degree of integration between various teacher groups is not high. All these factors affect the

effect of Ideological and political education.

### 3.3 The dilemma of the imperfect working mechanism of Ideological and Political Education

The working mechanism of Ideological and political education in Colleges and universities goes its own way. First of all, one-way communication between the upper and lower levels of administrative departments, lack of two-way communication mechanism, poor cross departmental communication, weak construction of modern information technology communication platform and low degree of use. Secondly, the teacher evaluation mechanism is biased towards scientific research, which affects teachers to shift the focus of work to scientific research rather than education and teaching.

### 3.4 The value goal of Ideological and political education deviates from the requirements of the times

Under the new situation, ideological and political education work should be combined with the requirements of the times to achieve accurate education, comprehensive education and ideological education. At present, on the one hand, the ideological and political education in Colleges and universities is divorced from the practical education, and the social hot issues concerned by college students in the new period are not enough concerned, and the practical teaching effect is not good. Second, the practice of Ideological and political education is out of touch with the era of new media, because the current ideological and political teachers are receiving traditional education ideas, teachers are too old to combine ideological and political education with new media, resulting in the effect of all-round education is not ideal.

## 4. INNOVATIVE MECHANISM OF COLLABORATIVE EDUCATION BETWEEN COUNSELORS AND IDEOLOGICAL AND POLITICAL TEACHERS

### 4.1 Actively change the concept of Education

Ideological and political education in the new era should be in line with the value of the times, guided by the general secretary's thought of socialism with Chinese characteristics in the new era, and actively change the concept of education. As the main body of Ideological and political education, teachers and counselors of political theory course should change the status quo of emphasizing theory and affairs, strengthen the guidance of students' ideological value, and fundamentally solve the problems of students' ideological education.

### 4.2 Innovation of Ideological and Political Education

In view of the different working methods of Ideological and political education in Colleges and universities and the different working mechanisms among the educational subjects, we should innovate the working methods.

Innovative counselors and ideological and political teachers coordinate the education work, and jointly build a "seven dimensional collaborative education" innovation mechanism with political belief shaping, value leading, professional skills building, mental health thinning, talent road supporting, employment and entrepreneurship supporting, and humanistic care.

The implementation of the cooperative education mechanism based on political belief is the fundamental

task to ensure the moral education of universities. Shaping College Students' Communist political belief is a major issue in China's higher education, which is the answer to the fundamental question of "who to cultivate, how to cultivate and for whom". It is the purpose of shaping college students as qualified builders and successors of socialist construction with qualified political character, lofty ideals and beliefs, and firm political stance. The specific mechanisms are: to establish a special study mechanism of political theory; The activity mechanism of theme party member day; Form, policy, education mechanism, etc.

The implementation of value leading, CO leading and collaborative education mechanism is to correctly guide college students' ideals and beliefs and socialist core values, and establish the correct three concepts. Counselors and teachers of Ideological and political course should make good use of their own main positions to guide the ideological value. The specific mechanisms include: the change of classroom teaching methods of Ideological and political teachers, the use of modern information technology, the construction and implementation of flipped classroom, the innovation of every class with new media, and the innovation of teaching methods and mechanism; Counselors should make good use of the integration mechanism of daily affairs and ideological and political education to have a positive impact on students.

The implementation of collaborative education mechanism is a positive guide to the improvement of College Students' professional skills. Counselors and teachers of Ideological and political course should understand the students' professional characteristics and professional prospects, so as to truly achieve the effective integration of "Ideological and political course" and "Ideological and political course".

The implementation of the mechanism of mental health sparse and cooperative education is the most characteristic of the times in the network. Facing the explosive development of network knowledge, college students have many psychological problems. Counselors and teachers of Ideological and political courses should pay attention to the mental health of college students and solve all kinds of psychological problems in the process of their growth. The specific mechanisms are: establishing peer-friendly mechanism; Establish a comprehensive information collection mechanism; Establish multi-dimensional psychological support mechanism.

The way of becoming a talent is an important way to realize the goal of talent training in Colleges and universities. Counselors and teachers of Ideological and political courses should help college students grow up to be reliable successors with national sense of mission and social responsibility. The specific mechanism is: to establish the salon mechanism of student talent coaching; To establish a mechanism for the research of craftsman spirit and innovative spirit.

The implementation of the cooperative education mechanism of employment and entrepreneurship is to guide the employment innovation of students. It mainly

helps students through the training of their mind and the idea of employment and entrepreneurship, so as to establish a good mentality and actively face the society and work.

The implementation of the mechanism of CO education by humanistic care is to make students fully grateful by serving students and caring for students by taking students as the center, giving full play to the work of counselors and ideological and political teachers, and by emotional education, and by caring about students' learning and life.

#### 4.3 Innovation of Ideological and political education working mechanism

The working mechanism of Ideological and political education in Colleges and universities needs to be improved constantly. The communication platform between counselors, ideological and political teachers, counselors and departments should be established to deal with all kinds of ideological trends of students in time by using modern information technology.

#### 4.4 The value goal of Ideological and political education should meet the requirements of the times

In the new era, the main social contradictions in China have changed. Meanwhile, the 14th five-year plan for national economic and social development and the formulation of the vision goal of the 2015 will comprehensively deepen reform and promote the socialist market economy in an all-round way. The rapid development and transformation of the new era society will inevitably lead to the change of people's values. For colleges and universities, it is worth studying how to guide students to establish the values in line with the new era.

For college counselors and ideological and political teachers, we should correctly analyze the diversity of the conflict of values in the new era. The ideological and political education should be modernized and combined with the diversity of values in the new era, so as to realize the function of Ideological and political education from simple reproduction to adaptation and transcendence. The modernization of Ideological and political education content requires the continuous absorption of the latest achievements of Marxism in China. At present, the ideological education of socialism with Chinese characteristics in the new era of general secretary is the core of the modernization of Ideological and political education content. Only by using the general secretary of the Communist Party of China to gather the social consensus and draw the largest concentric circle can ideological and political education be more correct in the direction of value.

#### 5. CONCLUSION

To sum up, collaborative education, as an innovation in talent cultivation in Colleges and universities, has attracted the attention of educators. In the ideological and political education of college students, counselors and ideological and political teachers need to establish a working mechanism of collaborative education, actively change the concept of education, adopt the innovative mechanism of "seven dimensional collaborative education", establish an intercommunication communication platform, and use new value ideas to guide and educate students. Only in this way can the ideological and political work in Colleges and universities be truly unified, from decentralized to centralized. There are important changes from individuals to teams, so as to improve and enhance the level of Ideological and political education in Colleges and universities, and cultivate qualified socialist builders and reliable successors who can adapt to the changes of the times and be worthy of the task of national rejuvenation.

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# Application of Artificial Intelligence Technology in Cruise Interior Design

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**Abstract:** In this paper, the application of artificial intelligence technology in fault diagnosis is analyzed and discussed from the perspective of fault diagnosis in cruise ship. It is expected to further improve the efficiency of cruise fault diagnosis work.

**Key Words:** Transformer; Fault Diagnosis; Expert System; Artificial Intelligence (Ai)

## 1. INTRODUCTION

Transformer plays a key role in cruise power system. There are many kinds of faults of cruise transformer. How to efficiently and accurately diagnose the faults is the focus of power system operation and maintenance work. Therefore, artificial intelligence technology should be effectively applied to this work practice, so as to improve the accuracy of transformer fault diagnosis[1-3].

## 2. OVERVIEW OF ARTIFICIAL INTELLIGENCE

Professor Nelson from the Artificial Intelligence Research Center of Stanford University pointed out that Artificial Intelligence is a discipline about knowledge, and it is a science that focuses on analyzing and exploring to acquire and utilize knowledge. However, Professor Winston of MIT pointed out that artificial intelligence technology is the science of how to use modern computer technology to complete the tasks that could only be completed by humans in the past. These views on artificial intelligence technology explain the ideas and contents of artificial intelligence in different dimensions. The author thinks that, artificial intelligence technology is based on the study of human intelligence activity, build up has the characteristics of intelligent artificial system, focus on how to use the computer to complete the human intelligence activity good discipline, through electronic computer hardware configuration and software tools to mimic human have the principle and law of intelligence. So, artificial intelligence technology is a branch of computer science, was born in seventy s of the 20th century, is the world's three big cutting-edge technology in the 20th century, artificial intelligence technology, space technology, energy technology), one of is also three cutting-edge technology in the 21st century, artificial intelligence technology, nanotechnology, genetic engineering). So far, artificial intelligence technology has gone through a journey of nearly half a century of development, in many fields widely favor and attention, and achieved good result feedback, now artificial intelligence technology has become an independent branch of science, whether in the theoretical perspective, or from the point of view of practice, has formed a system.

## 3. APPLICATION OF ARTIFICIAL INTELLIGENCE TECHNOLOGY IN TRANSFORMER FAULT DIAGNOSIS

In the practice of the electric power industry development, for the traditional method of transformer fault diagnosis is mainly determined by experimental analysis method of the parameters of the transformer, the parameter based on the analysis of the implementation realization of fault diagnosis, the fault diagnostic methods in diagnosis efficiency point of view, or from the perspective of a diagnosis on the precision is not high. Based on artificial intelligence technology and research and development of expert system and artificial neural network, grey fault diagnosis technology and data mining technology in the process of transformer fault diagnosis, highlights the high use value, to improve the efficiency of transformer fault diagnosis and improve the transformer fault diagnosis accuracy shows incomparable advantages, Undoubtedly, it is a new way and method for transformer fault diagnosis in the development and practice of power industry at present stage. Among the above several fault diagnosis technologies, the expert system is representative and widely used. Therefore, the transformer diagnosis expert system based on artificial intelligence technology is analyzed and discussed.

Transformer fault diagnosis expert system based on intelligence technology, is the accumulation and analysis of electric power industry development in the practice of several experts in the diagnosis of transformer faults in the practical work the application of the theory of knowledge, reasoning, technical skills, on the basis of its establishment as a computer application, around the gas chromatography analysis method, The three-ratio method and gas characteristics are effectively used to analyze the operation of the transformer in the power system, and then combined with relevant parameters to accurately judge the fault of the transformer. At the same time, combined with the transformer external inspection, insulation oil characteristics test, insulation oil preventive routine inspection and other means to build a database. The comprehensive analysis module in the expert system integrates the results of transformer gas chromatography analysis and external inspection, makes in-depth analysis and judgment on the operation of the transformer, and finally generates a diagnostic report, which will also include some operation and maintenance suggestions. In the transformer fault diagnosis expert system based on artificial intelligence technology, the coordinator is the most critical module. The coordinator plays a controlling and coordinating role in the operation of other modules. In general, transformer fault diagnosis expert system combined with artificial intelligence technology mainly includes the following parts:

First, the theoretical knowledge database of transformer fault diagnosis, which is modular structure, is the core of

the integration system. Second, the database. The database mainly consists of gas analysis, insulation prevention database, dynamic database and so on. Among them, the gas analysis and insulation prevention database is the basis of the historical archiving of the gas data and insulation prevention data in the process of transformer operation, which can be convenient for users to query and manage the historical data. In the process of application, the relevant staff will input the current data information into the system, the system will automatically make a rapid longitudinal comparison of the current data information and the development trend of historical data, and combine the experimental data for efficient horizontal comparison. The dynamic database is a context tree, which is mainly used to store the reasoning process and the final inference conclusion. When the user needs to obtain the relevant explanation, the explanation mechanism can call the relevant data information in the dynamic database, and then make some explanation for the user based on it. Third, reasoning module. It can realize the backward reasoning under the goal drive, and introduce the fuzzy mechanism into it, which can deal with some fuzzy problems effectively. Fourth, learning module. In the process of constructing the transformer fault diagnosis expert system based on artificial intelligence technology, through summarizing and effectively extracting the professional knowledge and skills of several experts, these knowledge are formalized and encoded and then input into the computer system, thus forming the knowledge base. Fifth, the context module. The main function is to store the intermediate results, provide the recording function for the reasoning module, guide the reasoning process of the reasoning module, and draw the corresponding reasoning conclusion.

#### 4. CONCLUSION

To sum up, the effective application of artificial intelligence technology into the cruise transformer fault

diagnosis practice is required to further improve the efficiency of cruise operation and maintenance, to ensure the safe and stable operation of the power system, and to promote the healthy and stable development of the power industry. Hope that through this article expounds the, can make relevant staff to realize the advantage of artificial intelligence technology, in turn, increase the investment, shift work idea, keep pace with The Times to integrate advanced technology, build up the mechanism of transformer fault diagnosis based on the technology of artificial intelligence, thus improve the efficiency of transformer fault diagnosis, for subsequent cruise operational work to lay the solid foundation.

#### ACKNOWLEDGEMENT

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# Study on The Development Strategy of The Private Colleges and Universities

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**Abstract:** Government (including central government and local government), enterprises and schools are the three main bodies of "industry-school cooperation". There are many problems in the process of promoting "industry-university cooperation": the main body status of the three parties is not clear; Financial support is relatively small; Lack of school-running effect evaluation mechanism, it is difficult to balanced distribution of comprehensive achievements of school-running cooperation. In view of the above problems, this paper puts forward some countermeasures to promote the development of industry-university cooperation in private universities. First, the local government should increase the financial support to the two sides, give full play to the guiding function of finance, and promote the rapid development of "industry-university cooperation"; Secondly, in terms of land, employment, taxation and other aspects, the two sides should be inclined to encourage the two sides to increase the investment in cooperative education. Thirdly, the evaluation mechanism of school-running effect should be improved to coordinate and distribute the comprehensive results of "industry-school cooperation", so as to achieve balanced benefits for both sides and promote the healthy development of cooperative education. Fourth, to highlight the core position of ideological and political education, to train qualified applied talents.

**Key Words:** Industry-University Cooperation; Industry-Education Integration; Cooperative Education

## 1. ANALYSIS OF THE PRODUCTION-UNIVERSITY COOPERATION MODEL OF PRIVATE COLLEGES AND UNIVERSITIES

"Several Opinions of The General Office of the State Council on Deepening The Integration of Industry and Education" (No.95 of The State Administration and Development (2017)) points out that only "university-enterprise cooperation, industry-education integration and collaborative education" can institutions of higher learning train qualified talents for the industry.

The report of the 19th National Congress of the Communist Party of China (CPC) pointed out that to improve the higher education and training system, we must deepen the integration of industry and education, strengthen cooperation between universities and enterprises, and realize the confluence development of higher education.

It can be seen that "industry-education cooperation, industry-education integration and collaborative education" has become a national strategy for the development of higher education.

The establishment of "industry college" is the current mainstream mode of "industry-university cooperation,

industry-education integration and collaborative education". With the close integration of industrial and professional teaching, schools and enterprises form a "mutually dependent, mutually supported, mutually promoted and win-win cooperative school-running community". "Cooperative school-running" can promote the healthy development of higher education.

"Order" education is the second cooperation mode of "production and education integration and collaborative education". Enterprises provide demand orders, and the two sides work together to formulate training plans, course systems and teaching syllabi. The two sides guide practical teaching activities together, and the two sides work together to cultivate application-oriented talents with "solid theoretical foundation and outstanding practical skills".

"Management software guided" is the third cooperation mode of "production-education integration and collaborative education". The main body of this cooperation mode is the support unit of industry-education integration and collaborative education project of the Ministry of Education. As a supplier, the "project support unit" supplies mainstream management software, improves the experimental teaching conditions in the school, and tries to cultivate the practical operation ability of skilled operation of management software[1-2].

## 2. PROBLEMS EXISTING IN THE DEVELOPMENT PROCESS OF INDUSTRY-UNIVERSITY COOPERATION IN PRIVATE COLLEGES AND UNIVERSITIES

In April 1991, the National Industry-University-Research Cooperative Education Association was established in Shanghai. In October 1997, the Ministry of Education issued the Notice on carrying out the Pilot Work of Industry-University-Research Cooperative Education on the ninth five-year Plan, and the pilot work of industry-university-research cooperative education was carried out in 28 universities across the country.

The "Key points of education work in the 12th Five-year Plan" emphasizes that every school should find the combination point with the local economic construction or industry demand, reform the mode of running schools, and develop its own characteristics. At the same time, it is emphasized that the development of higher education should adhere to the "government planning, facing the society, local areas, relying on enterprises". The report of the 19th National Congress of the CPC clearly points out that to improve the higher education and training system, we must deepen the integration of industry and education and strengthen cooperation between universities and enterprises.

"40 Articles of Higher Education in the New Era" and "Six

Excellent and One Top-of-the-line Plan 2.0" clearly point out that "taking this as the foundation and four returns" should be the main melody of the healthy development of higher education. (No.95, 2017) pointed out that "university-enterprise cooperation, industry-education integration and collaborative education" is the key to improving the level of running schools, and is the only way for colleges and universities to train qualified talents for the industry.

It can be seen that the school-running mode of "industry-school cooperation" in China tends to "state interventionism", and the central government's policy guidance is the core.

However, in the practical work of "industry and study cooperation" in colleges and universities, basically both "industry" and "study" are the leading role, and "government" is not obvious. Only focusing on "policy orientation" and ignoring "financial support", it is difficult for the "political" side to occupy the "main role".

Education is a public good. The government, especially the local government, must give financial support to "industry and university cooperation" to provide useful talents for economic development.

### 3. ANALYSIS OF THE CAUSES OF THE DEVELOPMENT OF THE PRODUCTION-UNIVERSITY COOPERATION IN PRIVATE UNIVERSITIES

3.1 Lack of fiscal capacity limits government support. Industry-university cooperation requires both major policies and policies formulated by the central government and financial support from local governments. However, the financial strength of local governments is uneven and the strength of financial support is uneven. The local governments in economically developed areas have strong financial resources and promote "industry-university-research cooperation" more vigorously, while the support of local governments in economically underdeveloped areas is relatively small.

3.2 The fuzzy output boundary limits the input intensity of enterprises. Schools are the supplier of "application-oriented talents", and enterprises are the demanders of "application-oriented talents". "Cultivating application-oriented talents urgently needed by enterprises" is the fundamental goal of "industry-learning cooperation, industry-education integration and collaborative education". It is the basic condition to realize the fundamental goal of "industry-study cooperation, industry-education integration and collaborative education" to make clear the output boundary and encourage both sides to increase investment in cooperatively running schools.

3.3 "Politics, Industry and Education" is a tripartite school-running subject of "industry-school cooperation, industry-education integration and collaborative education". The government pursues social benefits, the enterprise pursues economic benefits, and the school pursues school-running benefits. Lack of school-running effect evaluation mechanism, it is difficult to balanced distribution of comprehensive achievements of school-running cooperation.

### 4. EXPERIENCE OF INDUSTRIAL AND ACADEMIC COOPERATION IN WESTERN COUNTRIES

Herman Schneider (USA, 1906) believed that the core of school-enterprise alliance and industry-school cooperation is "enterprise investment + enterprise running school", which emphasizes on affirming the core role of the producer.

In 1983, THE Massachusetts Institute of Technology (MIT) implemented the Undergraduate Science Research Program, which clearly stipulated that students' study content in addition to the course study, also have scientific research study and task. Relying on the needs of the industry to guide on-campus learning is also to affirm the guiding role of enterprises.

The so-called second revolution of university education in Germany refers to the "combination of teaching and research". The goal of industry-University collaboration is to meet the cutting edge needs of the industry.

British universities, on the other hand, implement the work-study alternating system, during which students have to work in enterprises or departments related to their majors for one or two years.

The "laissez-faire model" prevails in western countries. "Government, enterprises and schools" form a "loose alliance", and enterprises are the core. "input-output benefit ratio" is the main assessment index to determine whether enterprises participate in "industry-school cooperation". However, the laissez-faire model puts too much emphasis on the dominant position of the producer. Therefore, to highlight the leading role of enterprises in "industry-university cooperation" should also be the fundamental principle that must be followed in the development of higher education in China.

### 5. STRATEGIES FOR THE DEVELOPMENT OF INDUSTRY-UNIVERSITY COOPERATION IN PRIVATE UNIVERSITIES

The core of the countermeasures for the development of private colleges and universities is to highlight the policy guidance function of the central government, highlight the financial support function of the local government, strengthen the core position of enterprises, and make every effort to enhance the training ability of schools.

5.1 The government supports industry-university cooperation in running schools, provides appropriate subsidies to all parties involved in industry and school, gives full play to the guiding function of finance, and promotes the rapid development of "cooperative running schools".

5.2 Give preferential treatment to the producers in terms of land, employment, taxation, etc., and encourage the producers to increase their investment in school running.

5.3 Improve the school-running effect evaluation mechanism, coordinate and distribute the comprehensive results of "industry-school cooperation and collaborative education", strive to achieve balanced benefits for both industry and school, fully meet the demands of "government's pursuit of social benefits", "enterprises' pursuit of economic benefits" and "schools' pursuit of school-running benefits", and promote "cooperative school-running".

5.4 Highlight the core position of ideological and political education, build an "application-oriented talent training program" suitable for the characteristics of new liberal arts, and strive to cultivate qualified talents with "excellent political quality, solid theoretical foundation and outstanding practical skills".

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# Research on The Development of Health Tourism Industry in China

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**Abstract:** As a new way of tourism, health tourism plays an important role in promoting economic development, coping with the aging of the population and promoting the upgrading of the tourism industry. In this paper, the health tourism market was analyzed, and the natural and human conditions for the development of health tourism in China were analyzed. Finally, a series of suggestions were given for the development of health tourism in China, such as strengthening the top-level design, launching the whole system of experience-based products, and building the whole industry chain of health tourism.

**Key Words:** Health Tourism; Experiential Marketing; Whole Industrial Chain

## 1. THE SIGNIFICANCE OF DEVELOPING HEALTH TOURISM INDUSTRY

1.1 Developing health tourism industry is a major measure to cope with population aging

At present, China's aging society is becoming more and more serious, facing the accelerated growth of the aging population, China's pension service and security how to deal with this challenge and opportunity has become a topic of our attention. The development of health tourism industry can relieve the great pressure of aging on social medical care and provide a new solution for urban pension[1-4].

1.2 Developing the health tourism industry meets the needs of economic and social development

Since the 18th National Congress of the Communist Party of China (CPC), General Secretary Xi has repeatedly mentioned the theory of "two mountains", which truly transforms clear waters and green mountains into mountains of gold and silver. Health tourism industry is a new model, relying on the environmental advantages of forest resources, water resources, rural resources and so on, fully embodies the development concept of "innovation, coordination, green, open and sharing".

1.3 Developing the health tourism industry is conducive to promoting the upgrading of the tourism industry

The health and health tourism industry is closely connected with the tourism industry, which can improve the quality and efficiency of the tourism industry and the health and health industry, as well as upgrade the grade. Continue to explore the synergistic development of tourism industry and health industry, looking for their meeting point and intersection point. With "tourism + health" as the mode, explore a variety of compound theme activities.

## 2. ANALYSIS OF HEALTH TOURISM MARKET

### 2.1 Silver hair market

The aging of the population has spurred the development of elderly tourism. China's aging is serious, and the forms

and demands of supporting the elderly show a trend of diversified development. As a new pension approach, health tourism can meet the needs of the elderly at a higher level, and is an important direction for the future development of the pension industry.

### 2.2 Subhealth population market

The intense pressure of competition and the intense pace of life in the market economy make many people in a state of sub-health. Health tourism is to meet the needs of sub-health people's physical and mental regulation and health care. This part of the population has high income and strong demand for health care, which is an important tourist market for health tourism.

### 2.3 People who pursue quality of life market

Some consumers regard tourism as an important way to pursue quality of life. The regions developing health tourism generally have superior natural resources and rich cultural resources, good ecological environment and rich cultural resources, which are suitable for the development of high-quality health tourism products to meet the needs of this part of consumers.

## 3. ADVANTAGE CONDITIONS FOR THE DEVELOPMENT OF HEALTH TOURISM IN CHINA

Our country has rich natural resources, superior geographical position created here rich and unique natural landscape, has been developed and built cloud today's national scenic area, scenic spots and so on for the development of health tourism laid a good material foundation. The accumulation of thousands of years of history and culture has created a rich cultural landscape and heritage in China, which are unique health tourism resources on the world stage with rich historical accumulation.

## 4. SUGGESTIONS ON THE DEVELOPMENT OF HEALTH TOURISM IN CHINA

4.1 Strengthen top-level design and establish a full-coverage public service system

Scientific evaluation of China's health tourism industry development resource endowment and basic conditions, health tourism resources and tourist source market to conduct detailed investigation and analysis, formulate operational policies and measures. We will improve the system of tourism information consultation, tourist safety guarantee and administrative services, set up a health care tourism development fund, and set up a platform for the development of health care industry.

4.2 Digging deeply into health and health tourism resources and launching full-system and full-experience product types

### 4.2.1 Full series product system

#### 4.2.1.1 Mountain forest health products

Health tourism should pay attention to the development of

mountain forest health products, the use of mountain and forest resources to develop health tourism products with the function of physical fitness, cultivation of body and mind. When designing the health care products of the forest, we should adhere to the differentiation positioning, and realize the characteristics and systematization of the health care products.

#### 4.2.1.2 Gourmet health products

China's development of health tourism should pay attention to the development of food health products, pay attention to the local characteristics of food therapy, nourishing culture to carry out in-depth exploration of food health products development.

#### 4.2.1.3 Sports health products

For example, you can watch taijiquan performances and competitions, visit folk taijiquan organizations and learn taijiquan personally. We can also build Tai Chi themed venues, such as Tai Chi Health Hall, Tai Chi Culture B&B, Tai Chi Hot Spring, Tai Chi Restaurant, etc. Create a Tai Chi life pattern including diet, daily life and other aspects.

#### 4.2.1.4 Religious health products

Religious kang have products using tangible cultural relics, such as words, pictures, show the origin and development of religious culture, convey intangible religious spirit, healthy, can also convey religious way of life, such as the development of religious health food, religion, martial arts, religious music health products health products, such as, the buddhist monastery repair place.

### 4.2.2 Full Experience Product Type

#### 4.2.2.1 Construct the characteristic theme of health tourism experience

The construction of experience theme is the basis of the development of health tourism products. Taking the Buddhist health and health scenic spot as an example, the scenic spot should dig deeply into the Buddhist health culture, and combine the existing historical relics with the health theory organically. It is possible to build a logo system with distinctive Buddhist cultural symbols, such as handprints, lotus flowers and smiles, to create a Buddhist health landscape sketch.

#### 4.2.2.2 Tourism product design should pay attention to sensory marketing

When designing health tourism products, marketers of health scenic spots should first consider how to make tourists' eyes, ears, nose, tongue, body and other senses get pleasant experience. Health nourishing into a variety of sensory stimulation as a whole, to create a unified experience effect. In the design, let the mountains, water, trees, stones, every grass and tree, a flower and a scene are deeply rooted in people's hearts.

#### 4.2.2.3 Tourism product design should pay attention to

#### emotional marketing

Emotional marketing refers to creating a specific situation and atmosphere for tourists to trigger their inner emotions and create excitement, happiness or other emotional experiences. The scenic spot operator Kangyang designs the script of specific theme, builds the stage of tourist experience, and lets tourists participate in it, which is the unforgettable memory left by tourists.

#### 4.3 Tourism is life, attracting tourists to take health tourism as a way of life

Attract tourists to health tourism as a way of life, which requires eating, living, travel, travel, purchase, entertainment in each link of the in-depth excavation. In the link of "purchase", tourism derivatives with cultural connotation, characteristics, interest and practicality should be developed.

#### 4.4 Establish the concept of big health and build the whole industry chain of health tourism

Extend the health tourism industry chain, increase the health tourism industry added value. We will promote the organic integration of the health and health tourism industry with sports, leisure and medical services. To build regional health care tourism industry cluster, build a series of "health care +" mode, form a multi-point flowering mode, and lay a solid foundation for the integrated development of health care and tourism.

#### 4.5 Omni-media marketing network

Pay attention to the concept of health and health promotion and public guidance, improve the public awareness of health and health tourism. Set up the concept of city marketing, build the health care city brand, expand the city influence. Expand publicity channels and establish a health tourism destination marketing system combining traditional communication channels such as radio, TV, newspaper and multimedia with new media channels such as mobile Internet, Weibo and WeChat, with "health tourism + Internet" as the medium.

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# Research on the Path of Internet + E-Government Online Mass Line

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**Abstract:** Government information disclosure has important significance and plays an important role in protecting citizens, legal persons and other organizations' right to know, improving the transparency of government departments at all levels, promoting administration according to law, and serving people's production, life and economic and social activities. With the continuous development of e-government in recent years, the original mode of government information disclosure has been gradually transformed. The rapid rise and sustained development of the Internet is leading and driving the continuous innovation of relevant traditional industries. In the context of "Internet +", China actively develops e-government. Governments at all levels continue to expand the government information disclosure platform, optimize the path of government information disclosure, and e-government has made positive progress in promoting government information disclosure.

**Key Words:** Government Information Disclosure; e-Government; Internet +; Mass Line

## 1. INTRODUCTION

This paper mainly studies and analyzes the path of e-government to promote government information disclosure since China put forward the "Internet +" action plan. In the informatized society, the network has changed people's way of work and life. It has become an important means to contact the masses, listen to the aspirations of the masses, and serve the masses. It has provided a new path for the masses to participate in politics and discuss politics, and has also provided a new challenge for the party and government organs to serve the people. It is of great significance to improve the social governance ability of the government, to close the relationship between the party and the masses, and to meet the needs of the masses [1-4].

## 2. THE CONTEMPORARY VALUE OF THE ONLINE MASS LINE

The Internet carries public opinion, people's feelings, people's aspirations, and is of great significance in improving the government's social governance capacity, enhancing the relationship between the party and the masses, and meeting people's needs.

### 2.1 New ways of Internet + mass line

The traditional channel for the Party and government to understand public opinion has long been the use of departments such as discipline inspection and supervision, letters and visits, and official media. However, in the era of rapid development of information technology, the upgrading development of new media such as network, microblog, WeChat and mobile phone client makes the masses' awareness of democracy and political

participation more and more enhanced, and various online work modes such as online examination and approval, online political inquiry, online public opinion and online publicity blossom everywhere. The Internet has become a mainstream channel for understanding public opinion, serving the masses and solving problems. Party and government organs open government affairs WeChat and government affairs micro-blog, through micro live broadcast, micro mailbox and online communication with netizens, so that the people have a new way to participate in political life, reflect the demands, express their will.

### 2.2 A new platform for solving public opinion demands

The Internet is not "broken", nowadays more and more reflects its effectiveness, network platform increasingly reflect public opinion, to solve an important means of appealing to public opinion, the Internet this platform play a important role of the mass line is the concrete of aggravation for the people, think about people's place, the thought of the people, to solve the practical problems related to the vital people, Got the masses praise, both "inside" and "face". Party and government organs communicate, communicate and guide the masses through the Internet, giving full play to the advantages of the Internet, and building a new platform for public opinion communication and ideological and political work.

### 2.3 Expand new ways of network supervision

"He who knows the leak of the house is under the sky, and he who knows the failure of the government is in the field." At present, it is of vital importance to guide the public to actively participate in the formulation, implementation and supervision of public policies. Power breeds corruption, absolute power breeds absolute corruption, power must be given strict supervision, otherwise it will inevitably lead to the occurrence of corruption. The mass line is conducive to actively expand effective online network monitoring, full of the right to know to ensure that the people can more fully exercise endowed by the constitution and the law supervision, the people involved in the power supervision, to understand authority government work situation, problem, processing process, etc., to become the most effective tools for anti-corruption.

## 3. THE REAL DILEMMA OF THE ONLINE MASS LINE

The Internet is characterized by scattered propagation path, long propagation cycle and fragmented propagation. Social media will easily become the fortress of rumors and untrue information. If the government does not make timely and effective voice, it will easily become the booster of online rumors.

### 3.1 Leading cadres wrong ideas

Party leaders at all levels carry out mass work in the



Internet environment, but some leaders still have a psychological state of disregard, fear and suppression of online public opinion. Some leading cadres will not even refuse to use the Internet, lack the awareness of listening to opinions, turn a deaf ear to the problems reported by the online masses, some older leading cadres even think that the online mass line is completely irrelevant, this is the task of young clerks; Some leading cadres are afraid of the public's opinions on themselves and their units. They are worried that their own image and the credibility of their units will be affected by the exposure of negative events, or even the disclosure of violations of rules and disciplines, corruption and other issues. Some leading cadres use their power to suppress or even retaliate against netizens for the adverse public opinions on the Internet, which will eventually lead to greater public anger and social problems.

### 3.2 The network political inquiry accomplishment is not high

Being good at using the Internet to understand public opinion and carry out work is a basic skill for leading cadres to do a good job in the new situation. However, politicians have not yet adapted to the new media, which is equal, open and interactive. They still maintain the traditional linear, one-dimensional and central-type work concept, and cannot achieve effective communication and benign interaction with netizens. Don't understand the network, the leading cadre can't really know the people don't get to the Internet, understand public opinion and guide public opinion, even know online network of leading cadres and lack of the ability of public opinion analysis, is not found on the network in time orientation problem, early intervention, targeted release information, clarify the facts, winning advantage, resolve disputes, to effectively control and eliminate the hidden danger public opinion.

### 3.3 Difficulty in dealing with network chaos

The Internet has its unique virtuality and anonymity. As the disperser of network information, some social problems will be magnified or even distorted. "Rumormongers" and "indignanters" stand in their own imaginary perspective, making irresponsible remarks, misleading the public, releasing their anger, and having extreme psychology such as hatred for the rich and the officials, black and white and so on. With the awakening of political consciousness and enthusiasm of political participation, netizens are deliberately incited by extreme ideas or even malicious netizens, and thus dominated by ideas inconsistent with mainstream values, which can easily form mass incidents.

## 4. THE REALIZATION PATH OF THE ONLINE MASS LINE

The development of the network is both an opportunity and a challenge to the reform and innovation of mass work.

### 4.1 Create a healthy network moral environment

The construction of network platform and network carrier is one of the prerequisites to effectively play the role of network platform and do a good job of online mass work. Create a healthy environment of network morality, must first to improve citizens' consciousness of knowledge

network, with a net, using the Internet platform to reflect their demands, so as to help and solve the social problem in itself, at the same time, the government should establish and improve the relevant laws and regulations, do tend to, the laws and law applied in virtual network space, Change the uncontrollable situation caused by network chaos from the root. Secondly, we should strengthen the construction and maintenance of the government's official website and official micro blog, build platforms for online examination and approval, online political inquiry and online interaction, make government affairs open, accept the supervision of netizens, attach great importance to the opinions and suggestions put forward by netizens, and truly ask about government affairs from the people, ask about needs from the people and ask about plans from the people. Finally, we need to send special staff to answer questions raised by netizens on the Internet, so that there will be interaction online and action offline, and the Internet will truly become a new channel for the Party and government to understand, get close to and serve the people.

### 4.2 Improve the mechanism of the online mass line

System is an important guarantee to realize the online mass line. To give full play to its role, we should strengthen the mechanism construction in several aspects. First, we should improve the mechanism of responding to the interest demands of netizens, respond to and deal with the interest demands of netizens in a timely manner, analyze and sort out the universal problems raised by the masses, and find solutions to the universal applicability problems. The second is to improve the performance assessment mechanism of online inquiries, and establish the assessment indicators of the number of staff answers to netizens and the degree of satisfaction of netizens on their handling, so as to ensure that the demands of the masses can be answered and solved in a timely and effective manner. 3 it is to create public opinion mechanism, the existence of the problems inherent with the netizen party moody's opinion, it is easy to form the network violence, even the outbreak of mass incidents, so in the face of the network public opinion, to lead the topic to grasp the development trend, timely guidance netizens negative emotions, control the discourse of the initiative and rational advantage how to reconcile contradictions, Quickly take action offline to solve problems related to the vital interests of netizens. Four is improve the network supervision mechanism and supervision mechanism includes two aspects of monitoring object, on the one hand, through the network real-name reporting, reporting network, leading the way such as E-mail, web site message boards, the staff of illegal, unreasonable supervision over the work practices and on the other hand is to the malicious hype, against false accusation, disinformation disturbances of netizens report to supervise, Through the establishment of a supervision mechanism, to severely crack down on the law. Fifth, the establishment of online and offline docking mechanism, the mature traditional methods and methods combined with the online mass line, in the form of "key surface", to achieve "online interaction, offline action", in-depth

practice, understand the real situation of the people to reflect the problem, find the crux of the problem, and effectively solve the problems for the people.

#### 5. CONCLUSION

To effectively play the role of the Internet in the mass line, we still need to start from addressing the needs of real interests related to the masses, turning passivity into initiative, pressure into motivation, and opposition into interaction. We need to do a good job of netizens, win the understanding and support of the masses, and make cyberspace a constructive force for social progress.

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# Discussion on Quality Cost Control and Guarantee in Construction Process

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**Abstract:** The current social background of our country is to advocate the protection of the ecological environment, which requires the related construction enterprises should do to discard some of the more extensive management mode, and also in the premise of quality protection and reduce the cost of the surrounding environment. The quality cost control is a construction project can be overall quality and environment when and whether companies are economic adaptability of the three relations to each other the combination of modern management mode, in part to the overall construction project operation status and social resources of saving protection plays a very important significance.

**Key Words:** Construction Process; Quality Cost Control; Security

## 1. WE SHOULD PAY ATTENTION TO THE COMBINATION OF QUALITY COST CONTROL AND STRATEGIC POSITIONING IN THE ENTERPRISE

At present, the industry is becoming more and more fierce in the process of competition. The overall thought of strategic management of construction enterprises must be introduced into the process of quality cost control. In the current construction enterprise development process, quality of work can reflect the situation of very comprehensive perform dynamic information, and combine the strategy of the overall quality of the quality of the positioning and strategic value chain to analysis work effectively, can do more whole optimization of construction quality and improve the whole level of construction management effect [1].

In strategic positioning, cost must be more ahead of the construction enterprises, construction enterprises in the project department, is the main of the construction enterprise to make strategic implementation enforcement, so the corresponding company should be to strategy implementation of the project as a whole object, further will be distributed to related project to project department, And let the leadership and decision-making level in the project department to develop a series of quality cost objectives, only in order to more effectively reduce the cost control cost. At the same time, in the actual work of construction enterprises should also be to undertake projects of integrity is homogeneous and homogeneous means the project department in the process of going from the currently set for the project of target quality cost control is in line with previous cost control foundation, and then according to increase or decrease in the proportion of calculated to draw, The current project

quality cost accounting is often just to undertake the same type of project work area for the target quality cost comprehensive setting. After confirming the overall cost of the target quality, the corresponding work should be done for the relevant responsibility system, and the overall cost of the target quality should be minimized from top to bottom according to the organizational structure of the project department [2].

Among the quality cost control, is often exists the defect of the internal and external all of this is in the midst of building costs belong to non value-added work, has the force majeure factors exist in a certain extent, but there are a lot of rework homework can be avoided, so this part of the job can be in a certain extent, to eliminate, However, the process of prevention and identification work can be preserved as value-added work, but the overall efficiency of prevention and identification work is not high enough, especially in the process of identification work. Therefore, relevant personnel should aim at this problem to improve the overall efficiency of use.

## 2. CONTROL OF FEEDBACK OF EARLY PROBLEMS

In the control process of problem feedback, it is very important for the cost and quality control of the construction project. In the early construction process, after the accounting and assessment and analysis of the quality cost, the overall project quality control cost can be obtained to a certain extent.

Quality cost control diagram as shown in the figure below, on the left side of the map is the overall quality improvement area, clearly see the damages cost increases the overall limit is greater than the prevention and appraisal costs lower limit, and the loss of the overall cost be affected overall quality cost is the most main influence factors, in the work of quality management, To increase the investment of prevention appraisal cost, we can implement quality preventive measures and strengthen the overall quality inspection work [3].

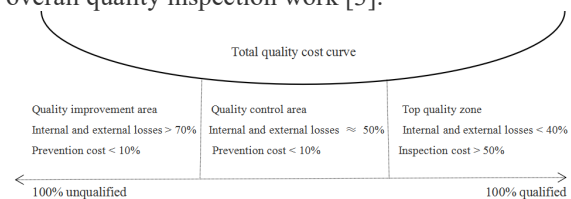


Figure 1 total quality cost curve

## 3. GUARANTEE THE IMPLEMENTATION OF QUALITY COST CONTROL

### 3.1 Guarantee of organizational structure

In the process of construction, the enterprise of high

project department is often to implementation of the project is responsible for the overall system, but to a certain extent for quality cost control is not the responsibility of the classification system formed, construction enterprises should go for the organizational structure of project department to continually perfect the work, And the quality responsibility and the overall organization of the project echo together, the division of labor is clear, the construction quality of the delegated work, specific to the personnel in each construction team.

### 3.2 Improve the quality cost control system

In order to more effectively implement the overall quality cost can be better controlled, it is necessary to improve the quality cost responsibility system of the project department. Quality responsibility should be grouped to each specific person, and some management power should be given to the group and the individual, so as to make everyone have a certain degree of economic responsibility for their work. However, some corresponding performance evaluation mechanisms are relatively lacking in enterprises, so it is necessary to regularly evaluate the work quality of each team member, and establish a set of scientific methods to carry out a system of rewards and punishments. For example, in the process of preventing appraisal costs, It is necessary to punish some erroneous behaviors in work caused by the mistakes of the construction workers themselves, and at the same time, reward those who perform well and work seriously [4].

### 3.3 Establish a comprehensive quality cost management information platform

Because the current management of construction enterprises is the lack of experience, to some extent, this creates for the analysis of economic activity may appear error analysis, led to the application of quality cost management in practice process will be subjected to a series of obstacles, but if to use information technology, can be very effective to solve a series of problems, On the one hand, the information system of quality cost within the overall project can gain the control of project quality cost by tracking the overall progress of the project. The information of project control obtained should also be delivered effectively, so that measures can be better

corrected.

### 3.4 Cultural inheritance of quality awareness and cost control

Construction companies are often exist a series of extensive mode of production and the personnel quality is relatively lack, this situation will cause the cost of the overall quality of the staff awareness will weaken, increased the difficulty of overall quality data collection, quality of operation makes the operating appear a series of irregularities, so, Relevant construction enterprises should realize that the quality consciousness and the cultural inheritance of cost control are inseparable.

### 4. CONCLUSION

To sum up, the quality of the project is an important factor influencing the long-term development of the construction enterprise in the current fierce competition. Therefore, only by putting the overall construction quality in the first place can the profit and benefit of the enterprise be better realized.

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# Effectiveness of Minimally Invasive Percutaneous Pedicle Screw Fixation in Thoracolumbar Spinal Fractures

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**Abstract:** Objective To investigate the effect of minimally invasive percutaneous pedicle screw fixation in thoracolumbar spinal fractures. Methods A total of 80 patients with thoracolumbar spine fracture treated in our hospital were selected. Among them, 40 cases were treated with open pedicle screw internal fixation (control group), and the other 40 cases were treated with minimally invasive percutaneous pedicle screw internal fixation (observation group). The perioperative indexes and pain degree of the two groups were counted. Results The intraoperative blood loss, postoperative drainage volume, length of hospital stay and postoperative VAS score in the observation group were lower than those in the control group ( $P < 0.05$ ). The difference of operation duration between the two groups was small ( $P > 0.05$ ). Conclusion Minimally invasive percutaneous pedicle screw internal fixation is an ideal method for treating thoracolumbar spine fracture, which is beneficial to reduce trauma and blood loss, relieve pain and promote postoperative rehabilitation.

**Key Words:** Thoracolumbar Spinal Fracture; Percutaneous Pedicle Screw Internal Fixation; Minimally Invasive

## 1. INTRODUCTION

Traditional open pedicle screw internal fixation mainly adopts a posterior approach, but it has a large trauma, a large amount of blood loss, and a large area of paravertebral muscle is pulled and stripped during the operation, leading to pathological changes of paravertebral tissue, resulting in chronic postoperative lumbar pain [1]. In recent years, the concept of minimally invasive surgery has been paid more and more attention, and percutaneous pedicle screw internal fixation has been formed, which can effectively reduce the surgical risk and increase the surgical safety. To this end, the results of minimally invasive percutaneous pedicle screw internal fixation for thoracolumbar spinal fractures were analyzed in this paper. Detailed reports are as follows.

## 2. OBJECTS AND METHODS

### 2.1 Research Object

A total of 80 patients with thoracolumbar spine fracture treated by our hospital from February 2020 to February 2021 were selected. By random number table method, 40 cases were included in the control group, including 22 cases of males and 18 cases of females. The age ranged from 28 to 56 years ( $41.56 \pm 3.58$ ). Another 40 cases were included in the observation group, including 21 males and 19 females, respectively. The ages ranged from 27 to 58

years ( $41.26 \pm 3.71$ ). There was no significant difference in general information between the two groups ( $P < 0.05$ ).

### 2.2 Methods

In the control group, open pedicle screw internal fixation was performed, general anesthesia was given, and the abdomen was fully suspended in the prone position. An incision was made in the middle of the back to cut the lumbodorsal fascia, and the paravertebral muscles located on both sides of the spinous process were separated to expose the injured vertebral body and the lamina and intervertebral joints of adjacent vertebral bodies. For patients with lumbar fracture, the vertex of hermitage crest was used as the entry point. For patients with thoracic fracture, the horizontal line intersection of the outer edge of the above articular process and the upper edge of the transverse process was slightly caudal as the nail entry point, and two pedicle screws were placed in each of the adjacent vertebral bodies. The connecting rod is installed and the damaged vertebra is properly extended until it is restored to a satisfactory height. The incision was rinsed with normal saline and a drainage tube was placed to suture the incision layer by layer.

The observation group was given percutaneous pedicle screw internal fixation, general anesthesia, and kept prone position, so that the abdomen was fully suspended. The c-arm machine was used to mark the body surface projection of the vertebral pedicle adjacent to the injured segment, the towel was routinely sterilized, and the needle was punctured one centimeter away from the mark. The percutaneous needle and the sagittal plane were maintained at 10 to 15° valgus to puncture the pedicle. Under the positive position electrodiagnosis, the needle could be observed to reach the outer edge of the pedicle shadow, and the lateral needle was parallel to the upper endplate. The needle continued to penetrate to the posterior edge of the vertebral body. Guide wires are inserted through the puncture channel, and four cuts about 1 cm in size are made on the back and a protective sleeve is inserted to the back of the pedicle, tapping along the guide wire to the anterior column of the vertebral body. The long-tail hollow screw was screwed, the pre-bent connecting rod was inserted through the upper and lower screws through the subcutaneous soft tissue channel, and the recovery state of the injured vertebral body height was determined until the ideal height was recovered. The incision was rinsed with normal saline, and the drainage tube was placed to suture the incision layer by layer.

### 2.3 Observation Indicators

The perioperative indicators of the two groups were

compared, including the duration of surgery, intraoperative blood loss, postoperative drainage volume and length of hospital stay. Pain was measured on a visual analogue scale (VAS), which was proportional to pain.

#### 2.4 Statistical Analysis

SPSS21.0 software was used to study and analyze the data, ( $\pm s$ ) was used to represent the measurement data, and T was used to test the inter-group data. The results showed

Table 1 Comparison of perioperative indexes between the two groups ( $\pm S$ )

group	The operation time(min)	Intraoperative blood loss(ml)	Postoperative drainage(ml)	The hospitalization time(d)	Postoperative VAS score
The control group(n=40)	86.45 $\pm$ 7.52	215.23 $\pm$ 30.86	204.18 $\pm$ 11.45	11.63 $\pm$ 1.13	2.86 $\pm$ 0.53
Observation group(n=40)	84.26 $\pm$ 8.02	82.36 $\pm$ 20.85	15.48 $\pm$ 0.93	7.69 $\pm$ 0.96	1.95 $\pm$ 0.55
<i>t</i>	1.260	22.564	103.889	16.806	7.535
<i>P</i>	0.212	0.000	0.000	0.000	0.000

#### 4. DISCUSS

At present, internal fixation with pedicle screws is the main method for treating thoracolumbar spine fracture. Studies have found that posterior midline open reduction and internal fixation with pedicle screws can help patients to restore the physiological curvature of the spine, release the pressure between the spinal canal, and reduce the long-term nerve function damage caused by secondary kyphosis of the spine. However, this operation is prone to lead to postoperative lumbar and back stiffness, pain and other symptoms, which may be caused by the large-scale separation of muscle stops and long-term tension and compression during open surgery, resulting in postoperative muscle fiber scarring and nerve changes [2]. At the same time, the postoperative histological recovery of the muscles around the vertebrae is difficult, and the recovery time is long, the muscle strength around the spine decreases, and the chronic back pain eventually forms.

This study showed that the intraoperative blood loss, postoperative drainage volume, length of hospital stay and postoperative VAS score of the observation group were all lower than those of the control group, indicating that percutaneous pedicle screw internal fixation had less trauma and less blood loss for patients, which was beneficial to postoperative recovery and pain relief, reflecting the advantages of minimally invasive surgery. Percutaneous pedicle screw fixation and open pedicle screw internal fixation of the difference is that the former intraoperative nail into around no important dominant vertebral side of neurovascular, along the muscle fiber direction blunt separation vertebral side, through the nerve hook gently pull open expose the nail pedicle screws into the points, avoid using lamina retractor surgical

that  $P < 0.05$  was considered statistically significant.

#### 3.RESULTS

As shown in Table 1, the intraoperative blood loss, postoperative drainage volume, length of hospital stay and postoperative VAS score of the observation group were significantly lower than those of the control group ( $P < 0.05$ ). The difference of operation duration between the two groups was small ( $P > 0.05$ ).

instruments such as excessive pull muscle and soft tissue, There is no need for extensive dissection of paravertebral muscles or too much fluoroscopy to complete the implantation [3]. In addition, there is no need to exposed the lamina and the facet joints during the operation, which can effectively protect the facet joint capsule and cause less iatrogenic injuries to the vascular network around the joint capsule and the posterior branch of spinal nerve, thus reducing postoperative muscle nerve atrophy, weakness, paresthesia and other symptoms, which is beneficial to postoperative rehabilitation and exercise.

In summary, minimally invasive treatment of percutaneous pedicle screw internal fixation can reduce the amount of trauma and blood loss in patients with thoracolumbar spinal fracture, promote postoperative rehabilitation, and relieve pain, which has good promotion significance.

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# Study on the Application of Tea Culture Combined with Double Grid Management Mode in Student Apartment Management

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**Abstract:** Student apartment management is an important part of school management. The combination of tea culture and double grid management mode in apartment management is beneficial to enhance the management awareness of managers, enhance students' cultural literacy and improve the level of apartment management. Therefore, this paper mainly discusses the application of tea culture combined with double grid management mode in student apartment management.

**Key Words:** Tea Culture; Double Grid Management Mode; Apartment Management

## 1. INTRODUCTION

In the apartment management, the combination of tea culture can reflect the thought of people-oriented, and manage from the perspective of students, so that students can experience tea culture and enhance their sense of belonging to the apartment. The application of double grid management mode in apartment management can further improve the quality of management, promote the standard of management, and ensure that the apartment management is scientific and reasonable. Therefore, this paper mainly discusses the application of tea culture combined with double grid management mode in student apartment management.

## 2. CONNOTATION OF TEA CULTURE

The most important idea of tea culture is to cultivate one's morality and character. Drinking tea, on the one hand, is conducive to supplementing various trace elements needed by the human body, which is good for health; on the other hand, it can refresh the mind and enhance thinking ability [1]. Participating in tea drinking activities can promote tea drinkers to gradually develop a peaceful mentality, establish an atmosphere of mutual respect with other tea drinkers, and cultivate the character of perseverance, benevolence and righteousness, which is also consistent with the educational goal of the school. At the same time, tea culture is the essence of Chinese traditional culture, emphasizing the etiquette and etiquette between people. In tea culture, younger generations need to offer tea to elders as a sign of respect, and the activities of drinking tea between brothers and sisters increase communication opportunities. Tea culture is rich in fraternity and filial piety. Integrating tea culture into the management of student apartment is conducive to forming a harmonious and stable management atmosphere and improving the management level of apartment.

## 3. INTRODUCTION TO THE DUAL-GRID MANAGEMENT MODE

The dual-grid management mode is mainly based on modern advanced grid information technology. The managed objects are divided into multiple grid units according to relevant requirements, and the connection between each grid is promoted through reasonable adjustment, so as to realize centralized resource allocation, shared and cooperative management, and improve management quality [2]. Applying the dual-grid management mode to the student apartment management is an innovation to the traditional management and provides more possibilities for the management.

## 4. SPECIFIC COUNTERMEASURES FOR APPLYING TEA CULTURE COMBINED WITH DOUBLE GRID MANAGEMENT MODE TO STUDENT APARTMENT MANAGEMENT

### 4.1 Improve and optimize the management mechanism

The application of dual-grid management mode in apartment management can be divided into multiple levels to realize step-by-step information transfer and improve management efficiency [3]. School belongs to the largest grid cell, and dormitory belongs to the smallest unit of grid, when the smallest unit grid provides requirements, will be asked to upload to the second level group, group leader, undertake the task of collect and transmit information, promptly posted on the first level group, each dormitory request finally, group leader all information collection, transfer to the school liaison. According to the actual situation of the school and the number of requests, each liaison will deliver the integrated information to the floor management within the specified time. Then, the floor management staff will upload the information to the student independent management department, and the information will be solved immediately if it meets the scope of authority, and the apartment management department will solve the problem according to relevant standards if it exceeds the scope of authority. In addition, when carrying out apartment management with tea culture as the guiding ideology, we should speed up the construction of school discipline, reasonably guide students to observe organizational discipline, develop good habits, strictly require their own behavior, and constantly improve students' comprehensive quality. With the help of the concept of tea culture, the people-oriented culture in the apartment management is reflected, and the communication between teachers and students is promoted to create a good apartment environment.

### 4.2 Construction of relevant management system

In order to ensure the good implementation of the dual-grid management mode, it is necessary to build an

effective grid management system, specifically divide each area in the grid management, and define the detailed responsibilities of different areas, including group responsibilities, district responsibilities, building responsibilities and dormitory management responsibilities. At the same time, we should strengthen the ordinary visit work and actively carry out the inspection work, so as to form an overall, systematic and fragmented management mode. In addition, relevant norms and standards should be formulated in the apartment management, and each hierarchical structure should be well reflected in the construction of the apartment dual-grid management system, and special management should be implemented for each node role. Use modern information technology to install electronic monitoring and identification system, gradually form a scientific management system, improve the quality of apartment management.

#### 4.3 Improve the environment of the apartment

From a cultural perspective, in order to improve the efficiency of student apartment management, it is necessary to form a cultural environment that can promote the development of students. To integrate tea culture into the apartment management, it is necessary to innovate the apartment management and operation mode, improve the apartment infrastructure, and fully reflect the educational function of school apartment. At the same time, it is very important for the school to have a comprehensive understanding of tea culture for the implementation of apartment management. In addition, the school should do a good job in service management, so that students become the main body of management work, accelerate the construction of infrastructure, increase the cognition of internal services. For example, the apartment walls and corridors should be repainted to change the overall image of the apartment and create a more warm, comfortable and clean apartment environment. The school strengthens the publicity of tea culture, displays tea culture in public areas, focuses on highlighting the importance of tea culture, subtly improves students' cultural literacy, carries forward China's excellent traditional culture, and enhances national identity.

#### 4.4 Improve the professional quality of management personnel

The spirit of tea people is the important content of tea culture, and also the main body supporting tea culture. Tea people mainly refer to those who are specialized in tea picking and tea production. With the progress of The Times, the scope of tea people has gradually expanded to include some people engaged in related work in the field of tea. The spirit of tea people comes from the style of tea trees. Tea trees themselves have good adaptability to the surrounding environment. All kinds of tea trees have corresponding growth rules and different living environments. At the same time, tea trees grow in different

seasons and in different soils, suffering from wind and cold, reflecting the character of perseverance and unremitting self-improvement, which is also the spiritual quality that school administrators need to have. Therefore, in school apartment management, administrators should actively combine the spirit of tea people, give students a perspective, accept the principles of modern management education and service education, master various advanced knowledge, promote their own management ability, provide better services to students, and show good spirit. How to build a high-level apartment management team is also a problem that the school needs to pay attention to. The school should formulate corresponding systems, rationally integrate tea culture, construct scientific management strategies, coordinate the work of various managers, and ultimately improve management efficiency.

#### 4.5 Establish the apartment brand

In the management of student apartment, the relevant management mechanism should be improved based on tea culture, so as to create an effective interactive platform between teachers and students, create a people-oriented cultural atmosphere, make students feel the influence of tea culture, enhance the sense of belonging to the apartment, and enhance the image of the apartment. At the same time, based on the tea culture, the corresponding communication space will be established to promote the communication between students and elites, provide rich resources for the student apartment platform, expand the scope of communication, and enable the healthy development of students.

### 5. CONCLUSION

To sum up, the tea culture and double grid management mode application in the student apartment management, from the tea culture from the people-oriented management concept, at the same time by using double grid management mode of modern information technology, implementation management mode innovation, effective fusion humanized management ideas and modern management mode, to provide new methods for apartment management, improving the quality of apartment management.

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# Mathematical Logic and Its Application in Computers

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**Abstract:** Mathematical logic plays an important role in people's lives. Mathematical logic is mainly a course of reasoning research. Its main content is to prove the correctness of a theory by way of verification. The relationship between mathematical logic and computer science is very close. Its application in the computer is mainly manifested in proving whether the program in the computer runs or not. It is indispensable in computer language and computer hardware design system, so mathematical logic plays an important role in the application of computer. In this paper, the author will study the content of mathematical logic, the importance of mathematical logic to computers, and the application of mathematical logic in computers.

**Key Words:** Mathematical Logic; The Computer; Logical Reasoning; Application

## 1. INTRODUCTION

Mathematical logic is an important course in mathematical reasoning process, main is to study a particular phenomenon of main structure and behavior patterns and symbols in the form of expression, in the process of the development of the computer, the application of mathematical logic is widely, but also from the symbols in the form of a research, in this paper, the author divides the next

## 2. CONTENT OF MATHEMATICAL LOGIC

In a broad sense, mathematical logic is mainly divided into four aspects: set theory, model theory, recursion theory and proof theory [1]. In this paper, the author mainly introduces the two aspects of propositional calculus and predicate calculus.

### 2.1 Propositional calculus

Propositional calculus is a kind of mathematical logic. At the same time, propositional calculus is mainly divided into two kinds of calculus forms, one is natural calculus, the other is axiomatic calculus. It focuses on how related propositions can be formed into more complex propositions with logical connectives. In the process of computer operation, proposition can be regarded as the object of operation, just like the algebraic expressions of letters in mathematics. At this time, logical conjunctions are just like the operation symbols of addition, subtraction, multiplication and division in the process of operation. This process is called propositional calculus.

### 2.2 Predicate calculus

Predicate calculus formula is the content of discrete mathematics, such as  $A=0$ , then if not  $A=1$ ,  $A, b$  are  $0, A \wedge b=0; a \vee b=1$ ; In the process of predicate calculus, the internal structure of propositions is mainly divided into two forms, subject and predicate, and then propositions are formed by propositional functions, logical connectors

and quantifiers [2]. Propositional functions mainly refer to the long term and the logical formula of the variable term. The long term mainly refers to the relationship between some determined objects and attributes in the operation process. The variable term refers to any one in a proposition, and this range is called the variable term field.

## 3. THE IMPORTANCE OF MATHEMATICAL LOGIC TO COMPUTERS

It is a basic quality for computer workers to have mathematical logic when they are working. The development and application of computers cannot be separated from mathematical ability as support. Even computer work without a certain mathematical background is very difficult to have a more broad space for development, the process of working in the computer field, if is the work content of some relatively simple, for example is like a small system in the development of computer, the computer image processing in the work, is really is not high to the requirement of mathematics [3]. However, if the process of work is to develop games and make game systems, it is difficult to further promote the work without certain mathematical skills. In the process of learning, students majoring in computer science in colleges and universities in China have taken mathematical logic and discrete mathematics as an essential course content in the process of computer teaching and assessment. From this, we can see that in the process of computer learning, mathematical thinking and reasoning logic play an important role in computer learning. If the computer is a building that is about to be built, then mathematical logic is the load-bearing pillar in this building. In the process of combining mathematical thinking with computer application, discrete mathematics is also the strongest in the process of computer application. If a computer programmer has a solid mathematical foundation, then he will be more careful when writing the program code, so that the use of the software will achieve the best experience [4]. For example, in the annual graduation season, many companies will include in the interview process of interns to test the ability of logical thinking, adaptability and active thinking of prospective interns. According to the survey, the interviewees who have strong mathematical thinking among them are likely to stand out.

## 4. MATHEMATICAL LOGIC AND ITS APPLICATION IN COMPUTERS

### 4.1 Mathematical logic provides methods for computer programming languages

With the development and progress of the society, knowledge engineering and expert system have emerged. The classical logic reasoning method has been unable to meet the needs of current computer programming and

development. Especially the continuous development of information technology at the present stage, the social each domain renewal speed becomes faster and faster, and thus make further improve the people's standard of living, but at the same time also led to the uncertainty of human life, want to in the process of development of the human mind correct reasoning, intelligent system is the significant particularly important. Under this background, non-classical logic gradually comes into being and develops rapidly.

Such as: In carries on the study of mathematical thinking process, there is a very classic topic is n queen problem, specific content requirements is in the process of permutation and combination, whether can be positive integer n queens on the board, but the requirement in the process of placing each row, every column, every one and only one queen on a diagonal line, how to place this time? In the process of solving this kind of problem, we can use mathematical logic to solve it and integrate the law from the crowd.

4.2 To provide ideas for the computer hardware system Mathematical logic plays an important role in the development of computer. As an important part of computer science, mathematical logic is closely related to Boolean algebra by the famous mathematician Boolean. Computer operations cannot be done without the support of numerical logic, but Boolean algebra is the basis of operations. Therefore, in the process of operation, mathematical logic is usually used to calculate.

4.3 Help to expand the scope of computer use Reasoning logic is a part of mathematical logic. In the process of computer application, reasoning logic is usually used to further expose the essence of things in the field of vision of the staff. Therefore, logic plays an important role in all fields of society, such as linguistics, law, psychology and mechanics. When a computer worker is promoting the work, the most important thing is to do the best

programming, no loopholes, which is undoubtedly inseparable from strong mathematical thinking. At present, programmers can clearly see in the process of programming that employees with strong mathematical thinking will be more perfect when writing programs, which is in line with the trend of the development of The Times.

#### 5.CONCLUSION

With the progress and development of society, mechanization and intelligence play an important role in People's Daily life. The wide application of computers makes people's production and life more convenient. At the same time, the development of computers cannot do without the support of mathematical logic, and the design of computer circuits and the development of related programs cannot do without mathematical logic. Therefore, the relevant computer staff in the work, to strengthen their mathematical logic ability, so that they can stand out in the work has a better space for development, promote the vigorous development of the computer industry in China.

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# Research on Preschool Art Education Under the Vision of Taishan Culture

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**Abstract:** Mount Taishan culture is also the spiritual wealth of history, but also the accumulation of five thousand years of Chinese history and culture. Preschool education, as the foundation of education in China, plays an important role in children's growth. This paper takes the importance of Taishan culture for preschool art education as a starting point, and puts forward relevant teaching strategies for preschool children's art education, so as to enhance the cultural and artistic accomplishment of preschool children.

**Key Words:** Taishan Culture; Preschool Art Education; Teaching Children

## 1. INTRODUCTION

China is a nation with a long history and rich traditional culture. It is the basis for the development of culture of the whole country and nation, and it is the spiritual bond that promotes the prosperity of the motherland. Preschool children are still young and have immature ideas about things and learning. Therefore, in the process of fine arts education for preschool children, teachers should properly integrate the excellent traditional Chinese cultural elements, which can not only exercise the creative ability of preschool children, but also promote the healthy development of children's body and mind.

## 2. THE SIGNIFICANCE OF TAISHAN CULTURE FOR PRESCHOOL ART EDUCATION

After the reform of the new curriculum, curriculum resources have always been the focus of attention. The main purpose of the development of art curriculum resources is to make up for the deficiency of the single national art curriculum, and timely play the resource advantages of local and various schools to meet the needs of students in various regions in art learning and activities. In the newly reformed "Art Curriculum Standards", it is emphasized to make extensive use of all kinds of curriculum resources outside the school, including art galleries, museums and cultural relic resource art workshops, etc., and make use of natural environment, campus and social life resources to carry out art teaching as far as possible. And actively encourage art teaching development and use of local cultural resources, creative development of all kinds of art teaching activities. Taishan folk culture and art have a long history, very rich, Taishan stone carving, Taishan shadow puppets, Taishan paper-cut at the foot of Taishan widely spread. Therefore, art teaching should also actively integrate into traditional culture, constantly explore and carry forward the excellent Chinese culture, which can not only improve art teachers' personal quality, but also help to change students' learning style [1].

## 3. ART EDUCATION STRATEGIES BEFORE SCHOOL

## UNDER THE BACKGROUND OF MOUNT TAISHAN CULTURE

In the art education of preschool, preschool teachers should, according to the age characteristics and physical and mental development rules of preschool children, guide children to appreciate art works and experience art creation, in order to cultivate the aesthetic level and art creation ability of preschool children, and ultimately improve the artistic quality of preschool children.

### 3.1 Art teachers love and understand traditional culture

In pre-school education, preschool age characteristics determine the children will not active to accept and love the traditional culture, is just to imitate the art teachers in class, so you need to fine arts teacher must love China's outstanding traditional culture, and enhance the understanding of traditional culture and understanding, can engender, Pass their own traditional culture and art literacy to preschool children, so that children in the rendering of traditional culture, gradually enhance their interest in learning traditional culture, so as to love traditional culture. Therefore, preschool art teachers should also learn and understand the excellent culture of our country, infiltrate the hearts of children with their own cultural literacy, enhance the national pride of preschool children, and cultivate their passion for the motherland.

Preschool education is essentially an experiential way of education. In general preschool education, children learn relevant art knowledge through manual practice and painting activities. Therefore, teachers can also properly penetrate the knowledge of traditional culture in the teaching process. Such as: Spring is the season of flying a kite, also is the children's favorite activity, teachers can lead children do kite together on the art class, before production, children need to collect information about the kite, kite is when some, what materials needed to make a kite, children in the process of looking for the answer, will be to understand the relevant cultural information, in the process of class, Teachers can also raise children's understanding of kite to the level of art education through guidance, and properly cultivate preschool children to establish correct values and humanistic spirit.

### 3.2 Teaching basic painting skills to preschool children

For preschool stage of children, age is small, the speed of learning things quickly, especially in the fine arts painting ability, is in commonly after teachers explain the basic knowledge, to lead the children painting operation, in a relatively short period of time, children can really grasp the painting techniques, and skilled master the methods of painting. Preschool children's comprehension ability is strong, actually there are many children at the beginning of contact painting was like this way of knowledge study, some children every day in painting, through painting

express their thoughts, not only can improve the comprehensive qualities of preschool children, also can promote the progress of children. In the art education of preschool, teachers can according to the degree of knowledge that children can accept at the moment, the painting skills are appropriately passed to children, and the level of children's painting is effectively improved. In the process of art teaching, teachers can also, according to the current form of education, let children use a variety of creative materials, so that they understand the basic characteristics and methods of art creation, in which they can experience different feelings of creation. Therefore, in preschool art teaching, teachers can use different materials and painting skills to transfer art knowledge to children, which can not only improve children's perception level, but also enable children to have in-depth feelings and experience of creation at their own understanding level [2].

### 3.3 Comprehension of cultural classics to improve children's literacy

The Chinese traditional culture and art education is intimately involved, to strengthen the culture of preschool children education, art education as one of the carrier, to promote preschool children's understanding of Chinese traditional culture, develop children's inheritance of Chinese culture, promote preschool children's artistic accomplishment and so on, has an irreplaceable role. In the art teaching class of preschool children, children can understand people's life, customs and concepts in different times, different nations and cultural systems through the appreciation of art works. Such as: Teachers can give students to appreciate Zhang Zirui's "Riverside Scene at Tomb Sweeping Festival". Although preschool children are still young and cannot really appreciate the value of fine arts, teachers can properly explain to children, so that children can have a certain understanding of the characters, customs and buildings in the painting, and also let children carry out careful observation. In order to cultivate

preschool children to the beauty of things, the form of beauty discrimination and perception. Such as: Teachers can also be appropriate to spread the paper-cut art into art education, we can take children to the local law UK folk museum or using multimedia broadcasting form let children understand the art of paper-cut, let the children in class to produce kinds of paper cutting, can also suggested that children will draw down paper-cut works, experience paper-cut of the difference between production and painting skills, To mobilize the enthusiasm of children to learn fine arts. The combination of traditional Chinese culture and art works can fully mobilize the patriotic consciousness and social responsibility consciousness of preschool children.

### 4.CONCLUSION

To sum up, China's traditional culture is long and brilliant, the development of preschool children is related to the future development of the Chinese nation. Therefore, in the pre-school art education research, in the rich and colorful teaching activities, into the excellent traditional culture of our country, let the pre-school children feel the charm of traditional culture in painting, which can not only enhance the artistic literacy of pre-school children, but also promote the national pride of pre-school children.

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# Application of Artificial Intelligence in Computer Network Technology

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**Abstract:** With the continuous development of science and technology in China, computers have been widely used in people's life. But the traditional computer networks have already can't satisfy people's needs, under the background of the era of big data, research and development of artificial intelligence technology, makes the computer network is put forward higher request, smart phones and smart TV has been fully applied in the life of people, so the researchers only by constantly improving computer network application, To promote the sustainable development of computer network technology. In this paper, the application of artificial intelligence in computer network technology is briefly analyzed.

**Key Words:** Artificial Intelligence; The Computer; Network Technology; Used To Investigate

## 1. INTRODUCTION

Along with the science and technology constantly improve, people also more and more widely used for computer, and put forward the higher request, under the background of big data, developed technology, artificial intelligence and artificial intelligence technology is applied to the computer network technology, not only can improve the efficiency of computer in the work and study, also can bring convenience for People's Daily lives, At the same time, it has brought positive impetus to the economic development of China's society [1]. At present, people have given us a lot of attention of artificial intelligence technology, according to its development, traditional data model and operation of the computer has can't satisfy the demand for the development of The Times, so people began to study the application of artificial intelligence technology in computer network, through the artificial intelligence technology to promote the development of our country network computing, For the development of China's computer technology to pave the way.

## 2. THE MEANING OF ARTIFICIAL INTELLIGENCE TECHNOLOGY

Artificial intelligence can also be called excitation intelligence, mainly through the instructions in the computer to complete, make the machine become intelligent, and can replace people to complete some difficult and dangerous work. Artificial intelligence technology has strong characteristics in information processing, learning ability and reasoning ability.

With the continuous development of China's information computing, the development of artificial intelligence technology is more and more mature, in order to make the computer network technology to meet the needs of people's life and work, researchers will use artificial intelligence technology into the computer network, so as to improve the efficiency of the computer system. It can

be mainly reflected in the following aspects:

First, the artificial intelligence technology can help the computer network to process the unknown information in the computer, and to monitor the important documents in real time, at the same time, the processing results back to the user.

Second, artificial intelligence technology has excellent collaboration ability. We can integrate relevant information in big data and serve as the basis of future resources, so that users can share resources through the platform.

Thirdly, artificial intelligence technology has strong reasoning ability and learning ability, which can greatly provide the management efficiency of computer network. Fourth, artificial intelligence technology also has a strong memory, for information storage has a positive role in promoting, but also to a certain extent to strengthen the network management.

## 3. ADVANTAGES OF ARTIFICIAL INTELLIGENCE IN COMPUTER NETWORK TECHNOLOGY

Perfect and innovation of computer technology in China after a long time, has gradually become mature, has many characteristics, such as speed, dynamic and polygon, the research and development of artificial intelligence can very well to incorporate these features, and make it perfect, therefore, for the computer network technology is also put forward higher request [2]. In daily life, in order to combine the characteristics of computer technology, and make the computer network technology to maintain a safe and stable operation, it is necessary to strengthen the computer network technology in the security management. The application of artificial intelligence technology to computer networks has the following advantages:

### 3.1 Strengthen information processing to prevent unknown problems

Artificial intelligence technology in the computer network can be more efficient, safe processing of information, and can effectively prevent unknown problems. Under normal circumstances, the reasoning of artificial intelligence technology is through the science and technology, and computer network technology in the presence of large amounts of fuzzy data, through the artificial intelligence technology to strengthen the management capability of computer network, to process information to the overall planning, greatly make up for the deficiency of the traditional computer management, artificial intelligence technology can also carry on the real-time monitoring, To ensure that the computer can operate safely and stably.

### 3.2 Strong learning ability and problem solving ability of artificial intelligence technology

The application of artificial intelligence technology to computer networks can improve the learning ability of

computers and effectively deal with nonlinear problems. Even if a large amount of data information is contained in the computer system, there are still a lot of unprocessed junk data. In the process of computer network technology research, improve the level and depth of the system, and the computer technology is vigorously promoted, so that the people get a wide range of recognition. At the same time, the use of artificial intelligence technology can also solve many practical problems through nonlinear thinking.

### 3.3 Lower operating costs

The application of artificial intelligence technology can effectively reduce the cost of the use of computer network technology, according to the survey results show that the artificial intelligence technology in computer network application, the cost of investment is the smallest, artificial intelligence technology to the programming of system program, main control operation method, through the application of artificial intelligence technology not only improves the operation speed is to strengthen the efficiency of the computer, The application of artificial intelligence technology in the computer system can effectively reduce the waste of resources, but also can vigorously promote the computer network technology.

## 4. THE PRACTICAL APPLICATION OF ARTIFICIAL INTELLIGENCE IN COMPUTER NETWORK TECHNOLOGY

### 4.1 Application of Network Information

At present, the security management content of most computers in the market is mainly firewall, anti-intrusion system, anti-spam system, etc. The firewall and anti-spam system mainly through anti-intrusion system to maintain, which is the biggest role of anti-intrusion system, and the rational use of anti-intrusion system can help the firewall and anti-spam system better application.

### 4.2 Optimizing Hardware

Artificial intelligence technology is effectively applied to the hardware of the system, the computer can get rapid development, the fundamental reason is to rely on the hardware facilities in the computer system, the application of artificial intelligence technology can optimize the hardware of the system, make it combined with software, so as to effectively improve the computer technology. In the context of big data, the development of computer technology also promotes the optimization of system

hardware. Only by constantly improving system hardware facilities can the advantages of computer network technology be maximized [3]. Artificial intelligence can not only optimize the computer system hardware, but also reduce the difficulty of operation in the work of staff.

### 4.3 Application in data collection and analysis

In the application of computer network technology, artificial intelligence technology is applied to the interface between computer and human, which greatly promotes man-machine combination in artificial intelligence and gives full play to the value of artificial intelligence technology. Intrusion detection technology can effectively detect and analyze the network data in the computer, and feedback the results to users, so that users can more clearly realize the practicality of the software. Agents in artificial intelligence technology can complete relevant instructions according to the communication between data. In addition, the application of computer technology in daily life can arrange meetings, schedules and other services through Agent technology, bringing better user experience to consumers.

## 5. CONCLUSION

In a word, artificial intelligence has many advantages in the application of computer network technology, and has played a positive role in promoting the development of computer technology. With the continuous development of information technology in China, artificial intelligence technology has been applied to all aspects of computer technology, bringing a broader space for the development of computer network.

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# A Brief Analysis of The Ways to Improve the Quality of Foreign Teachers' Specialized Courses for Junior College Students in Sino-Foreign Cooperation

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**Abstract:** With the internationalization of education development, China's higher education and foreign exchanges develop rapidly, domestic and foreign academic degree mutual recognition, the level of cooperation between schools is constantly improving, a large number of excellent foreign educational resources have been introduced. Sino - foreign cooperation in running schools will introduce foreign advanced teaching modes, talents and technologies to improve the level of higher education in China. At present, colleges and universities actively promote Sino-foreign cooperative education programs and promote foreign teachers' teaching, aiming to cultivate students with international vision and cross-cultural communication ability. However, for the junior college students in the Sino-foreign cooperative programs, the basic English level is generally weak, the basic professional knowledge is uneven, and the teaching staff is inexperienced. How to improve the quality of foreign teachers' professional courses has become an urgent problem to be solved.

**Key Words:** Foreign Teacher Specialized Course; Sino-Foreign Cooperation; Running College

## 1. BACKGROUND

### 1.1 Characteristics of Sino-foreign cooperative education projects

Sino-foreign cooperative education programs take domestic and foreign continuous study, graduation can obtain domestic and foreign bachelor's or master's degree certificate. The Chinese-foreign cooperatively-run programs offer specialized courses from the foreign cooperative colleges every semester, and the teaching time of the teachers of the cooperative colleges shall not be less than one third of the total class hours. Domestic teachers teach in both languages, while foreign teachers teach in English. The introduction of foreign courses in the domestic environment enables students to get familiar with the teachers of foreign cooperative colleges, the teaching methods of foreign teachers and the English classroom atmosphere in foreign countries in advance, so as to pave the way for students to study abroad. On the other hand, the credits of specialized courses are recognized by cooperative universities, which can reduce the burden of studying abroad.

### 1.2 Research Status of Specialized Courses for Higher Specialized Foreign Teachers

With the rapid development of Sino-foreign cooperative

school running projects in China, the research on cooperative school running is increasing day by day, but most of the research focuses on the current situation, improvement methods and model construction of bilingual teaching. In the article "A Study on Chinese-foreign Cooperative Teaching Based on Consumer Behavior Curriculum", the paper mainly focuses on the separation between Chinese major course teaching and foreign teacher teaching, emphasizing the importance of bilingual teaching of major course and how to improve the effect of bilingual teaching.

### 1.3 The level of teaching subjects

Junior college students generally have a poor English foundation, weak learning willpower, tight curriculum arrangement and other factors. Professional bilingual courses and professional foreign teaching often make students exhausted, with mediocre results, or even shrink back. Combined with the actual situation, the current situation is analyzed in detail as follows:

1.3.1 Junior college students have poor English foundation. Most of the students failed in English in the college entrance examination. Intensive IELTS course learning in school, but English as a comprehensive language, it is difficult to get immediate results.

1.3.2 The general curriculum arrangement of students in Chinese-foreign cooperative education programs is tight, resulting in great learning pressure. In order to complete the study of professional courses and other normal courses as well as IELTS within three years, the curriculum arrangement is full, which squeezes students' time and energy for self-study and exploration to some extent.

1.3.3 Students have weak willpower in learning. College students generally do not have a strong willingness to learn, in the middle school formed in the loose, do not love learning, fun and other situations is difficult to change, coupled with the university is free thought, many students can not accept this kind of high intensity of learning, and even abandon themselves.

1.3.4 The teaching level of teachers is limited. Most teachers of specialized courses have no teaching experience of bilingual and foreign teachers, and they are still in the stage of continuous exploration and learning. Teachers of specialized courses have no experience of studying abroad. Objectively speaking, it is difficult to guide students with foreign teaching thinking and teach foreign specialized courses.

## 2. METHODS TO IMPROVE THE PROFESSIONAL

## COURSES OF FOREIGN TEACHERS

According to the learning characteristics of junior college students, combining with the teaching purpose of bilingual professional courses and the current situation of foreign teachers' professional courses, this paper puts forward a reasonable teaching method. This teaching method maximizes the teaching ability and auxiliary role of teachers of specialized courses, so as to eliminate students' psychological barriers and improve students' learning efficiency.

Generally speaking, according to constructivism learning theory, teaching should exert students' subjective enthusiasm as much as possible, and stimulate students' interest and curiosity in learning. But for the junior college students, the consistent casual attitude, fear of difficulties, do not love learning, it is difficult to stimulate their love of learning in a short time to learn actively. In addition, many courses, full arrangement, tight time, pressure, it is difficult to do consciously preview after class review. Moreover, college students have strong dependence on psychology, unwilling to self-exploration in many aspects, and repulsion for new content and new knowledge. Therefore, it is particularly important to make full use of class time, and it is key to give full play to the teaching level and classroom management ability of teachers of specialized courses during class, as well as the auxiliary role of students in class and after class.

In order to maximize the professional course teachers' teaching ability, classroom management ability and learning auxiliary role. This article mainly discusses from three aspects: teachers, teaching materials and teaching. The details are as follows:

2.1 Give full play to the leading role of teachers. First of all, to improve the teaching ability of teachers of specialized courses, teachers self-improvement, teaching training and practical exchanges, multi-pronged. Teachers of specialized courses improve themselves in classroom teaching and management; (b) the provision of appropriate training by the school, especially for the teaching of junior college students; Observe and exchange foreign teachers' teaching, learn from the teaching process, practice teaching methods, etc. Secondly, improve the role of teaching assistants of specialized courses. During the teaching period, the teachers of specialized courses will be transformed into teaching assistants to assist students and foreign teachers in teaching English and foreign languages. Have in-depth communication with foreign teachers and make reasonable teaching plans. Always pay attention to the state of the students and the content of the class, when new knowledge and new concepts, it is necessary to stop and make a simple explanation for the students; Organize the classroom content, understand students' problems and solve them in time. Cycle gradually to help students overcome difficulties. Again, play the teacher's incentive role. As teachers, we should not turn a blind eye to or complain about the poor basic level of junior college students and their average learning ability. And must be good at discovering the student's luminous point, and

timely encourage, inspire the student.

2.2 Select reference materials suitable for junior college students. First of all, most of the excellent professional course textbooks on the market are written for undergraduate students, with many difficult contents, and some difficulty for junior college students. Secondly, there is a huge difference between foreign curriculum and domestic curriculum. Each foreign course is divided into one or more content units, each content unit has a certain independence, a course may need more than one or two reference textbooks. Therefore, how to choose the appropriate reference materials becomes particularly important. Teachers of specialized courses choose appropriate domestic and foreign textbooks according to the teaching objectives and requirements and the learning characteristics of junior college students.

2.3 Give full play to the supporting role of teachers in teaching. Special classes are set up to assist the learning of foreign courses. The main function of this class is to digest and consolidate the learning content of specialized courses. In class, I conducted polling exercises in listening, reading, writing and speaking for the English content of specialized courses, and completed the homework of specialized courses. Adjust the number and quality of English assignments for specialized courses according to students' learning conditions. Through the way of homework, forcing students to review the content, master the content of the class.

## 3.CONCLUSION

This paper focuses on the important position and role of Chinese teachers in teaching. Teachers can lead students to learn bilingual specialized courses, help students accept foreign teaching courses, and force students to master the content of foreign specialized courses. With the help of professional teachers, junior college students can successfully complete the study of foreign professional courses, gradually adapt to the teaching content of foreign teachers, and lay a good foundation for their study and life abroad in the future. At the same time, it provides an effective teaching mode to improve the effect of cooperative school running.

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# This Paper Discusses the Value of Cloud Computing Technology in Computer Network Security Storage

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**Abstract:** In the background of the continuous development of computer technology, its ancillary functions are more and more, in which the storage function plays an indispensable role, effectively improve the user's learning and work efficiency. In recent years, the problem of safe storage in computer network has attracted more and more attention. Once data loss occurs in computer, it will cause great loss to users. This paper will discuss the value of cloud computing technology in computer network secure storage.

**Key Words:** Computer; Cloud Computing Technology; Storage

## 1. INTRODUCTION

With the rapid development of society, the number of network users in China has been on the rise. At the same time, there is a great risk of user information leakage. In the past, in the management of computer network work, the problem of information security is generally not enough attention, often occur user data information leakage phenomenon. At present, users pay more attention to the security of personal information, the traditional computer management has not met the needs of The Times. In this context, cloud computing technology derived from the use of virtualization, distributed computing and other technologies to effectively integrate many resources in the network, to meet the needs of users to pay for the required resources on demand, its market value is significant. Based on this, this paper mainly discusses the value of cloud computing technology in computer network security storage.

## 2. THE PROBLEM OF SAFE STORAGE IN COMPUTER NETWORK

### 2.1 Configuration vulnerability of computer network information platform

Computer network system whether in the process of operation, or data storage process there are great security risks. The main reason is that each computer has its own IP address and network address, and when hackers attack or get into the information by a virus, the leak will occur. If such information is used in illegal channels, there will be serious consequences. So master computer security vulnerabilities, is conducive to better computer security protection. At present, the computer system of many industries is relatively backward, and the system has not been updated or anti-virus software has not been installed in the process of using the computer, so the computer network system is at greater risk of attack. Moreover, the security level of a large number of computer network

platforms is low, and even if the password is set, it is also vulnerable to hacker intrusion, resulting in data leakage in the process of transmission, causing economic losses to individuals or enterprises.

### 2.2 Security management vulnerability

The hidden danger of computer network operation is mainly caused by two factors, including system defect and security management loophole. Many computer network systems did not accept the corresponding management and maintenance during the working period, the system security level update obviously lagged behind, for various new Trojan horses, viruses can not be effectively resisted. At the same time, many computer users lack sufficient security awareness, in the application of the computer did not establish security management awareness, not timely, upgrade the new system and anti-virus software, so that the system appears more security loopholes, to the virus opportunity.

### 2.3 Security vulnerability

At present, a large number of computer networks lack the corresponding protection system, resulting in the data information in the computer directly exposed to the external network, increasing the risk of hacker attack, computer network internal security is insufficient. Although some computer systems are equipped with protection systems, but these protection systems are usually of general type, can only resist some common viruses, for special attacks can not be effectively intercepted, thus causing computer paralysis in the process of operation. In order to ensure the reliability and stability of the computer network system, a more advanced information protection system should be built to ensure the security of data and provide security guarantee for the storage of computer data.

## 3. THE APPLICATION OF CLOUD COMPUTING TECHNOLOGY IN COMPUTER NETWORK SECURITY STORAGE

### 3.1 Data encryption technology

Data encryption technology is applied to computer network safe storage, basically has the following two points: (1) through the multi-step encryption algorithm to encrypt data, this method is applied to computer network safe storage, can significantly reduce the risk of data loss, ensure the security of information storage, unnecessary loss help individuals and businesses. For example, the most commonly used at present is the random combination of 256 numbers, and the random arrangement of 256 numbers in the matrix. Before the 256 numbers are arranged, the initial arrangement status of different

numbers should be recorded in a table [1]. Then with the help of digital encryption technology to decode the table, the use of different permutation or mapping way to arrange the numbers, and through the decode table to further encrypt data. This can provide sufficient security for computer information storage and reduce the probability of data information being plagiarized. (2) random sequence, in the computer information encryption is also more applications. Most network maintainers will establish pseudo-random sequences in the process of encrypting computer data. Compared with other methods, this kind of data encryption is more arbitrary. For other decryption personnel, in the decryption due to insufficient understanding of the computer random sequence, significantly increased the difficulty of decryption, so it can effectively improve data security. In the actual operation, the ASCII sequence code of the previous rules should first be disturbed to make it garbled [2]. In the subsequent rearrangement of sequence codes, it is important to pay attention to the relationship between the numbers of each sequence code and the numbers before and after it. The application of random sequence in the process of sequence design, on the one hand, is beneficial to increase the difficulty of decryption, on the other hand, it can prevent other decryption personnel from mastering the sequence length. Only if other crackers know enough about the sequence design can they steal information from the computer. Based on the theory, the random sequence method has a great difficulty in decryption, and can provide sufficient security, so as to effectively protect the computer network storage security.

### 3.2 Key management technology

Key management technology is used in computer network security storage, it is necessary to protect the key to some extent. There are many ways to protect network security keys. The most common ones are the keys to protect computer information storage, the keys to protect information security during information transmission, and so on. In the process of key protection of computer information security, when the key into the system, all the data information is encrypted protection, only after decryption can be viewed. In order to prevent key leakage, corresponding measures should be taken to protect the key. For example, when the computer password is stolen, the

system should immediately record the time and place when the password is cracked, immediately send an alarm to the user and change the key in time [3]. Some computer keys will disappear by themselves after being damaged, but users still need to obtain computer information through the key. How to restore the key to use the computer normally has always been a problem of concern to users. The master key of a computer system generally contains several sub-keys. When restoring the master key, the serial number of each sub-key should be processed first, and the master key should be restored by the relevant formula.

### 4. CONCLUSION

The application of cloud computing technology in computer network security storage can not only effectively solve the problem that traditional data storage can not be recovered when lost, but also play an important role in improving the utilization rate of computer network data and information, and better reflect the relevant value. When users experience the convenience brought by computer storage technology, they also need to pay attention to data security protection, strengthen key management and data encryption, enhance data protection awareness, and ensure the security of computer network storage.

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# Professor Tang Lilong's Experience in Treating Allergic Rhinitis with Addition and Subtraction of Lifting Powder

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**Abstract:** Allergic rhinitis belongs to the category of "Rhinitis" in traditional Chinese medicine, and it has a unique advantage in treating allergic rhinitis. Based on years of clinical experience, Professor Tang Lilong created the original treatment of allergic rhinitis by "promoting dryness and rising qing, warming the nose and orifices", and added or subtracted the treatment of allergic rhinitis with the main prescription of "lifting and lifting powder", which has achieved good clinical effects and opened a new idea for the clinical treatment of allergic rhinitis.

**Key Words:** Allergic Rhinitis; Lifting Powder; Experience

## 1. INTRODUCTION

Allergic rhinitis (AR), also known as allergic rhinitis, is a chronic inflammatory disease of nasal mucosa mediated by LGE and mediated by the release of inflammatory mediators (mainly histamine) and immunoreactive cells and cytokines in the presence of atopic individuals exposed to allergens. With nasal itching, sneezing, nasal hypersecretion and nasal mucosa swelling as its main characteristics, the prevalence of this disease in the general population is 10%~25%. In recent years, with the progress of industrialization, the incidence of this disease has been increasing year by year [1]. There is no name of Allergic Rhinitis in Chinese medicine, but it can be classified as "BD" according to its typical symptoms, and traditional Chinese medicine has its unique advantage in treating AR.

Professor Tang Lilong is a young innovative talent of traditional Chinese medicine of State Administration of Traditional Chinese Medicine and a key backup discipline leader of TCM diagnostics during the 12th Five-Year Plan. He has been engaged in clinical teaching of traditional Chinese medicine for more than ten years and has rich clinical experience and unique insights into AR. After many years of clinical summary, combined with the climate characteristics of northwest region, put forward the treatment method of exonerating dryness and rising qing, warming and clearing nasal orifices, and achieved good clinical efficacy in practice, now the experience is summarized as follows.

## 2. ETIOLOGY AND PATHOGENESIS

Although there is no "allergic rhinitis" in the name of traditional Chinese medicine, it can be classified as "BD", "qiu" and other categories according to its clinical

characteristics. BD is a disease mainly characterized by paroxysm and recurrent episodes of nasal itching, sneezing and runny nose [2]. This disease was first recorded in the Book of Ritual and YueLing in the Western Zhou Dynasty, it was called BD: "season qiu qiu and summer, it was the great waters of China, qiu qiu was lost in winter, Clinton was more thin." As a name, first found in the Yellow Emperor's Internal Classics, such as "Ask the pulse" said : " the so-called keshun pulse headache, BD, abdominal swelling, yangming and in, it was qiu, qiu, head, BD, abdominal swelling also. In addition, there are some names like "qiu", "qiu", "qiu", "qiu" and so on in ancient literature. Medical experts in the past dynasties believed that the physiological and pathological characteristics of the nose were closely related to climate, meridians, viscera, evil factors and constitution. It was mostly caused by the low function of viscera (deficiency of lung, spleen and kidney qi), and external cause was mostly caused by the invasion of the nose orifices by the evil of wind cold and wind heat [3]. For example, Sui Chaoyuanfang recorded in the Pathology of Diseases, Volume 29, Vendors of Nasal Diseases: "When the nose is hot, the body fluid is dry; when it is cold, the overflow cannot be collected by itself. The lung air passes through the nose, and the viscera is cold, which enters the nose with the air and is multiplied by the nose, so the body fluid cannot be collected by itself." That is to know the effect of cold and heat on body fluid; But Liu Hejian, a physician in the Jin and Yuan dynasties, said, "It is always wrong to become cold in the lungs. She proposed "crabbed depression", and thought that wind fever was one of the causes of BD. Many ancient documents also recorded that the six evils (wind, cold, heat, humidity, dryness, fire) are closely related to this disease. According to the clinical summary of many years, Professor Tang Lilong believes that the allergic rhinitis in Northwest China is mainly caused by dryness and other evil factors. "Introduction to medicine, " said "nose is clear, " lung for jiao dirty, like your mind and evil dryness, primary air breathing, atmosphere directly and nature are interlinked, and outer coat, begin to understand in the nose, age season season dry climate, is located in the plateau of the northwest dry evil first infringement nasal orifices, nasal orifices by pathogens congestion, lung injury and Zimbabwe, which affects lung qi xuan, fresh air can not access, no glory, It became BD. Therefore, Professor Tang Lilong believes

that the allergic rhinitis of patients in Northwest China is mostly caused by dryness evil attack on the lung, and most patients with this disease have the special symptoms of dryness evil such as dry skin.

### 3. SYNDROME DIFFERENTIATION AND TREATMENT

Under the guidance of the above theory of dryness evil attacking the lung syndrome differentiation, Professor Tang Lilong often used lifting powder as the basic prescription, and combined with the patients' different syndromes and physique to add or subtract, so as to achieve the therapeutic purpose of clearing dryness, raising qing and warming the nose and orifices. It was first recorded in the Ming Dynasty physician Gong Tingxian's book, "The Return of All Sickness, Volume Two, Plague" [4], "Inner Fu Xian Prestige for the Treatment of Large Head Disease and Toad Disease. Rigid silkworm 22, turmeric, cicada slough each two and a half money, rhubarb 42, ginger juice paste for pills, a heavy money a. Take one pill for adults, half for children, and adjust the honey water to make it better." Yang Lishan, a doctor in the Qing Dynasty, made good use of this recipe and renamed it "Lifeng San" according to its characteristics. In his book "A Bien on Typhoid Fever and Warm Epidemiology", Yang Lishan regarded it as the total recipe of 15 prescriptions for "fever suppressing heat inside", and used it to treat "great heat in the outer and inner areas", that is, the syndrome of warm and hot spreading inside and outside. It is very precise in the selection of medicine. The original formula contains six kinds of medicine. Now, honey and rice wine are generally not used, and only four kinds of medicine are used, namely, silkworm, cicada slough, turmeric and rhubarb [5]. Professor Tang Lilong believes that the silkworm in the rise and fall powder is hot and salty, with thin smell, frivolous and rising, and is good at rising and clearing. Cicada slough sweet salty cold, rise float Xuan is transparent, long in dispersing evil. The combination of these two medicines can play the effect of clearing away evil spirits. Clinical application, often can be combined with Xinyi, dahurica and other drugs, in order to enhance the efficacy. In addition, Professor Tang Lilong believes that addition and subtraction based on this formula can also be used for the treatment of chronic sinusitis and other nasal diseases.

### 4. MEDICAL RECORD

Jin, female, 9 years old, was first diagnosed on August 4, 2020. Chief complaint: Repeated bilateral nasal obstruction for 4 years with aggravation and swollen throat for 3 days. The patient's mother complained that the patient had a history of allergic rhinitis, with obvious seasonality, more frequent in autumn every year. The onset was mainly due to nasal congestion in the morning, accompanied by nasal dryness, pharyngeal itching, sneezing, and previous diarrhea. Three days ago, the patient developed symptoms of nasal congestion and sneezing, accompanied by swelling and sore throat and sticky sputum, which was difficult to cough. The patient took drugs by herself (the drugs used were unknown) for treatment, but the symptoms showed no improvement. At the time of consultation, the patient's throat was red and

swollen, his tongue was red and dry, and his pulse was floating and thin. Diagnosis: Rhinitis, dryness invade lung syndrome. To cure xuan zao, rise qing and warm the nose and orifices, the prescription is to add and subtract the lifting powder and shoot the dry mabo powder. Stir-fried Silkworm 6g, Cicada Slough 4g, Radix Artemisiae 8g, Stir-fried Burdocks 10g, Honeydew Flower 8g, Huachuangerong 8g, Ginger Pinellia 8g, Poria Peel 10g, Thunberg Fritillaria 6g, Ma Bo 6g, Forsythia Forsythia 6g, Licorice tablet 3g, Turmeric (vinegar)8g, Liquor Radix Scutellariae 8g, Wax Gourd Peel 15g. Seven doses of Kangrentang granules, each dose was mixed in 2 packs, twice a day, 1 pack at a time, washed with boiled water.

Second diagnosis (August 11, 2020) : the redness and swelling of the throat disappeared, the congestion of the nose and the sneezing relieved. Three days ago, the patient developed diarrhea due to wind. The tongue was red with thin white coating and the pulse was floating and thin. Adjust the prescription: Stir-fried Silkworm 8g, cicadas slough 6g, Xinyi 8g, Angelica 6g, Shegan 8g, Radix Platycodon 6g, Terminalia chebula 8g, Poria 12g, Wumei 8g, Ginger ginger 10g, Dazao 10g, Sun-fried Licorice 5g, Honeycomb 6g. Seven doses of Kangrentang granules, each dose was mixed in 2 packs, twice a day, 1 pack at a time, washed with boiled water.

Third diagnosis (August 18, 2020) : All the patients were improved after treatment. The first step was to remove the honey-dried flower, add forsythia and burdock, and take 7 doses to further consolidate the curative effect. Disease maintenance: advised careful daily life, shelter from cold wind, avoid sweets, spicy and stimulating products, a small amount of frequent drinking warm boiled water.

According to: This patients every autumn, rhinitis, is a typical of seasonal allergic rhinitis, dry evil invading nasal orifices, see a stuffy nose, nasal dry nasal itch, patients with sore throat, pain to begin with, stick difficult to cough up phlegm and combining with the history, shows its besides feeling dry evil also has the evil of wind heat, wind hot the evil throat invasion, and sore throat, so with lifting or shoot dry puffball adjustment to conquer. On the second visit, the swelling of the patient's throat disappeared, and the pathogenic factors of wind and heat were seen to be gone. However, due to the diarrhea caused by wind, the prescription was adjusted and the drugs such as windproof and Terminalia chebula were used to prevent the patient from having diarrhea in the past, and the diarrhea lasted for a long time, so cohosh was added. The patient's symptoms improved on the third visit, and the prescription was slightly adjusted according to the patient's physique to continue taking the medicine for another week to consolidate the curative effect.

### 5. CONCLUSION

In recent years, due to the change of environmental climate, the incidence of allergic rhinitis is increasing year by year, and when the disease is serious, it will be complicated with bronchial asthma and other diseases, which has a great impact on the lives of patients. In the treatment of this disease, western medicine usually uses antihistamines, anticholinergic drugs, corticosteroids, anaphylaxis mediators, anti-IgE antibodies and other

drugs. Although the symptoms can be relieved and controlled to a certain extent, they still occur repeatedly and are difficult to be cured. In the treatment of this disease, traditional Chinese medicine pays attention to the combination of four diagnoses and syndrome differentiation, which often achieves good curative effect and can greatly reduce the recurrence rate. Li-long tang, says professor allergic rhinitis cause whether cold evil, evil or dry heat, the influence of the zang-fu organs are the lungs, or invaded by intrusion through the nose and lungs, causing the descending function of dispersing pertains lung disorders, and then show the cloud of gas and fluid distribution imbalance, and outer expression in the nose, treatment focuses on the lung function of dispersing pertains and transforming and XuanTong nasal orifices, And fuzheng quxie is the key point. Lifeng powder has a very good effect of clearing and reducing turbidity, and then according to the patient's inter-symptom and physical characteristics of reasonable addition and subtraction, the effect of allergic rhinitis is quite good.

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# Research on the Hindrance Factors and Improvement Countermeasures of Art Innovation Education in Contemporary Universities

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**Abstract:** Innovation is the driving force of national development. The development of a country needs college students with innovative ability. The foundation of innovation ability is to have the consciousness of innovation. The consciousness of innovation is one of the important psychological qualities of innovation. In fine arts education, only under the guidance of innovation consciousness can there be innovation motivation, so as to set the goal of innovation and stimulate the potential of innovation.

**Key Words:** Innovation; Entrepreneurship; College Students; Fine Arts Education

## 1. CURRENT SITUATION OF ART INNOVATION IN COLLEGES AND UNIVERSITIES

In today's social background of rapid economic development and technology re-climbing, standing still has been replaced, and independent innovation has become an important standard to measure talents. However, there is still a big difference between college students trained by traditional education and innovative talents. Therefore, innovation and entrepreneurship education arises at the historic moment under the promotion of the Party in response to the requirements of development. Xi pointed out that the education supply reform will incorporate entrepreneurship and innovation education into the national education system, with students as the target and schools as the main body to promote creativity and innovation and drive the economy with innovation. In 2017, the 71st session of the United Nations General Assembly unanimously adopted Resolution 284, calling on all countries to support mass entrepreneurship and innovation, and designating April 21 as the "World Innovation Day", which has made mass innovation and entrepreneurship a global concept[1-4]. Although the problem of innovation is the focus of the government departments, but there are many problems in the development. Below, we will analyze the current development status of contemporary college students' art education innovation from the perspective of college graduates, and see what problems exist among them:

1.1 Influence of traditional career choice concept. On today's college students employment problem, always maintained a tradition of thought, is that you want to find more relaxed and work more comfortable and treatment and good, worthwhile things could not have happened, so many college students don't consider when employment

treatment of other lower jobs, the jobs demand extremely unbalanced, which limits the development of some industries.

1.2 Insufficient policy implementation. Although now the major schools in implementing the innovation education, but the effect is not obvious, the main government in this area do not reach the designated position, the support of the college students' innovative undertaking policy implementation and improvement, university student's creative and ideas, may be because of funding problems, and other hardware facilities is not complete, so an alternate way, This is also a major problem of college students' educational innovation.

## 2. RESEARCH COUNTERMEASURES

2.1 Cultivate the consciousness of innovation. Ideology determines action. To cultivate the innovative ability of college students, we must first improve their innovative consciousness. The innovation consciousness refers to the innovation intention, innovation desire and innovation assumption that people show in the creation activities according to the individual life development and social needs. The consciousness of innovation is the forerunner of creative thinking and innovative ability, which can motivate and promote college students to carry out creative activities.

2.2 Improve innovation ability. Innovation ability provides new ideas, theories, methods and inventions with economic, social and ecological values for all kinds of practices and technical fields. The competition in today's society is the competition of talents, especially the competition of college students with innovative ability. Higher vocational colleges should train students to be high-quality talents with innovative ability. To cultivate students' ability to find and solve problems and summarize experience from work, and to cultivate students' ability to consider and solve problems from various aspects and adapt to various aspects of development.

2.3 Improve the quality of teachers. Innovative education needs high-quality teachers as the guarantee. Art teachers are pioneers and implementers of art education, and the improvement of the teacher team is the top priority, which requires that our teacher team should have a reasonable structure, a combination of professional and professional, and need both theoretical knowledge and practical experience. Such a team of professional and part-time entrepreneurship teachers can not only promote the development of practice and education, but also equip

students with various abilities needed for entrepreneurship through innovative education, provide feasible opinions for the continuous development of students, and also provide various channels and social contacts for students who plan to start their own businesses in the field of fine arts. In order to cultivate a strong spirit of art and art ability of high-quality talent to lay a foundation.

2.4 Education in different levels and stages. Art innovation education should take into account the wishes and ideas of students of different grades, offer innovation and entrepreneurship courses in different levels and integrate knowledge into professional courses for students at different stages, so as to ensure a solid foundation of art skills and increase the feasibility of innovative practical knowledge. A strong appetite for innovation of the students in higher vocational colleges can actively constructing practice bases or incubator, in order to help students with innovative entrepreneurial intention and ability to participate in the real innovation environment, stimulate students' subjective initiative, can also organize regular lectures, seminars, information consulting and other activities for students, understand the latest information. Through expert lectures, entrepreneur seminars, alumni exchange meetings, enterprise visits and other forms to deepen students' understanding of the connotation of innovation, as well as the reserve of innovation knowledge and the improvement of skills.

2.5 Promote learning through competition and carry forward the spirit of craftsmanship. Various art major competitions jointly held by colleges and universities and enterprises can enhance the social influence of skilled talents, which can greatly mobilize students' enthusiasm for learning. Through competitions, outstanding talents can stand out, provide targeted training, and build a stage for skilled talents to compete, communicate and study together. We should attach importance to the cultivation of professional qualities characterized by craftsman spirit, and build artisans in major countries with higher core skills and professional qualities. We will vigorously promote the spirit of model workers and the spirit of

artisans, and pool a strong force for innovation.

"Innovation" is the key to innovation and entrepreneurship. "Rarity is valuable", this is the truth that we all know, to make the fine arts "rare", but also to do "good", can show its "expensive". "No one has me, people have me excellent, people excellent I create" has become the new motto of innovators. Of course, innovation should also be based on the principle of moderate innovation, and excessive novelty will not be accepted by the society.

College students are the future of our country. They have passion, dreams, abilities and experience. Of course, the most important thing is that they have the ability to be independent and the spirit of innovation. Although they lack experience and limited ability, it is of great significance for the whole society that they take the first step of innovation and entrepreneurship. With the development of the society and the formation of the innovation and entrepreneurship atmosphere in the society, more and more college students will embark on the path of innovation and creation and make their own contribution to the future of the country.

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# The Strategy of Infiltrating Humanistic Education Idea in Physical Education Teaching of Higher Vocational Colleges

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**Abstract:** With the acceleration of the process of social opening up, people have more and more opportunities to contact the world, and some people continue to introduce the advanced education ideas from abroad into China. As is known to all, higher vocational schools are an important part of the core talents in our country. The future society, so they must have a strong body, a healthy mind and a good work ethic to meet the needs of the society. This article will focus on how to permeate and the importance of permeating humanistic education in higher vocational physical education.

**Key Words:** Higher Vocational Physical Education; Humanities Education; Significance Of Infiltration

## 1. CONNOTATION AND SIGNIFICANCE OF HUMANISTIC EDUCATION

### 1.1 The basic connotation of humanistic education

Humanistic education, in the process of optimizing the educational system, enables students to gradually form a stable and noble character in learning, understanding and perceiving humanistic knowledge. Through the innovation of humanistic education concept, with student development as the focus, the construction of strategic educational objectives, to provide a good guarantee for the optimization of training and talent promotion. In the content construction of higher vocational physical education, educators should realize the importance of humanistic education, construct the education idea of sustainable development, develop comprehensively and harmoniously, and fully reflect students' humanistic feelings.

### 1.2 The importance of humanistic education in higher vocational physical education

According to the development of today's society and the learning characteristics of higher vocational students, the humanities course is introduced into physical education teaching to clarify the main position of students in teaching. This kind of concentrated teaching mode can better guide students to advance towards good physical and mental development.

It must be clear that the main significance and value of the current national vocational higher education reform is to promote students' humanistic consciousness in physical education teaching. However, higher vocational training is a major, the purpose of the course is to train a number of outstanding talents for the society, especially the core practical skills of higher vocational training[1-3].

## 2. NECESSITY OF THE INFILTRATION OF HUMANISTIC EDUCATION INTO HIGHER

## VOCATIONAL PHYSICAL EDUCATION

Analyzed from the overall situation of current economic development, the emphasis of higher vocational education teaching should be placed on maintaining the quality of students, and the importance of humanistic education can be seen from this. With the development of the global economy, the demand of the society for the quality of talents is gradually improving. In the high-level professional physical education teaching, students' high professional level and good physical quality should be maintained at the same time.

In order to stand firm in the fierce market competition and obtain professional skills for sustainable development, we must constantly expand our knowledge and skills under the background of rapid economic development.

## 3. STRATEGIES FOR THE PENETRATION OF HUMANISTIC EDUCATION IDEAS IN HIGHER VOCATIONAL COLLEGES

### 3.1 Emphasize students' subjectivity when designing teaching objectives

In the past, teachers, as the leaders and rulers of the classroom, seriously restricted the formation of students' learning consciousness when creating educational content. In addition, while teaching activities are carried out, all teaching activities are carried out under the guidance of teachers. Through the injection of P.E. class, students passively accept P.E. class. The emergence of this phenomenon also leads to the students become the passive people of physical exercise, the lack of innovation and interest in the classroom content, so that students have a relatively low interest in physical activities, tired of physical education, more serious. Therefore, in the current process of sports content innovation in vocational colleges, it is necessary to better penetrate the humanistic education idea, change the original education system, and improve the overall efficiency of physical education. Teachers should permeate the humanistic education idea to ensure that they represent students' subject status, and strengthen students' subjectivity and stimulate students' learning motivation through reasonable choice of teaching contents. Teachers should also respect students, pay attention to their emotional changes, and design classroom projects to motivate students to participate in activities. In addition, as a part of the content design of PE class, students can analyze their own needs, choose teaching methods, strengthen the flexible space of the class and improve their learning awareness by showing the subject state of students. Let the humanistic concept fully permeate into the sports in vocational colleges.



### 3.2 Develop differentiated physical activities

In order to realize the meaningful penetration of humanistic ideas, teachers should set up differentiated teaching projects within the framework of higher vocational physical education innovation that respects students' dominant position. P.E. educators should identify the differences of students' skills, analyze the different characteristics of students, combine with the basic situation of P.E. teaching, stimulate students' perception ability in P.E. courses, and achieve the ultimate goal of making students get along with themselves harmonious.4. Health. When designing differentiated teaching contents, teachers should take students as the center and comprehensively understand the framework conditions of students through reasonable design and systematic selection of teaching contents. For example, in the higher vocational physical education teaching content, some students have good physical quality, and some students have weak physical quality due to the differences between students. Therefore, teachers should develop targeted training methods. Students with poor performance in sports should pay attention to their poor physique. You may not be able to do long 800-meter and 1000-meter workouts at the same time. In order to achieve the teaching objectives, teachers can make use of their spare time to let students do physical exercise, improve the students' physique, to achieve the purpose of physical exercise. If teachers fail to recognize the differences among students in the classroom, education will fail, students' self-esteem will be damaged, and the ultimate goal of humanistic education infiltration will be lost.

### 3.3 Constructing humanistic innovative physical education teaching courses

With the reform and innovation of education concept, physical education workers should provide students with more opportunities for sports activities by optimizing the design of curriculum content, so that students can get inspiration from the learning consciousness in the whole environment. When selecting the content of physical education course, we should realize the construction of interesting education goal, so as to stimulate the basic needs of students. For example, when analyzing students' professional needs, educators should choose teaching contents wisely and construct teaching objectives according to students' learning interests and basic hobbies. With a good foundation for optimizing sports links, we will create a novel and interesting lesson plan. In addition,

educators should also subvert the humanistic teaching content and make the teaching atmosphere active so that students can improve the level of physical education under the guidance of the humanistic concept when developing the teaching content of physical education in higher vocational colleges. Educators should also actively guide students to participate in sports consciousness, through the physical education class let students set up life goals, firm faith, shape healthy personality, to achieve the innovative development of higher vocational physical education teaching content.

## 4. CONCLUSION

At present, when higher vocational colleges offer physical education courses, educators should realize the core position of humanistic penetration in physical education innovation, summarize the courses by analyzing the previous teaching experience, and optimize the quality of students. Sports programs according to their own needs. Teachers should play a leading role in the whole class so that students can improve their comprehensive quality on the basis of understanding the basic knowledge of physical education. At the same time, educators should also encourage students in the optimization of the innovative spirit of education projects, let students put forward their own opinions in the training process, in order to reduce students in higher professional academic and employment pressure, through humanistic care. The penetration of education idea can improve the comprehensive quality of sports students in higher vocational colleges and bring more high-quality professional talents to the society.

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# A Preliminary Study on The Training Mode of Contemporary University Students Under the Background of Curriculum Reform

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**Abstract:** College curriculum is a very important link of student education, which can be compared to the starting board on the road of life, it can make the ability of students to get a real promotion, is a very important link before students enter the society. However, the lag of the current education system can not provide a reliable guarantee for the improvement of students, so the curriculum reform of colleges and universities should be promoted in time, and strive to find a teaching method more suitable for The Times.

**Key Words:** Reform; Cultivation Mode; Language Use

## 1. CURRICULUM REFORM IS A NECESSARY CONDITION FOR THE CULTIVATION OF COLLEGE STUDENTS

The task of teaching journey is difficult and onerous. With the continuous progress of education in China, the pressure of education in China is also growing. Today's university education is mainly around the foster the growth of college students, today's university curriculum should need combined with the practice and research, to university students in learning to explore new knowledge constantly, this is the basic task of the current university education in our country, in the teaching activities as the basic carrier, lets the student in the learning progress. At present, educators need to improve the quality of college courses to lay a solid guarantee for the growth of students.

## 2. PROBLEMS EXISTING IN THE CULTIVATION OF COLLEGE STUDENTS

### 2.1 Lack of practical courses

Today's education in the society is a huge push and pull gradually lost the heart of teaching, the practicality of education is low, the knowledge learned can not be well applied to life, so that most of the contemporary college students after graduation choose to work and the major is not suitable. There is another point that is, the lack of practice of today's education, education only focus on the book classroom rather than life and society, such education is meaningless, is lifeless. Investigate its origin, and now the lack of education practice is mainly at the neglect of the importance of practical teaching, no attention degree, school and educators also does not take the initiative to carry out the corresponding practical course, so that the students do not know to learn to use, to learn how to greatly reduce the students' learning enthusiasm, let the students change passive, It restricts the exertion of the practical advantages of college teaching.

2.2 Neglect of guidance of ideological education direction  
At the same time, there are also many problems in

ideological education in China's higher education. Putting aside the importance of ideological education is only to elevate the status of theoretical learning. We can see from the present situation of ideological education that students and teachers regard ideological education class as a time to relax, rest and play. Some schools even change ideological education class directly into activity class. It can be seen from the above that the administrators and educators in colleges and universities lack the importance of ideological education and neglect it perfunctorily. Each inspection by the leaders is just a walking process. How can this play a guiding role in the establishment of students' values? Pedagogue is such, how to still guide the thought of the student is healthy development. The neglect of ideological education reflects the drawbacks of today's education. If it is not changed in time, it will only have a continuous negative impact on China's education in the future.

### 2.3 Lack of overall curriculum evaluation

In China's colleges and universities, most of the evaluation criteria for students is still based on scores, and the idea of a book for life is still prevalent in every aspect of the university. In such an environment and under high pressure, students are forced to study only for grades, lack of practicality for what they have learned, and can't really apply what they have learned. In the final analysis, it is still the problem of China's current education system that schools lack a comprehensive understanding and evaluation of students, thus leading to the current situation that students' value is determined by scores [1]. As it goes on like this, students' learning enthusiasm is constantly eroded and their interest in learning is gradually dissipated. What remains is only their anxiety to cope with the exam, which makes college education lose its true nature.

### 2.4 Lack of cutting-edge and high-end courses

In the present university education, the education courses of the school are basically still in the original state, and the teaching of Office software is still stuck on the old version of Office. In other courses, too, mathematics still places emphasis on basic mathematical principles, leaving little room for international advanced mathematical knowledge; Chemistry, on the other hand, is the understanding of molecules and elements, and does not involve any deeper chemistry teaching at all. Nowadays, with the continuous development of science and technology, the way of education in colleges and universities is stagnating, which can only reduce students' enthusiasm for learning and gradually make students dislike learning in the process of learning.

### 2.5 Low selectivity of courses

University now divided into compulsory and elective course, elective courses are less poor, account for half of the university is a compulsory course, it is difficult to let the students in the process of students really find suits own development direction, most of today's college students feel confused about the future is mostly for schools to implement this is caused by a single mode of education. College education must be developed in a more refined way, with disciplines being refined so that students can truly learn what they want to learn and what they are willing to learn. In the future, it is necessary to pay attention to the diversity of disciplines, instead of inculcating a large amount of knowledge to students all at once. In this way, not only students are under great pressure, but also teachers are under great educational pressure. Future university courses should give students more autonomy and allow them to develop independently, so that their innovation and creativity can be exercised in the study.

### 3. COLLEGE STUDENTS' TRAINING MODE AFTER REFORM

#### 3.1 Set up special courses and emphasize professional education

The characteristic of education is an extremely important label of education. Specialized education means more detailed specialty differentiation and more specialized learning content. This is not only the refinement of professional disciplines, at the same time, it will be the students' learning pressure cut to a certain extent, lets the student study pressure is not too nervous, let students really can have their own free time to the deeper research of self learning, or use the time to develop other interests [2].

#### 3.2 Change evaluation standards and strengthen comprehensive evaluation

A roll of fixed ideas about life, after all, in the student's future development will have a certain degree of limitation, to break the status quo, first of all to change the current assessment standard, let the score is no longer the sole criterion for evaluating students, students make evaluation of dribs and drabs of life, let the student behavior, lifestyle, personality character also become the standard of evaluation of students, But at the same time, we should be careful not to make the comprehensive evaluation superficial, not to become a new form of surface work, we should really put the comprehensive evaluation into every corner of students' study and life.

#### 3.3 Education should keep up with development and refuse to lag behind education

With the continuous development of science and technology and society, college education should not lag behind. Colleges and universities are places to train talents for the society. If they do not keep up with the pace of The Times, the innovation ability in education will not be

reflected naturally. In order to avoid the lag of education, the first step is to make appropriate adjustments to the courses of today's universities, let the current technology penetrate into the current education mode, and make colleges and universities become a place for the dissemination of advanced knowledge. In this way, not only students' interest in learning can be improved to varying degrees, but also the learning style of the school will develop to a certain extent.

### 4. COLLEGE STUDENTS SHOULD REDUCE OR AVOID MISTAKES IN COMMUNICATIVE LANGUAGE

#### 4.1 Pay attention to the cultivation of language ability

Now the students' language level and not neat, language ability education should be a focus of the university education, around the language education for college students, we should advocate college students read more English original data, strengthen the consciousness to cultivate college students' language ability, increase students' language learning practice, college students in the real environment constantly improve the level of their own language.

#### 4.2 Cultivate cross-cultural awareness and increase cultural sensitivity

Today's college language education should pay attention to the importance of cross-cultural training, so that students can be exposed to a wider range of language knowledge and a more diverse social environment in advance, so as to improve students' ability to deal with problems. In addition, we should also strengthen the sense of cultural identity of our country, maintain the sense of identity of mother tongue culture in a wide range of language learning, and achieve the original intention of not forgetting our roots.

### 5. CONCLUSION

As the last pass in the journey of students' learning, college learning brings students not only knowledge, but also a further understanding of society, family and friendship. Therefore, it is necessary and necessary for college education to be advanced. We should continue to explore new teaching models, so that students' learning to keep up with The Times, so that students can use the language with ease. We should polish our original aspiration and devote ourselves wholeheartedly to modern university education.

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# Selection and Optimization of Motor and Reducer for Industrial Robot

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**Abstract:** The motor and the reducer are the core parts of the industrial robot, and there are many kinds in the market. The motors and reducers used in industrial robots have the requirements of high precision, high bearing capacity and small volume. Therefore, the conventional motor and reducer do not have the performance to meet the application requirements of industrial robots. It is necessary to optimize the selection of industrial robot motor reducer through experimental analysis. Using dynamic simulation analysis and checking parameters, preliminary determination of the selection of the two, combined with experimental data comparison. Verify the accuracy of the parameter simulation analysis method, and finally determine the selection, which provides a reference for industrial robot motor and reducer selection optimization. This paper introduces a simple, accurate and fast selection method of robot motor and reducer, in order to optimize the structure design of robot and improve the performance of robot. In order to verify the accuracy and reliability of the simulation analysis method, the ADAMS software was used to simulate the robot dynamics by considering the interaction between each axis when the robot was moving, and the comparative analysis of the experimental data of the prototype was combined.

**Key Words:** Industrial Robot; Dynamics Analysis; Simulation Analysis; Motor Selection; Reducer Type Selection

## 1. INTRODUCTION

In order to ensure that the motor and reducer of the robot can work normally and give full play to their maximum performance under various working conditions, the following parameters need to be checked and compared, such as the maximum speed, maximum torque, maximum moment of inertia and power of the motor, etc. And the rated torque of the reducer, the allowable start and stop torque (that is, the maximum allowable torque in acceleration and deceleration), the allowable bending moment, the maximum allowable bending moment of the moment, the transmission ratio, etc. Through dynamic simulation analysis and check the above parameters, to determine the preliminary selection of the two, and then a large number of experimental data as a comparison, the final confirmation of the motor and reducer selection[1-5].

## 2. TECHNICAL BACKGROUND OF MOTOR AND REDUCER OF INDUSTRIAL ROBOT

In the manufacturing field of industrial robot motor and gear reducer, Japan has been in the leading position. In the 1950s and 1960s, a lot of theoretical research work on gear reducer has been carried out in Japan. By the 80's, a variety of new motor and new structure reducer research, has formed a series of products, and applied for a number

of patents. A series of theories, such as the result of the relevant graph, can calculate the relationship between the fluctuation of the number of clearance ratio of the reducer and the torsional vibration, calculate the parameter equation of the cycloid gear tooth profile, study the transmission accuracy of the cycloid planetary structure reducer with geometric method, consider the multi-stage transmission multi-cycloid gear transmission and multi-crank shaft structure, etc. Based on these technical contents, the main motor and reducer dynamic mathematical models are constructed, and on the basis of this theory, the influence of machining error of parts and assembly error clearance on the precision of motor and reducer is discussed. Aiming at the research of motor and reducer of industrial robot in China, the mathematical model system of computer clearance back error and the mathematical model of high-precision and high-bearing force analysis are gradually established with the help of high-precision structural design theory and method, and some achievements have been made in the dynamic simulation of motor and reducer of industrial robot. Focus on the motor's maximum speed, maximum torque, maximum moment of inertia, power and other parameters check, reducer's rated torque, start and stop allowable torque, allowable bending moment, instantaneous maximum allowable bending moment, transmission ratio and other parameters comparison.

## 3. KINETIC RESEARCH METHOD

The dynamics equation of industrial robot is very complex. In the process of specific dynamics research, the whole space position and the torque distribution of the moving joint should be considered, or the path torque of the prototype of industrial robot should be considered. Because of the huge amount of computation. Therefore, considering Newton Euler method, Lagrange method, high justice, Kane method, Robertson Wiedenburg method, based on this paper, the use of ADAMS software, simulation calculation solution, in order to avoid a large number of matrix equation increase the amount of calculation. The software functions, including the multi-rigid-body system dynamics equation system dynamics theory, through the equation calculation, can in the study of dynamics, the virtual mechanical dynamics system analysis data, through input the simulation data, fast output displacement velocity and acceleration, such as reaction force and torque curve data, thus to confirm the motor and reducer selection, Provide dynamic data reference.

Common robot dynamics research methods are as follows: Newton-Euler method, Lagrange method, Gauss method, Kane method and Roberson-Wittenburg method, etc., all have their own characteristics. Because of the complexity

of robot dynamics equations, it is very difficult to solve the torque distribution of the moving joint in the whole space position or just one path by manual calculation. Even using Matlab to solve the matrix equation, the amount of calculation is very large, but it is much easier to use the analysis and calculation function of ADAMS to solve the simulation. The software solver uses Lagrange method in the dynamics theory of multi-rigid body system to establish the system dynamics equation and conduct dynamics analysis on the virtual mechanical system. Output curve of displacement, velocity, acceleration and reaction force, moment, etc.

#### 4. MODELING AND SIMPLIFICATION OF VIRTUAL PROTOTYPE

Using SolidWorks software for modeling, the robot is assembled into a zero state, considering the following simplified parts.

4.1 The robot is in a relatively static state during the movement of each axis. And parts of the same density are modeled as a unified part body.

4.2 According to the ratio of the reducer, it is divided into two parts, one part is connected with the motor; The other part is connected with the output end part.

4.3 In the modeling process, the relative position, rod length parameters and part quality attributes are set according to the model assembly situation.

#### 5. IMPORT AND SETUP OF VIRTUAL PROTOTYPE MODEL

Save the modeling data of the virtual prototype as, and then open it in ADAMS software to uniformly set each parameter unit. By setting the density of the part and giving the quality attribute to the part, all the units related to the torque are in Newton meters (Nm) as the unified unit. In addition, select and set the constraint relationship between parts in the connector. The base and the ground are set as fixed constraints, and each joint of the robot is connected with the motor and reducer, and set as rotation constraints. Finally, according to the number of motors, motion parameters and instructions are added according to the relative motion of each joint of the robot.

#### 6. SETTING OF DRIVER FUNCTIONS

Select the desired motion parameters and instructions, select Velocity in the STEP, enter the driving function STEP(time, 0, 0 d, 1.5, 150d) +STEP(time, 2.5, 0d, 4, -150d) in the aging process, This function indicates that the control speed of the motor and reducer of the joint is 0°/s and gradually accelerates to 150°/s during the period of joint movement from 0 to 1.5 s. During 1.5~2.5 s of joint movement, maintain 150°/s speed of rotation; During the period of 2.5 ~ 4s, the velocity of the joint gradually decelerated from 150°/s to 0°/s. In order to obtain the maximum torque, it is necessary to meet the superposition of the maximum weight moment and the maximum moment of inertia, so the robot's pose and speed are required to reach the ultimate state, and the maximum speed is required.

#### 7. COMPARISON OF SIMULATION DATA AND EXPERIMENTAL DATA

The six-joint robot was selected as the simulation object, and the simulation results of the required output maximum

torque of the second joint under the same working conditions were compared with the experimental results. The initial pose is set as the point where the forearm of the robot extends to the maximum distance. At this point, the center of mass of the robot as a whole deviates from the rotation center of the first joint axis, and the deviation rate reaches the maximum. When the second joint is rotated, it can accelerate the rotation of the second joint to the maximum speed in the direction of anti-gravity in a short time, and the required output torque of the motor is maximum. Through the simulation experiment, the simulation test data is presented as follows: the maximum torque is 1268Nm, and the output torque of the motor is 18.6nm under the condition of 65% transmission efficiency. When the test experiment was started, the maximum current was 27.23A, the rated current of the motor was 11.2A, and the rated torque was 8Nm, then the maximum output torque of the motor was about  $27.23/11.2 \times 8 = 19.45\text{nm}$ , lower than the maximum torque of the motor 24N·m. Through data comparison, it can be seen that the converted results of the simulation data and the experimental data are relatively close, with the error rate less than 10%. Therefore, the simulation analysis results can be referred to for the later selection optimization.

#### 8. CONCLUSION

Based on theoretical mechanics and considering the influence of relative movement of each axis on the selection of motor and reducer, the robot dynamics simulation analysis was carried out by using ADAMS software, and the reliability of the simulation results was verified by the experimental data, so as to simplify and optimize the selection of robot motor and reducer. The results of the simulation data are close to the experimental data after conversion, and the error rate is less than 10%. The results of the simulation analysis are of reference significance for the later selection and optimization.

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# A Study on College English Translation Teaching and Flipped Classroom

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**Abstract:** Flipped classroom is a new form of teaching organization that is suitable for the background of information network. It subverts the traditional teaching process reasonably and effectively, and brings new ideas and new methods to the teaching reform. This paper focuses on the teaching implementation of flipped classroom in college English, objectively analyzes the problems existing in the teaching practice and the solutions, and explores the effectiveness and challenges of flipped classroom teaching.

**Key Words:** Flipped Classroom; College English; Research

## 1. THE DESIGN CONCEPT OF FLIPPED CLASSROOM

Flipped Classroom Mode, also known as Flipped Classroom or Flipped Classroom, is to adjust the time in and out of the Classroom in an information environment and flip the traditional teaching Mode. Compared with the traditional Classroom, Flipped Classroom has great advantages because traditional teaching only focuses on the inculcation and transmission of knowledge. Ignoring the inner absorption and digestion of students. The singleness of traditional teaching mode and means inevitably makes students fall into a vicious circle of lazy thinking and knowledge indigestion, and teachers' "teaching" and students' "learning" cannot cooperate effectively. In the flipped classroom model, knowledge is taught in advance before class, students take the initiative to learn and think and ask questions, and the internalization of knowledge is placed in class. Teachers change the traditional leading role and become guides and facilitators, and students change from passive learning to dominant learning. As the teaching process, from the emphasis on knowledge transfer, to the traditional model of teaching with learning gradually shift to emphasize in based on information network environment center, mainly learning mode of integrated exploration, the rollover model to students in learning the dominant position, overcome various defects of the traditional teaching mode and bring new ideas for education teaching innovation[1-7].

## 2. THE PRACTICE OF FLIPPED CLASSROOM IN COLLEGE ENGLISH TEACHING

The "English Curriculum Standards" issued by the Ministry of Education clearly states: "English curriculum learning is a process in which students gradually master English knowledge and skills and improve their ability to use the language through English learning and practice activities. It is also a process in which they temper their will, cultivate their sentiment, broaden their horizon, enrich their life experience, develop their thinking ability,

develop their personality and improve their humanistic quality." Based on this standard, the disadvantages of the traditional college English teaching model become more and more prominent. The idea of flipped classroom with information network as the carrier undoubtedly brings new vitality to the traditional teaching. Reasonable and effective teaching design can highlight the characteristics of the new teaching model and make up for the shortcomings of the traditional teaching.

The traditional college English teaching activities are still dominated by one-way teaching between teachers and students. Teachers have been in the role of lecturers for a long time, while students are in a relatively passive learning position. Classroom teaching lacks interactivity and students lack interest in learning. Under the flipped classroom teaching mode, the trend of increasing the interaction between teachers and students challenges the traditional teaching methods. With the deepening of curriculum reform in colleges and universities, it is required to attach importance to students' dominant position and cultivate good learning habits of students' independent learning, so as to realize students' comprehensive and comprehensive development. This requirement coincidences with the requirement of flipped classroom model for students' learning. Flip it, therefore, we need to promote classroom mode effective application in English translation teaching, teachers should change teaching idea, to respect the principal position of students, make students develop independent learning ability, they certainly to the issues raised in the classroom, to Orient the role of the teacher's own guide, guide the student to carry on the inquiry learning cooperation, willing to accept students put forward various points of view, Enhance the interaction between teachers and students to create a good atmosphere of English translation teaching.

## 3. PROBLEMS AND STRATEGIES IN COLLEGE ENGLISH FLIPPED CLASSROOM

Flipped classroom is still in the stage of exploration and development. In the process of teaching practice, various problems come one after another. Only by facing up to the problems, can educators analyze and solve them, can they continuously push the teaching reform and innovation to new heights.

### 3.1 Teaching hardware facilities

Flip the classroom practice is dependent on the network teaching platform and multimedia classroom, this requires pilot schools and related departments actively invest in the construction, APP and comprehensive promotion network teaching platform, the teacher with the school network teaching construction of zhenhai, to create a comprehensive, innovative teaching full cover, multi-channel, multi-dimensional new teaching space.

### 3.2 Ideological problems

Long tradition of teaching mode has been cure people of "teacher" and "students" cognitive, teachers "knowledge to reassure", students just listen and learn, this kind of education teaching mode and thinking seriously hindered the students' autonomous learning ability, passive learning seriously affect students seeking knowledge desire and study effect, therefore, change concept is particularly important. Students are the main body of learning, teachers are guides, teachers carefully design the teaching process, students take the initiative to learn and analyze problems, in this link, students' learning ability and active thinking constantly improve, the learning effect is natural, clear and efficient.

In the research on the application of flipped classroom model in teaching, many scholars have pointed out that in the application of flipped classroom model, the lack of students' learning consciousness is an important aspect that affects its effectiveness. Although college students have strong independent learning ability, their learning consciousness is still uneven, especially in the Internet environment filled with a large amount of information content, so that some college students find it difficult to concentrate on the study of English translated videos. When the flipped classroom model is applied to college English translation teaching, teachers should take this reality into consideration and formulate effective assessment methods to ensure the effectiveness of students' pre-class learning, so as to supervise students' completion of the learning of teaching videos. Teachers can adopt the method of combining the process evaluation and outcome evaluation of students' learning results, increase the proportion of the usual study results in the comprehensive results, and improve the students' attention to the teaching video learning.

### 4.CONCLUSION

In the current era of rapid development of Internet technology, the application of flipped classroom model to

college English translation teaching is conducive to improving the effectiveness of English translation teaching and realizing the comprehensive development of students' English ability. Although there are still many problems to be solved in the application of flipped classroom model in English translation teaching, and more college English teachers need to improve and develop it in practice, this teaching model will eventually be widely used with the curriculum reform in colleges and universities and the efforts of teachers and students.

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# Research on Algorithms of Multi-Source Information Fusion in The Internet of Things

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**Abstract:** Knowledge fusion is an important link of knowledge management and knowledge engineering. Acquisition of professional knowledge from the Internet of Things is the preferred way for people to acquire new knowledge. In order to obtain text knowledge with small granularity, high precision and complete, this paper proposes a knowledge fusion algorithm of multi-source information fusion in the Internet of Things. The text knowledge is structured by using ontology conceptual framework, and the conceptual framework is fused. Experimental results show that this algorithm can effectively solve the problem of text knowledge inconsistency and improve the efficiency of knowledge fusion.

**Key words:** knowledge fusion; Text knowledge; Knowledge inconsistency; Conceptual framework

## 1. INTRODUCTION

Knowledge is an important driving force of human social progress. With the advent of digitization and information age, the sources of knowledge have become more diversified. Among them, text knowledge is an effective way for human to acquire the required knowledge directly, so the study of text knowledge is particularly important [1-4].

Knowledge fusion is an important part of knowledge management and knowledge engineering. It mainly studies the transformation, integration and fusion of knowledge in distributed knowledge base system, and generates new knowledge. It is an interdisciplinary subject of knowledge science and information fusion.

By integrating multi-source knowledge into new knowledge, the connotation, level and confidence of knowledge can be improved [3], so as to further improve the knowledge base and provide knowledge-based services for human beings. At present, there are many kinds of knowledge fusion methods, among which the knowledge fusion algorithm based on Bayesian criterion and the knowledge fusion algorithm based on evidence combination theory are the most widely used. Because the Bayesian decision criterion has the minimum classification error rate, the application of Bayesian theory in knowledge fusion can decompose a large problem into several small problems that can be easily solved, and then use the hypothesis of maximum posterior probability to obtain the best fusion result. The combination of evidence theory D-S was proposed by Dempster in 1967 and further developed and improved by Shafer in 1976.

D-S defines the trust function and the basic probability distribution, and the final fusion is carried out according to the maximum support criterion. In modern society, although people can get the knowledge they need from

various media and expand their horizons, texts are still their first choice. Zoology is the key research direction of human natural science, the description of the same animal, due to different sources, its content is not the same. In order to solve this problem, a knowledge fusion algorithm based on ontology is proposed in this paper, based on the knowledge representation method of conceptual framework. By using the conceptual framework, the domain knowledge structure is visualized, and the further excavation of the knowledge base itself is realized to the greatest extent, so as to provide the object-oriented knowledge service.

## 2. RELEVANT WORK

For the multi-source knowledge fusion algorithm proposed in this paper, the text knowledge is processed by using ontology, and the appropriate knowledge representation method is selected to make the text clear and structured.

### 2.1 Ontology knowledge

Ontology is a kind of knowledge organization, which defines the basic terms and their relations that constitute the vocabulary of a certain domain, and defines the denotation rules of the vocabulary by combining these terms and relations, reflecting the essential characteristics of things. The combination of ontology and knowledge instances constitutes a knowledge base and becomes an effective tool for people to share and reuse knowledge.

### 2.2 Knowledge representation method

Knowledge representation is a core problem in the field of artificial intelligence. In knowledge engineering, the commonly used knowledge representation methods include predicate logic representation, production representation, frame representation, script representation, semantic network representation and object oriented representation. From the perspective of knowledge reusability and shareability ontology-based knowledge representation has gradually become a research hotspot. In this paper, knowledge is represented in the form of ontology-based conceptual framework, which makes the structure of textual knowledge more visualized.

### 2.3 Inconsistency type analysis

Multi-source text knowledge has strong heterogeneity, which is easy to cause knowledge inconsistency. The following are several common inconsistency types :(1) Inconsistency in concept names. In different sources of texts, there are often some differences in the description of the same thing. For example: China's treasured protected animal giant panda in Taiwan is called the panda, is actually the same kind of creature. (2) Time/date is inconsistent. In this paper, the inconsistent types of time/date are divided into two categories: ancient chronology type and modern chronology type. (3) The

type of measurement unit is inconsistent. Commonly used units include length unit, mass unit and time unit. However, different texts have different measurement standards for the same thing, which leads to the situation of inconsistent units. The height of a man is in centimeters. The height of a man is in meters. Specific types of commonly used units.

### 3. FUSION ALGORITHM

Different texts often describe the same concept differently, so you need to find a way to avoid the differences caused by heterogeneity. In this paper, a text knowledge fusion algorithm is proposed, which frames text knowledge from different sources. When the acquired concept names are the same but the content is different, the concept attributes are fused to form a new and complete conceptual framework.

### 4. CONCLUSION

This paper first introduces the ontology knowledge and the choice of knowledge representation method related to the research content, then analyzes the types of knowledge inconsistency, proposes a multi-source text knowledge fusion algorithm, and verifies the feasibility and effectiveness of the algorithm with an example. The multi-source text knowledge fusion algorithm proposed in this paper effectively solves the problem of text knowledge

inconsistency and improves the efficiency of knowledge fusion. The next step will be to explore how to better integrate textual knowledge from different sources under the condition of different concept names and the same content.

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# Application of Ultra High Liquid Chromatography in Drug Analysis

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**Abstract:** In recent years, the drug safety issue has been concerned by the public, coupled with the increasing demand for drugs, the quality requirements of drugs are becoming higher and higher. The separation technology of high performance liquid chromatography is an important means of modern drug analysis and quality control. It uses the column filled with small particle size filler and uses high pressure to transport the mobile phase, so that the column efficiency is higher than the conventional liquid chromatography, and the resolution is greatly improved. Ultra-performance liquid chromatography is based on high performance liquid chromatography, the use of smaller particles packed column, so that the resolution, analysis time can be improved to varying degrees. This approach is also better for the quality control of research drug products or drug control.

**Key Words:** High Performance; Liquid Chromatography; Preservative Application

## 1. INTRODUCTION

With the development of society, ultra-performance liquid chromatography (UPLC) has been gradually known and attracted more and more attention. High performance liquid chromatography with different detectors, so that different detectors have a higher application technology, greatly improve the work efficiency. First of all, the characteristics of ultra-performance liquid chromatography have played a significant role in some fields, and the rapid analysis speed and universality in the application process make it occupy an important position. Sensitivity and separation efficiency also belong to the important position. These advantages directly establish its irreplaceable important position[1-2].

High performance liquid chromatography (HPLC) is a new separation and analysis technology developed from gas chromatography and classical liquid chromatography in the late 1960s. It uses a new type of high pressure infusion pump, high sensitive detector and high efficiency particle stationary phase, in the separation speed, separation efficiency and detection sensitivity and automation have reached a perfect degree, the characteristics of its method are as follows.

(1) High separation efficiency With the new and efficient filling material as the stationary phase, the column efficiency of the column can reach the theoretical number of 30 000 plates per meter. (2) The detector with high detection sensitivity and the most widely used in high performance liquid chromatography is ultraviolet absorption detector, whose minimum detection amount can reach 10<sup>-9</sup> g. (3) Fast analysis speed High pressure

liquid chromatography uses a high pressure pump, infusion pressure up to 40 MPa, is the flow rate of mobile phase greatly accelerated, up to 1 ~ 10 mL/min, finishing a sample time is greatly reduced, just a few minutes. (4) Analysis of a wider sample range High performance liquid chromatography has a wider analysis range and can also analyze similar optical isomers. (5) Types of mobile phases Multi-performance liquid chromatography has a wide selection of mobile phases and is easy to manufacture.

## 2. HIGH PERFORMANCE LIQUID CHROMATOGRAPHY

High performance liquid chromatography technology is a mature technology, based on the classical liquid chromatography, gas chromatography experimental method and theory, through the online detection, high pressure pump delivery of mobile phase and high efficiency fixed equal methods formed. The main components of high performance liquid chromatography are injector, controller, high pressure infusion pump, treatment system, reservoir, data acquisition, column and detector.

### 2.1 High performance liquid chromatograph combined with fluorescence detector

Fluorescence detectors are used in a wide range of applications. They test compounds that have been derived and have fluorescent properties. At the same time, the common detector is composed of excitation light source, excitation monochromator and photodetector for detecting luminous intensity. This detector is generated by the emitted light after passing through the excitation light monochromator, and then this light is absorbed by the fluorescent material after passing through the sample pool, and the absorbed material is excited again, and then the fluorescence emission occurs again, and then through the receiving process is the working principle of this detector.

At the same time, the detector has high selectivity, only for the absorption of fluorescent substances, and the sensitivity is also high, the lowest value of 10 ~ 12μg/mL.

### 2.2 High performance liquid chromatograph combined with differential refractive detector

Differential refractive detector can detect the difference between samples for a long time. When a light source reaches another medium in one medium, it is refracted because the two media have different refractive indices. Relatively speaking, high performance liquid chromatography with differential refractive detector is different from the previous type of detector, this concentration detector is a response signal and solute concentration can be proportional to a kind of instrument.

### 2.3 High performance liquid chromatograph combined with evaporative light scattering detector

Evaporative light-scattering detector is a kind of universal detector, which is widely used in high performance liquid chromatography (HPLC), and as the evaporative light-scattering detector is become aerosol spray after, and then put the inside of the drift tube heated solvent evaporate naturally, don't spend the rest of the volatile solute particles in light scattering detection pool detection, such a series of process is its detection principle.

### 2.4 High performance liquid chromatograph combined with diode array detector

Diode array detector is an optical multichannel detector. In practical operation, multiple wavelengths of chromatogram can be detected at the same time and different comparisons can be made, and all the information of the sample can be obtained at one time, which greatly reduces the time and improves the work efficiency. Qualitative and quantitative analysis of the sample.

## 3. APPLICATION OF HIGH PERFORMANCE LIQUID CHROMATOGRAPHY IN DRUG ANALYSIS AND QUALITY

In the process of drug analysis, because the sample content is small, it will cause great difficulties for research, so a technology that can improve the speed and efficiency is needed in the research. Ultra-performance liquid chromatography (UHPLC) has solved these problems effectively, showing the importance of its characteristics. First of all, in the analysis of A1z, AzZ and A3z compounds, under the premise of ensuring the same analysis effect, using this technique can reduce the analysis time, while the accuracy and sensitivity are relatively high.

Secondly, ultra-performance liquid chromatography is commonly used in the study and analysis of conventional drugs. Mixture extraction and ultra-performance liquid chromatography are used to determine drug components simultaneously, and the analysis results can be accurate to the requirements of the Drug Administration.

The chemical composition of Chinese traditional medicine than western medicine in the chemical composition is complicated, so when using ultra high performance liquid chromatography analysis, can speed up the analysis at the same time to improve the accuracy, detect the presence of different chemical composition, on the separation degree, ultra high performance liquid chromatography detection of epimedium flavonoids ingredients than high performance liquid chromatographic (HPLC) technique is much better, In the process of research and analysis of many components of traditional Chinese medicine, it is difficult to determine the variety of compounds and the characteristics of large content differences are the key points of technical analysis. Today, the use of ultra-performance liquid chromatography (UHPLC) in pharmaceutical analysis can establish a better analytical platform for the full use of HPLC in drug analysis and drug quality.

## 4. CONCLUSION

To sum up, high performance liquid chromatography is a method that takes the advantages of both and makes the best of practical application. Classic liquid chromatography and gas chromatography led to a more perfect chromatography, known as high performance liquid chromatography. Therefore, the combination technology of the current detector is getting better and better, and the actual effect is also greatly improved. Similarly, this high efficiency and high accuracy method makes the detection technology of high performance liquid chromatography play an important leading role in drug analysis and quality control.

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# Higher Mathematics Teaching Research Integrating Mathematical Modeling Idea

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**Abstract:** With the rapid development of China's social economy, people pay more and more attention to the progress of education. As a very important basic course in colleges and universities, higher mathematics plays a positive role in promoting the development of education in our country. This paper clearly points out the deficiencies and problems in higher mathematics in colleges and universities. According to the existing problems combined with the idea of mathematical modeling, relevant solutions are formulated, so as to facilitate mathematics teachers in colleges and universities to better integrate the idea of mathematical modeling in teaching. This paper discusses the teaching and research of higher mathematics with the idea of mathematical modeling.

**Key Words:** Mathematical Modeling; Thoughts; Higher Mathematics; Teaching And Research

## 1. INTRODUCTION

Higher mathematics is a tool discipline for non-mathematics majors in senior colleges and universities. It can not only effectively cultivate students' innovation ability, but also form a good knowledge system, so as to help students learn better in their future study and life. It plays a crucial role in promoting teaching. Due to the special status of higher mathematics in the teaching of higher colleges and universities, mathematics teachers should make scientific teaching plans and teaching plans, effectively improve students' comprehensive ability, cultivate high-quality technical talents, and make outstanding contributions to the prosperity of our country.

## 2. STATUS QUO OF HIGHER MATHEMATICS IN TEACHING

According to the actual situation investigation, the present stage of higher mathematics teaching into the idea of mathematical modeling has achieved relatively good results, but there are still some problems, need to timely reconstruction and improvement.

### 2.1 The teaching content lacks certain rationality

Higher mathematics is different with that of the other students, its content is more, but the course time is relatively small, higher mathematics teachers can only catch up ways to instill the teaching material content, and described how to use the background for higher mathematics is less, this has been a bad phenomenon, students only clear formula and theorem of higher mathematics, However, they do not know how to apply the knowledge in real life. If the knowledge they have learned cannot be applied, their development will be seriously hindered [1].

### 2.2 The teaching method is too single

Higher mathematics in the process of teaching, to improve

the traditional "cramming" way teachers, enrich teaching content by means of examples, but ignored a problem greatly, higher mathematics teachers chosen example is too single, and not according to the actual situation of the students to look up, causing students interested in it, and loss of interest to learn higher mathematics.

### 2.3 Teaching methods need to be improved

With the development of science and technology, modern technology has been widely used in education. The application of multimedia technology has greatly improved the teaching quality of higher mathematics. The introduction of this technology has fundamentally changed the teaching methods of higher mathematics, and has become an important means of higher mathematics teaching today. But just only rely on the multimedia technology is no way to fundamentally solve the problem of higher mathematics teaching, students can't keep up with the rhythm of the teachers in the teaching, for interest, the content of the teacher says will only do some relatively simple questions, the teacher once the content is too complex, students began to wander. In traditional teaching methods, the blackboard, as the main teaching tool for teachers, is also an important means for teachers to sort out teaching ideas, which can greatly improve students' thinking ability [2]. Therefore, in senior colleges and universities, blackboard teaching and multimedia technology should be combined to improve the overall teaching quality.

## 3. INTEGRATE THE IDEA OF MATHEMATICAL MODELING INTO THE RESEARCH OF HIGHER MATHEMATICS

Although higher mathematics teaching has achieved relatively good results, but there are still some problems need to be solved, schools and teachers should attach great importance to this problem. In view of the deficiencies in the teaching process of higher mathematics at the present stage, as well as the achievements of mathematical modeling thought in China, integrating mathematical modeling thought into the teaching of higher mathematics can effectively improve students' ability to solve practical problems with the knowledge learned, so as to improve the application of students' basic knowledge.

In order to improve the overall teaching quality, we can start from teaching. In the actual teaching process, scientific teaching methods should be formulated to fully mobilize the enthusiasm of students and make them take the initiative to participate in teaching. At the same time, in combination with real life, the idea of mathematical modeling is integrated into the teaching of higher mathematics. The specific contents are as follows:

### 3.1 Improve traditional teaching methods

Some complicated and difficult reasoning models in the

traditional teaching methods are deleted, and some concise and profound mathematical theoretical knowledge is introduced to simplify the calculation methods and learn to use skills. The transformation of traditional teaching ideas should not only focus on the indoctrination of students' mathematical knowledge and thus ignore the application of mathematical knowledge in real life. Instead, the idea of mathematical modeling should be integrated into the practical teaching of higher mathematics and the characteristics and application of mathematical model of calculus should be emphasized [3].

3.2 Pay attention to the integration of mathematical modeling ideas

3.2.1 Focus on mathematical methods

When explaining the definition principle, teachers of advanced mathematics must integrate the idea of mathematical modeling into it, and focus on the application of mathematical methods. When analyzing functions, integrals and other concepts, they should make full use of the learned knowledge, integrate it into new knowledge, and turn the unknown into the known. For example, when advanced mathematics teachers explain the meaning of derivative, they can give different examples according to the major of each student. For students majoring in physics, derivative can be regarded as the change and rule of velocity. For students majoring in chemistry, derivatives can be thought of as changes and laws of chemical reactions.

3.2.2 Attach importance to the establishment of functional relations

We often regard functions as junior high school mathematics knowledge, without taking them into consideration in the idea of mathematical modeling, without taking variables of practical problems into it, and establishing relevant face washing. Teachers can build mathematical models through practical problems, and remind students of the aspects they need to pay attention to when building mathematical models, and make some assumptions. This not only enables students to understand the application of mathematical modeling ideas, but also improves students' learning enthusiasm.

3.2.3 Emphasis is placed on the application of mathematical knowledge and practical problems

After explaining the meaning to the students, the teachers of advanced mathematics should attach importance to the combination of meaning and practical problems, and strengthen the application by means of examples, so that the students can understand the application of mathematical knowledge and its specific value. For example, the second kind of curved integral, when the

teacher explains it, it is difficult for the students to understand, so the teacher can combine it with the work done by the variable force learned in physics, and the work done by the variable force with the second kind of curved integral, so that the students can fully understand it, but how to explain the properties? Directional examples can be used to enhance understanding and facilitate memory [4].

3.2.4 Pay attention to the application of derivative, integral and differential

Teachers of advanced mathematics can integrate the idea of mathematical modeling when explaining the application of derivative, integral and differential. The definition of "micro element method" is mainly derived from the meaning of definite integral, which guides students to understand the application of micro element. In clarifying the meaning of integral, the idea of "micro element method" has been widely used in mathematical modeling.

4. CONCLUSION

With the continuous development of science and technology and the continuous reform of education, the cultivation mode of talents is also changing. In the teaching of higher mathematics, teachers should attach importance to the integration of mathematical modeling ideas, change learning methods, change learning ideas, pay attention to the practical application of mathematical knowledge, stimulate students' interest in learning higher mathematics, realize the cultivation of innovative talents, and promote the sustainable development of China's educational cause.

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# Research on Automatic Production Technology of Cnc Machine Tool Based on Plc Technology

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**Abstract:** For a long time, CNC machine tools have been upgrading the supporting system of high cost, long time and other deficiencies. Therefore, this paper mainly analyzes the status of CNC machine tool, and based on PLC technology design a set of CNC and monitoring system, to achieve chip removal, cooling, control tool and equipment monitoring and a series of modern functions.

**Key Words:** Cnc Machine Tool; Plc Technology; Automatic Production Technology

## 1. INTRODUCTION

With the continuous progress of science and technology in the world, automation technology has been widely used in various fields, which has greatly promoted the change of the form of industrial production, transforming the previous artificial production mode into automatic intelligent production. In many automation equipment, numerical control machine tool has an indispensable role, in the supporting NUMERICAL control system through the pre-set program, can make the machine tool to complete the processing of a variety of high precision parts, to make up for the traditional manual or semi-automatic production mode. And, CNC machine tools greatly liberated the labor force, on the one hand to ensure high accuracy and production efficiency, on the other hand, also provide security for industrial production. However, CNC machine tools and supporting systems update fast, need regular maintenance. Although CNC machine tool aging has high processing performance, when it can not meet the processing needs of high-precision parts. If the purchase of CNC machine tools and supporting systems, will greatly increase the economic burden of enterprises. To do this. This paper will realize the automatic production of CNC machine tool based on PLC technology.

## 2. TECHNICAL ANALYSIS

### 2.1 1 PLC technology

PLC technology is mainly based on programmable controller, which can control embedded devices and control their output according to pre-programmed software program [1]. PLC technology has faster processing speed, accurate control, and can be extended, applied to CNC machine tools can improve the accuracy and precision of control, increase the use time of machine tools, further enrich the control function of machine tools.

### 2.2 Mechanical modification technology

In the process of upgrading CNC machine tools, the need for mechanical transformation technology as a good support, for the work table, tool table, slide seat and other components need to be upgraded. When transforming the worktable, on the one hand, the upgrade and installation requirements related to the control function should be met,

on the other hand, the manual control switch should be saved to prevent the need for manual access under special circumstances, and ultimately ensure the smooth and safe operation of the CNC machine tool. When reforming the tool rest, we should pay attention to the form of tool control and choose a reasonable tool rest according to the actual situation to ensure the effectiveness of tool control and improve the accuracy of tool control. When transforming the guardrail, attention should be paid to the faster running speed of the CNC machine tool after the transformation, and the protection demand is improved at the same time. After the transformation, the safety of the machine operator and the normal operation of the equipment should be ensured.

### 2.3 Circuit modification technology

Circuit modification technology is usually the focus of CNC machine tool upgrading, and the parts that need modification usually cover circuit interface, control switch and servo motor [2]. For the transformation of the circuit interface, it is usually due to the need to add other control equipment or change the control function. The circuit interface is responsible for the signal output of the CNC machine tool, so the corresponding circuit interface needs to be redesigned according to the different upgrade functions. The number and position of servo motors need to be changed because the process or precision requirements are improved. The transformation of control switch is generally due to the influence of the precision decline of NUMERICAL control machine tool after aging on the production and processing. In the transformation, the old switch is replaced with the new control switch to reduce the production risk.

### 2.4 Monitoring System

The monitoring system is the basic guarantee to ensure the stable operation of THE CNC machine tool. It monitors the temperature, vibration and other indicators in the operation of the machine tool in real time through the sensor technology, and transmits them through the network.

## 3. SYSTEM DESIGN AND IMPLEMENTATION

### 3.1 DESIGN and implementation of CNC system

The CNC system mainly consists of upper computer software, lower computer software, machine tool mechatronic components and database [3]. Among them, the upper computer software is mainly the machine tool operation monitoring system, which can analyze and process the data transmitted from the lower machine, and through the operator to issue control commands. The lower computer software is mainly a sensor device, used to collect temperature, vibration and other information. Mechanical and electronic parts of machine tools include motor, spindle, cutting tools, etc. The role of a database is

to collect and store data in real time. For the circuit upgrade, mainly focus on the control circuit and external I/O circuit. When the control circuit is modified, the external control of chip removal motor and cooling is realized through the contactor function. By controlling the PLC output point contactor, the coolant can be extracted by the motor to reduce the high heat caused by the friction between the tool and the workpiece. At the same time, through THE PLC output point contactor, can realize the bidirectional motor chip removal, to avoid the processing process of waste chips affect the machining accuracy. During the transformation of external I/O circuits, interfaces are usually redefined and connected to complete the transformation of input and output interfaces.

Mechanical transformation mainly includes cutting tools, working table, spindle, etc. The realization of the cooling function of CNC machine tools requires manual control of the cooling motor button, and the change of the button behavior will cause the operation and working state of the cooling motor to change accordingly. Its PLC programming control sequence is as follows: first for M code gating, set start and stop conditions, set code and button processing process, second for button input, judge start, work indicator light display, and finally for control cooling motor output. The main function of hydraulic station is to control tool loosening, clamping, using piston, pull rod and pull claw and other components, complete the process of tightening tool. The PLC programming control sequence is as follows: first, set the start condition and button input, then set the power start condition, judge the tool change mode, work indicator light display, and finally control the output of hydraulic motor. The machine tool chip removal function is mainly achieved by controlling the operation of the bidirectional motor, its PLC programming control sequence is as follows: first for M code gating, set the start processing, set the positive and negative processing, button input, second for judging the positive and negative, work indicator light display, and finally for the control of chip removal motor output. Tool control is mainly realized by controlling the positive and negative rotation, positioning and stopping of the spindle. The PLC programming control sequence is as follows: first, M code gating, tool starting conditions judgment,

control spindle start output, followed by spindle stop, judgment stop response, and finally for spindle output control and execution. The lubrication function of CNC machine tools is mainly completed by controlling the start and stop of the lubrication pump. By giving lubricating oil to the guide rail, it can improve the stability of machine tools and increase their service life. Under normal conditions, the lubrication work of machine tools will start by itself after operation.

### 3.2 Design and implementation of monitoring system

The monitoring system covers two functions: data collection and data processing. The data collection function covers three modules: device management, monitoring and information query. The data processing function covers two modules: data collection and data storage. Based on C# language and C/S operation mode of computer monitoring system development, can be in the machine tool monitoring system management interface query a number of information about the machine tool, including the spindle, bed, screw state. You can also query the running information about the monitoring component.

## 4. CONCLUSION

To sum up, based on PLC technology, can realize the function upgrade of CNC machine tool automatic production, effectively improve the machining accuracy of the machine tool, enrich the automatic control function, so as to enhance the automatic production efficiency of CNC machine tool.

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# Investigation and Research on Mental Health Problems of Poor College Students in Old Revolutionary Areas

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**Abstract:** Today, the principal contradiction in Chinese society has been transformed into the contradiction between the people's ever-growing needs for a better life and unbalanced and inadequate development. The third level is psychological needs, and more attention has been paid to people's psychological needs. We should increase basic research on mental health issues, do a good job in popularizing knowledge about mental health and mental diseases, and standardize the development of psychological treatment. Use "little bees" team visiting poor students information collection, one-on-one follow-up support four years in a row, using the relevant study to investigate the parent-school cooperative education, employment, interpersonal relationship, academic and career planning interaction of poor college students mental health problem, the result shows that give full play to the leading role of impoverished college students' own self education is the most critical and important.

**Key Word:** Poor College Students; Psychological; Mental Health; Bee

## 1. INTRODUCTION

In recent years, the rights and opportunities of poor college students to receive higher education have been guaranteed to a certain extent under the diversified and mixed aid methods of state award, loan, aid, reduction and supplement. However, with the changes of economic, social and ethical values, the mental health problems of poor college students due to material poverty have not been effectively solved in the short term<sup>[1]</sup>.

Huanggang, the old revolutionary base area, is economically backward. As a local college, many students of Huanggang Normal University come from the local rural areas in Huanggang, and their families are poor. Maslow's hierarchy of needs, an American social psychologist, rises in turn. "1) physiological needs, 2) safety needs, 3) social needs, 4) respect needs, and 5) self-actualization needs". In his opinion, physiological needs are the most basic and the most intense among all kinds of human needs. Due to family economic conditions<sup>[2]</sup>, poor college students often fail to meet even the most basic survival needs, and poverty leads to the formation of self-abasedness, isolation, isolation and anxiety<sup>[3]</sup>. Inferiority complex is the primary problem in college students psychological characteristics, economic poverty caused many college students are in a very fragile condition, their spirit and no rely on and on and on, many poor students

psychological pressure is too big, ultimately dropped even suicide<sup>[4]</sup>, it's not conform to the "people-oriented" social reality.

In order to better understand the poor students' family life, learning situation and psychological state, so that the poor students can get timely help, specially carry out the poor students visit survey, in-depth understanding of the poor students' family life and psychological state, put forward the corresponding solutions and measures. "Bee" team is in Huanggang Normal University studies ministry for honeycomb, teaching college student worker representatives visited the poor family as "bee", go there, visit object, during the holidays (winter or summer vacation), school teachers visit special poor family, on the basis of visiting, poor students information collected from a freshman, establish archives for poor students, the implementation of "one to one" support (each a poor student to specify a teacher or a student is responsible for the contact, dynamic tracking students (study, life, psychology, etc.) and out of poverty or senior, help link resources, such as; Need school financial aid, psychological counseling, work-study jobs, etc., so that its students can successfully complete their college studies. Effectively solve the practical problems of poor students. Meanwhile, the mental health status of poor and non-poor college students in Huanggang Normal University was investigated by using professional psychological scale SCL-90 to compare the differences between the two. By means of self-compiled questionnaire and individual case interview, the root causes of mental health problems of poor college students are deeply understood. Through the conclusion of the empirical study, the theoretical and practical guidance is provided to strengthen the ideological and political education and mental health education of poor college students, so as to effectively put forward the strategies and methods for the ideological and political education and mental health education of poor college students in local normal colleges.

## 2. RESEARCH OBJECTS AND METHODS

### 2.1 Research Objects

Survey object 1: Students of Huanggang Normal University were selected by hierarchical sampling. 500 questionnaires were distributed, 480 were recovered, and the recovery rate was 96%. Among them, 450 were valid, with an effective rate of 94%. 115 people in the survey, the number of freshmen and sophomore students, 126 junior students in 110 people, senior students in 99 people,

among them, the boys in 290, the number of girls, 160 liberal arts students 178 people, 272 people in science and engineering students, poor students 121 people, of which 42 people in cities, rural areas, 79 people, the poor students, 329, including 270 people in the city, 59 people in the countryside.

Survey Object 2:10 college students, 5 male students and 5 female students from Huanggang Normal University were selected.

## 2.2 Research Tools

### 2.2.1 Symptom Checklist 90 (SCL-90)

Clinical Checklist 90 (SCL-90) [5], also known as self-reporting Inventory, sometimes called Hopkin's Symptom Inventory (HSCL, compiled earlier than SCL-90 by the same author, HCSL was first compiled in 1954). Compiled in 1975 and written by L.R.Derogatis. This scale has a total of 90 items, including a wide range of psychiatric symptoms, including feelings, emotions, thinking, consciousness, behavior, life habits, interpersonal relationships, eating and sleeping, etc., and uses 10 factors to reflect the psychological symptoms of 10 aspects.

#### 2.2.2 self-made questionnaire

According to the existing research, the questionnaire on common mental health of poor college students was compiled by ourselves. It was an open questionnaire with 9 questions, mainly to understand the common psychological distress, psychological desire for help and basic social support of poor college students. Typical questions such as: When you have a problem, especially a psychological problem, what do you usually solve? In general, who do you turn to for help?

#### 2.2.3 Case interview

Through semi-structured interviews, the author has an in-depth understanding of the mental health, social support, willingness to seek help and self-acceptance of poor college students.

#### 2.3 Test procedures

For the first two questionnaires, a collective test was carried out. Questionnaires were sent to schools and then collected. The case interview was carried out in the way of face-to-face communication.

#### 2.4 Statistical processing of data

SPSS11.5 was used for statistical processing and analysis.

## 3. INVESTIGATION RESULTS AND ANALYSIS OF PSYCHOLOGICAL PROBLEMS OF POOR COLLEGE STUDENTS

### 3.1 Comparison of mental health status between poor and non-poor college students

Independent sample t-test is used to test the difference between poor and non-poor college students in SCL-90 scores [6], and the results are shown in Table 3.1. The results show that there are significant differences in somatization, obsessive-compulsive symptoms, interpersonal sensitivity, depression, anxiety, psychosis and SCL-90 total scores, and the scores of poor college students are significantly higher than those of non-poor college students.

Table 3.1 Differences in seizure of the poor students and poor students in the SCL-90

Poverty group poor group

factor T

average standard deviation average standard deviation  
somatization 1.60 0.17 1.50 0.16 2.75\*\*

Forced symptoms 1.59 0.13 1.51 0.17 3.32\*\*

Interpersonal sensitivity 1.89 0.12 1.42 0.12 3.23\*\*

depression 1.79 0.14 1.45 0.17 3.77\*\*

anxiety 1.72 0.15 1.54 0.11 3.24\*\*

psychotic 1.69 0.17 1.43 0.11 2.75\*\*

### 3.2 Psychological problems detection rate of poor college students in SCL-90

According to the scoring rules of the SCL-90 scale, if the factor reaches 2, the item is considered to have symptoms; if the factor reaches 3, the problem severity of the item is above medium, which may require further diagnosis and treatment [7]. As shown in Table 3.2, almost every factor was detected by poor college students, among which the highest detection rate was anxiety symptoms, followed by obsessive symptoms.

### 3.2 Detection rate of psychological problems of poor students in the SCL-90

factor  $\geq 2$ (number) Detection rate(%)  $\geq 3$ (number)  
Detection rate(%)

somatization 17 14 10 12

Forced symptoms 39 32 12 10

Interpersonal sensitivity 23 19 12 10

depression 23 19 11 11

anxiety 89 74 48 40

psychotic 15 12 6 5

### 3.3 Comparison of mental health status and norms of poor college students

The mental health level of poor college students in this sample is compared with the domestic norm, and the sample T test is carried out. As can be seen from Table 3.3, the factors and total scores of poor college students in SCL-90 are significantly higher than the domestic norm and reach a significant level [8].

### 3.3 Poor mental health of students and the norm

factor poor students(N=121) national norm(N=1388)

average standard deviation average standard deviation  
somatization 1.60 0.17 1.37 0.48 3.91\*\*

Forced symptoms 1.59 0.13 1.62 0.58 9.27\*\*

Interpersonal sensitivity 1.89 0.12 1.65 0.61 3.99\*\*

depression 1.79 0.14 1.50 0.59 6.35\*\*

anxiety 1.72 0.15 1.39 0.43 7.11\*\*

psychotic 1.69 0.17 1.29 0.42 9.11\*\*

### 3.4 Results of self-compiled questionnaire survey

Nine open-ended questions were designed to investigate the responses and responses of poor and non-poor college students to these questions.

Question 1: what do you think is the most difficult thing in your college life?

As for the answer to this question, the main questions include the following aspects: The first is the worry about employment. Students from rural areas and poor families, in particular, generally expressed concern about the issue. This is also the reality of today's society. With the increasing employment pressure of college students, employment has become the focus of common concern for all. Especially in the senior students, the performance is particularly prominent, because they will directly face the

employment problem, is inevitable. The second problem is interpersonal problems. Among college students, there are not a few who are troubled by interpersonal relationship. This is the first time for many students to leave their hometown, and living in a collective dormitory is not suitable for many of them. Lack of social skills and inability to communicate with others is a serious problem. At the same time, college life, unlike high school as there is a heavy workload, the students are in the classroom every day, mutual communication and exchange is more convenient. The third is learning difficulties. This point is mainly reflected in the expression of science and engineering students. Because in university, a lot of learning content and process are mastered by oneself, need to play a leading role in the learning process, and there is little supervision from teachers. In addition, the light workload makes many students focus on recreational activities and fail to complete their academic tasks in time. Especially with the popularity of the Internet and computers, more and more college students sink in the Internet, and meet a lot of difficulties in their studies, or even can not complete their studies and drop out of school, which has brought serious harm to the family and society. Fourth, career planning and development. Today's society is a pluralistic era, filled with a variety of values [12]. At the same time, college students are also faced with a variety of choices. On their future to become a what kind of person, what kind of career and so on these questions, is often discussed by college students. In this question, there is no obvious difference between poor and non-poor college students.

Question 2: when you are in a bad mood, do you seek help from others?

In response to this question, 80 percent of college students said they would like to ask others for help, especially when they are sad. But there are also some people, especially poor college students, who do not seek help from others, but hide it in their heart or try their best to solve the problem.

Question 3: when you are in trouble, especially when you are in psychological distress, what is your usual solution? For the answer to this question, there are mainly the following aspects: first, to talk to friends; Second, talk to your parents. Third, talk to the teacher; Fourth, go to the Internet or smoke, drink and exercise to vent; Fifth, keep a journal.

Question 4: generally speaking, who do you turn to for help?

For the answer to this question, the people who ask for help most are their family members and close friends, and there is no difference between poor students and non-poor students on this point.

Question 5: when you encounter psychological problems, are you willing to turn to the psychological counseling center for help?

In response to this question, the majority of people said no, as long as a few people said they would like to go to the counseling center for help.

Question 6: to what extent can you usually get psychological support from your parents?

For the answer to this question, non-poor college students are obviously more affirmative than poor students, indicating that it is completely or easy to get psychological support from their parents.

Question 7: To what extent do you usually get psychological support from your teachers?

There was no clear distinction between poor and non-poor students in the answers to this question, both of whom said they received less support from school teachers.

Question 8: to what extent can you usually get psychological support from your classmates?

For the answer to this question, there is no obvious difference between poor students and non-poor students, both of whom indicated that they received more support from their schoolmates.

Question 9: Overall, are you satisfied with your mental health?

In response to this question, most of the poor students were dissatisfied with their mental health, while most of the non-poor students were satisfied with their mental health.

### 3.5 Case study results

A semi-structured interview was conducted with 10 poor college students [13] to deeply understand their thoughts and psychological states. The specific results are as follows:

Question 1: what aspects of your college life do you think will be affected by financial reasons?

In answer to this question, poor college students believe that economic reasons will affect their personal life in the following aspects: First, they need a lot of financial support to attend skills training, such as English training, driving test, postgraduate entrance examination, civil service examination and so on. Secondly, the individual nutritional status is improved. Some poor college students live a very tight life indeed, the school's various aspects of the subsidy is limited. So they have to spend less on food, so malnutrition exists. Third, employment intention. In terms of employment choice, students from poor families mostly choose those remote areas or grass-roots units, because the consumption level in big cities is relatively high, and for poor college students who are not well-off, they will face greater pressure of survival. Fourth, socialize. As the saying goes, college campus is also a small social circle. The interpersonal relationship between the students need to interact with each other, eat together, entertainment together. If a friend's birthday will buy gifts, please have a meal and so on. However, due to financial constraints, poor college students refuse or avoid these activities, which have a certain negative impact on their social relations, leading to long-term isolation and a certain sense of inferiority. In these aspects, poor college students are obviously constrained by economic conditions.

Question 2: do you think people around you have certain prejudices against you? If so, how did you handle it?

The answer to this question: some poor students think it exists, while others think it doesn't. This suggests that different people have different social perceptions of the problem. Those who think "there" are poor students who

feel that their wealthier classmates sometimes look down on them and feel they are often pitied. Eat better by yourself, buy more expensive clothes, etc., always feel supervised. When dealing with these biases, they often avoid them. Think "no" poor living, then feel family economic difficulties also nothing, as long as their self-reliance, in other aspects can exceed others, do better than others, will get the appreciation of others.

Question 3: Are you satisfied with your current situation in life?

In response to this question, most of the poor students said they were not satisfied with their living conditions. It is mainly reflected in the following aspects: First, I need to further develop my studies to make myself more outstanding; Secondly, psychologically, we need to further overcome those inferiority, throw away the burden, and live a more sunny life. Thirdly, I need some opportunities to exercise my personal ability. Only in this way can I achieve better development and get the opportunity to stand out in the future job hunting.

Question 4: do you feel that society, including the school, has given you enough help or support?

In response to this question, most students believe that society and school provide them with great support, especially financial support, which enables them to successfully complete their studies. However, social and school neglect psychological care and support. In addition to financial assistance, they also need the psychological support of achievement.

Question 5: what do you think of asking others for help? Including financial, psychological and other aspects of help.

In response to this question, most of the poor students think that they have no choice but to ask others for help, especially for financial help. They want help from others, but not handouts. But they don't complain as much when others can't help.

Question 6: how do you view yourself as a poor student?

In response to this question, most people think that they can not decide their own birth, only to have a good acceptance of their own reality, can better have a clear understanding of themselves. Difficulties are not terrible, as long as they insist on self-improvement, will get the respect of others, later life will be better and better.

#### 4. ANALYSIS ON THE PROBLEMS AND CAUSES OF THE MENTAL HEALTH OF POOR COLLEGE STUDENTS

Through the above quantitative and qualitative research results, it is not difficult to find that the main problems existing in the mental health of poor college students are as follows<sup>[14]</sup>. First, the interpersonal relationship is self-closed, inferiority and self-esteem coexist; Second, widespread depression; Third, serious anxiety, material vanity and ideological dependence. Investigate its main reason is first, the family is poor, the economic pressure is heavy; From the results of research and investigation, economic reasons may be one of the main reasons for the mental health problems of poor college students; Secondly, the bad culture of the society has brought psychological troubles to the poor college students. Third, employment

pressure, dream and reality conflict. March, April and May of each year are the peak of the outbreak of psychological problems of graduating students. During this period, it is common for college students to commit suicide and self-harm. The main reason is employment. Fourth, individual personality difference is large, lack of correct self-cognition.

#### 5. CONCLUDES

Colleges and universities should strengthen the financial aid to poor college students and establish an all-round and diversified financial aid system. In order to build a harmonious family atmosphere, stimulate their own potential, give full play to the leading role of poor college students in self-education is the most critical and important.

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# The Impact of Internet Environment on Cross-Border E-Commerce Consumption Economy

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**Abstract:** This paper briefly summarizes the cross-border electricity business operation to the consumer economy, in the form of the status quo, this paper mainly discusses the Internet environment on cross-border electricity consumption economy expanded trade channels, reduce the transaction threshold, increase the competitive strength and increased risk of four big influence, and puts forward the measures to perfect the credit system and increasing government support.

**Key Words:** Internet; Cross-Border E-Commerce; Consumer Economy

## 1. INTRODUCTION

With the rapid development of information technology, sales in the real economy can no longer meet the consumer needs of the masses. E-commerce has seized the development opportunity at the outlet of the Internet and gradually expanded in the market. In recent years, the consumer economy of cross-border e-commerce has undergone greater changes under the influence of the Internet environment.

## 2. OVERVIEW OF CROSS-BORDER E-COMMERCE CONSUMPTION ECONOMY

Cross-border e-commerce refers to the development mode of international trade by relying on Internet information technology and using major electronic trading platforms. Since cross-border e-commerce is completed by consumers and merchants far away through the e-commerce platform, it has three main features. The first feature is its global nature. Since it no longer relies on physical stores to sell goods, people around the world can buy the goods they need. The global reach of the Internet has helped this form of consumption grow. The second feature is that it is invisible. Similarly, due to the virtualization of the network, consumers can not actually touch the goods, most of the goods are invisible, relying on digital transmission to achieve data sharing and communication. The third feature is its efficiency. Since people no longer need to go out to buy goods, it saves a lot of time for the consumption process, and its consumption efficiency has been greatly improved. The prosperity of cross-border e-commerce consumption economy is completely dependent on the rapid development of the Internet. Due to its global, intangible and efficient characteristics, it helps consumers all over the world to make global consumption without barriers and limits, which constitutes the prosperity of consumption economy [1].

## 3. THE IMPACT OF THE INTERNET ENVIRONMENT ON THE CONSUMPTION ECONOMY OF CROSS-BORDER E-COMMERCE

### 3.1 Expand the trading channels

The continuous expansion of the coverage of the Internet has helped the service scope of cross-border e-commerce to further expand, and its transaction channels are more and more broad. In the past, trade could only be carried out in countries with developed Internet, but with the technological breakthrough of the Internet, the transaction channels are more and more abundant. For example, the traditional foreign trade platform does not support the pay treasure payment or WeChat, lead to consumers in the overseas commodity purchase need to transform the terms of payment, the operation process is very troublesome, but now most of the platform in order to promote economic, cross-border electricity consumption has eased the terms of payment request, more convenient for consumers to buy. In addition, in the initial stage of the Internet, there were few cross-border e-commerce, and trading platforms were also scarce. However, with the gradual expansion of the Internet, more and more merchants joined the sales mode of cross-border e-commerce, and trading platforms emerged in an endless stream.

### 3.2 Lower the trading threshold

Along with the Internet technology constantly breakthroughs, cross-border electricity trading threshold is gradually reduced, mainly embodies in the change of the postage, the previous goods postage would probably more than the price of the goods itself, but with the progress of the Internet to promote the logistics development of the economy, although now goods postage still exist, but compared with before has dropped a lot of, It has greatly lowered the barriers to trade. In addition, merchants no longer need to own stores to carry out cross-border e-commerce business. Often, a small warehouse or a small room can meet the demand for transactions. It is no longer necessary to store up a large amount of goods, and the risk of loss is reduced a lot. With the development of the Internet, overseas e-commerce business is no longer monopolized by large enterprises. Any overseas personnel with excellent credit can develop their own e-commerce business by using the Internet. Some merchants do not even need to use the platform for sales, but through the wechat sales mode for business development.

### 3.3 Improved competitiveness

Although the Internet provides many overseas electricity development opportunities, but also brought a lot of competition, for the start stage, on the Internet outside electricity mainly compete and entity shop, due to its global and convenience has great advantage, and with the popularity of the Internet, overseas competition between electricity is becoming more and more big, enterprise and individual wechat business competition, Both large and small businesses are becoming more competitive.

### 3.4 Increased trading risk

Although Internet help outside the electricity consumption and economic obtained fast development, but also increase the risk of trading for its, because the Internet expanded overseas electricity trading range, led to many illegal businessmen emerged and selling fake and inferior products to consumers, make consumers suffer economic losses but also waste of waiting time, Or some of the more extreme individual businesses of the consumers to buy more after pin, directly led to the legitimate rights and interests of consumers suffered serious violation, and difficult to liability, while a case can be done via the Internet, but its investigation is difficult, take a longer time, eventually leading to the heart of the consumer lost the trust of the overseas electric suppliers, The consumer economy will also fall [2].

#### 4. HOW TO PROMOTE THE DEVELOPMENT OF CROSS-BORDER E-COMMERCE CONSUMER ECONOMY IN THE INTERNET ENVIRONMENT

##### 4.1 Perfect the credit system

If a consumer economy wants to prosper more, it needs to protect the legitimate rights and interests of consumers and businesses in the economy. The most effective way is to improve the credit system. For merchants, if they want to get a share of cross-border e-commerce, they first need to ensure that their personal credit meets the requirements of e-commerce platform without bad credit. At the same time, the platform needs to confirm the source of their commodities, and for some sensitive commodities, they also need to ensure the selling qualification of merchants. For e-commerce services set up by enterprises, the platform is required to review their qualifications, check their enterprise license and legal person information, etc. The platform needs to punish illegal e-commerce businesses. When the accumulative valid complaints exceed the prescribed limit, the platform needs to ban the online sales qualification of the businesses, and make every effort to protect the rights and interests of consumers. Only by mastering the credit information of merchants in detail and allowing consumers to supervise the information, can we ensure that consumers trust merchants and more effectively avoid sellers selling fake and shoddy products. For consumers, the platform also needs to do a good job of credit supervision. Due to the anonymity of the Internet, many netizens do things that are not in line with the contemporary values, such as maliciously brush bad reviews to blackmail merchants,

and charge fees to make malicious complaints to merchants, resulting in lower credit value of merchants, etc. Therefore, the platform also needs to do a good job of consumer data management, help merchants to verify such consumers and make certain consumption restrictions. Only when consumers and businesses supervise each other can the credit system be perfected to the maximum and the consumption economy of cross-border e-commerce be guaranteed to continue to prosper.

##### 4.2 Increase policy support

In order to sustain the consumer economy of cross-border e-commerce, the government should increase its support. On the one hand, it is necessary to increase the development of the Internet. Only with more and more healthy development of the Internet can cross-border e-commerce be guaranteed to continue to carry out confidently. On the one hand, it is necessary to increase support for cross-border e-commerce. As long as its products are legal and compliant, the certification standards of cross-border e-commerce can be appropriately relaxed to help more and more small enterprises to embark on the development path of cross-border e-commerce.

#### 5. CONCLUSION

In a word, under the Internet environment, all consumer economies are changing, and cross-border e-commerce has been greatly affected. In order to promote the development of cross-border e-commerce consumer economy, both the government, businesses and consumers need to keep up with the tide of Internet development and timely adjust their development strategies.

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# To Explore the Anesthesia Convalescence Nursing of Nerve Block Combined with Tracheal Intubation General Anesthesia for Hip Arthroplasty

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**Abstract:** Objective To analyze the nursing measures of nerve block combined with tracheal intubation general anesthesia for hip arthroplasty during anesthesia convalescence. Methods From April 2020 to April 2021, 50 patients who received nerve block combined with tracheal intubation under general anesthesia and hip arthroplasty in our hospital were included in the study. In the recovery period of anesthesia, corresponding nursing intervention measures were given to observe the complications of the patients. Results All the 50 patients successfully completed the operation, 5 cases appeared respiratory depression, 4 cases hypoxemia, 4 cases hypothermia, 3 cases nausea and vomiting during anesthesia recovery. Conclusion In the recovery period of anesthesia after hip arthroplasty with nerve block combined with tracheal intubation under general anesthesia, more complications are likely to occur. It is necessary for nursing staff to strengthen monitoring and take corresponding measures for possible complications to promote postoperative recovery.

**Key Words:** Nerve Block; Tracheal Intubation General Anesthesia; Anesthesia Convalescence Nursing

## 1. INTRODUCTION

The elderly are the common group of hip fracture. Currently, surgery is the main treatment for hip fracture in clinical practice. Hip replacement has great trauma to the body, and nerve block combined with endotracheal intubation general anesthesia is the basic to ensure the smooth operation [1]. However, due to the relative special characteristics of elderly patients, the decline of physical function, poor tolerance to anesthesia, and the greater risk of anesthesia, it is necessary to take appropriate nursing intervention in elderly patients with hip replacement [2]. This paper mainly analyzes the nursing measures during the anesthesia convalescence of nerve block combined with tracheal intubation under general anesthesia for hip arthroplasty, for specific reference below.

## 2. OBJECTS AND METHODS

### 2.1 Subjects

The subjects of this study were 50 patients who received nerve block combined with tracheal intubation and general anesthesia for hip arthroplasty in our hospital from April 2020 to April 2021. Among them, 30 cases were male and 20 cases were female. The age range ranged from 60 to 72 years, with an average age of (65.47±3.47) years. Types of disease: 21 cases of femoral neck fracture,

15 cases of femoral intertrochanteric fracture; 14 cases were osteoarthritis of the hip joint. This study was reviewed and approved by the Medical Ethics Committee of our hospital. All patients and their family members were informed of the study content and signed the agreement.

### 2.2 Methods

2.2.1 After entering the anesthesia convalescence period, closely observe the changes of the patient's vital signs, and deal with the abnormalities quickly.

2.2.2 Respiratory care. Due to the influence of endotracheal intubation and surgical operation, laryngeal spasm and edema are easily caused, and hypoxemia may occur in severe cases. Therefore, dexamethasone should be given according to the doctor's advice, and oxygen inhalation with mask should be taken according to the situation. Pay close attention to the patient's oral cavity and nasal cavity, and timely clean up excessive secretions to ensure normal breathing.

2.2.3 Vomiting and aspiration care. Inhalation of vomit will cause respiratory obstruction and even death. If the patient has aspiration, should immediately turn the head to one side, changed to prone position, absorb respiratory secretions. Flush the respiratory tract with normal saline to avoid infection.

2.2.4 Restless care: use restraining tape to bind appropriately, and give oxygen according to the situation to prevent respiratory obstruction.

2.2.5 Thermal insulation care: give patients thermal insulation blanket, reasonably adjust the temperature of resuscitation room, and appropriately improve the ambient temperature. The heating blanket is placed on the sheet, the patient lies flat, the heating blanket is connected to the warm blanket machine, and the heating gas is continuously blown into the bed. The temperature of the heating blanket should be kept at about 40°C. At the same time, the patient's blood pressure, heart rate, oxygen saturation and other vital signs were closely monitored. When the patient's anal fever reached more than 40°C, the temperature of the heating blanket was lowered.

### 2.3 Observation Indicators

The complications of all patients in the recovery period of anesthesia were counted, including respiratory depression, hypoxemia, hypothermia, nausea and vomiting, etc.

### 2.4 Statistical analysis

SPSS21.0 software was used to study and analyze the data. [n(%)] was used to represent the counting data. X<sup>2</sup> was



used to test the data between groups, and  $P < 0.05$  was considered as the difference, which was statistically significant.

### 3.RESULTS

All the 50 patients successfully finished the operation, and the awake time was 12 to 20 minutes, with an average of  $(16.14 \pm 2.17)$  minutes. In the recovery period of anesthesia, 5 patients presented hypotension, 4 patients presented hypoxemia, 4 patients presented hypothermia, and 3 patients presented nausea and vomiting, as shown in Table 1.

Table 1 Complications of all patients during anesthesia convalescence [N (%)]

complications	The number of cases	Composition than
Respiratory depression	5	10.00
hypoxemia	4	8.00
hypothermia	4	8.00
Nausea and vomiting	3	6.00

### 4. DISCUSS

Hip arthroplasty can effectively relieve joint pain, improve joint deformity and restore hip joint function. Hip arthroplasty is difficult to operate, so it requires a higher anesthetic effect during the operation [3]. Nerve block and tracheal intubation general anesthesia are the most commonly used anesthetic methods, which can play a significant analgesic effect. After the operation, the anesthetic drugs gradually recede, and the patients enter the recovery period of anesthesia. However, due to the different metabolic rates of different anesthetic drugs, the body function will be affected to different degrees, and at the same time, some anesthetic drugs remain in the body, leading to physiological function discomfort [4]. In addition, a large amount of bleeding during the operation leads to insufficient blood volume, and under the influence of anesthetic drugs, symptoms such as increased heart rate and restlessness are easy to occur in the recovery period [5]. Therefore, it is of great significance to take effective nursing intervention in anesthesia convalescence period and reduce the occurrence of complications to ensure the surgical effect and improve the prognosis.

This study showed that in all the 50 patients, 5 patients developed hypotension, 4 patients developed hypoxemia, 4 patients developed hypothermia, and 3 patients developed nausea and vomiting, indicating that targeted

nursing intervention measures were beneficial to reduce the occurrence of related complications. In the anesthesia convalescence nursing, strengthen the monitoring of patients' vital signs, abnormal conditions can be found in time. And the nursing work in anesthesia recovery related complications as a breakthrough point, based on past experience for a variety of possible complications to take corresponding nursing intervention, including respiratory tract nursing, vomiting aspiration, hypothermia nursing and restlessness, etc., to ensure that patients breathe unobstructed, reduce the oxygen consumption, maintain emotional stability, so as to reduce the risk of complications. It plays an active role in preventing complications.

### 5.CONCLUSION

In conclusion, targeted nursing measures for patients with nerve block combined with tracheal intubation under general anesthesia for hip arthroplasty during anesthesia recovery period are beneficial to reduce the incidence of related complications and accelerate postoperative recovery.

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# Analysis of Machining Error

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**Abstract:** In the process of modern social operation, the machinery industry plays a very important role, has a great impact on People's Daily work and life and social construction; However, appear easily in the daily some machinery enterprises in the production process of machining error phenomenon, affecting the quality and accuracy of mechanical products, therefore, relevant business leaders need to improve the emphasis on the phenomenon of machining error, and strengthen the introduction of modern advanced technology and equipment, to ensure the maximum extent, reduce the error phenomenon occurrence probability, Ensure the quality and precision of mechanical products, and lay a solid foundation for the continuous and stable operation of the enterprise itself. The following is mainly to analyze and explore the machining errors and solutions.

**Key Words:** Machining; Error; Measures

## 1. SPECIFIC OVERVIEW OF MACHINING ERRORS

Generally, the machining error of the so-called mainly refers to the mechanical parts after processing, its shape, size and other information with the default values, there exist certain differences between in the practical work, technicians can adopt some techniques and methods, analysis of error, and reduces the probability of the machining errors, guarantee quality and accuracy of mechanical products processing, At the same time, it promotes the improvement of production efficiency and economic benefits. In general, modern machining errors can be mainly divided into geometric errors, original errors, errors caused by stress and thermal deformation and other types [1].

## 2. SPECIFIC FACTORS THAT CAUSE MACHINING ERRORS

### 2.1 Positioning factors

The research shows that, in the process of machining, there are some differences between the design process of the jig and the ideal design, and there are some phenomena such as the coincidence of the datum in the positioning process, which leads to the deviation of the datum, which affects the actual machining process. And if the actual processing of positioning error beyond the tolerance range, will lead to a gap between the fixture and the component, resulting in machining error phenomenon, not only affects the quality and accuracy of mechanical parts processing, but also affect the later production and processing.

### 2.2 Factors related to machine tools

As we all know, the machine tool is a very common equipment in the process of modern mechanical processing, which affects the efficiency and quality of production and processing to a great extent; However, due to the influence of the characteristics of the machine tool itself, errors are easy to occur in the daily machining process. The main reason is that there is a certain gap

between some guide rails and lead screws when the machine tool is in motion and the preset data, which results in machining errors.

### 2.3 Factors related to cutting tools

At the same time, in the process of modern mechanical processing, the tool will also cause the phenomenon of machining error, in the daily processing, most of the relevant personnel using lathe tool, boring tool, grinding tool and milling cutter, and according to different processing parts to choose the appropriate tool, to ensure that the quality and precision of the component to the greatest extent; However, with the extension of use time, the tool will appear different degrees of wear, and the strength and shape of the tool itself will change, which leads to the late processing process is easy to affect the shape and precision of the component, increasing the probability of machining errors.

### 2.4 Process factors

In addition, in the process of modern mechanical processing, processing technology occupies a key position, which determines the level and quality of processing; However, due to the elastic deformation that is easy to occur in the process of parts processing, the position of force point of parts processing changes, and different processing schedules have different force points, which leads to the occurrence of errors [2].

## 3. TO STRENGTHEN THE RESOLUTION OF MACHINING ERRORS

### 3.1 Strengthen the processing of the original error

In the current period, in order to strengthen the processing error problem, improve the processing accuracy and quality, the relevant enterprise leaders first need to improve the understanding and attention to the processing error phenomenon, clear the specific characteristics of the error phenomenon; In the practical work, technicians can strengthen process inspection work, in order to deal with the original error phenomenon, reduce the probability of error scene, guarantee the quality and precision of mechanical parts processing, at the same time, relevant enterprises on production equipment purchasing, also need to know about the various manufacturers to investigate, Choose the best quality and reliable and high credibility of the manufacturer to purchase, and the relevant tools and fixtures and other materials for strict testing, to ensure that its own specifications, performance, such as in line with the needs of production and processing, to avoid the occurrence of processing error phenomenon, for the enterprise itself and the industry as a whole to lay a solid foundation for the healthy development.

### 3.2 Strengthen the implementation of production principles

Usually, due to the complex production process of some mechanical parts, if it is not standardized management, it is easy to have bad problems, affecting the quality and

precision of parts; In order to avoid the occurrence of these problems, in the actual machining process, the enterprise leaders need joint technical personnel, etc., to develop a strict production principles, and implement it to the actual machining process, strictly regulate the administration of production and processing personnel, avoid machining error due to personnel error problem; In the process of modern mechanical processing, the common principles are mainly given priority to the first after the second, the first surface after the hole and the benchmark first, etc., and the processing personnel can establish multiple surface datum points to guarantee the processing accuracy, to ensure that the probability of machining error phenomenon is reduced to the greatest extent.

### 3.3 Strengthen the control of stable deformation

When the machining process is carried out, because the actual processing is easy to appear high heat, which leads to the tool or component in the processing process of thermal deformation phenomenon, with the extension of processing time, the degree of deformation is deepened, which affects the normal use of the component in the later period; In order to change this situation, in the daily processing, processing personnel can use the application of coolant and other materials, or in the car and other equipment to install heat dissipation equipment, physical heat dissipation treatment, at the same time, the relevant personnel can also be added in the spindle and components of a certain lubricant, to avoid the emergence of friction heat generation phenomenon, On the other hand, the connection between the machine tool and the heat source can be reduced or cut off, so as to avoid the influence of excessive heat on the processing process to the greatest extent.

### 3.4 Strengthen the application of error compensation

In addition to the above measures, in order to strengthen the process of machining error phenomenon, relevant enterprises and personnel can also strengthen the application of error compensation, through the process artifacts for people to create new error and error compensate to the original, make it won't affect

components processing quality and precision, to ensure quality and accuracy in modern machinery manufacturing and processing [3].

## 4. CONCLUSION

To sum up, the machinery production and processing industry, as an important link in the operation of modern society, has a great impact on the operation and development of all walks of life; Therefore, in the practical work, the relevant enterprises and researchers need to fully understand the mechanical processing, and spend a lot of money resources, strengthen the advanced technology and equipment research and development innovation, and combined the relevant departments, to create a more perfect management system and standard, controls on the actual production process specification, avoiding the phenomenon of traditional processing error; At the same time, related enterprises also need to strengthen the training of professional and technical personnel, and with the help of modern technology and equipment and facilities, improve the quality and precision of processing, promote the improvement of enterprise production efficiency, economic benefits and social benefits, and then promote the further development of modern mechanical processing industry and the society as a whole.

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# The method of Corporation Law -- As the example of forging shareholder's signature

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**Abstract:** With the continuous development of social economy, the application of corporate law in judicial practice has become more and more extensive. Based on the legislative style of my country's "Combination of Civil and Commercial", the current research on company law appears to be particularly important. Based on the case of forged shareholder signatures, the method of researching company law is guided, and the case is evaluated from the three aspects of the case summary, the main points of the judgment, and the theoretical analysis, and the method of researching the company law is explored from abstract levels such as legal thinking, value orientation to concreteness. Level legislation technology and other aspects, explore the current civil law and company law cases should be pursued in the judicial concept of "when the people are the people" and "when the business is the business", correctly understand the relationship between civil law and company law, and emphasize the importance of civil law. Modesty.

**Keywords:** The Unity Of Civil And Business; Legal Thinking; Modesty

## 1. INTRODUCTION

With the advent of the Civil Code of the People's Republic of China (hereinafter referred to as the Civil Code), the application of law between civil law and other private laws in judicial practice has reached a new stage. As one of the important commercial laws, the study of company law is an important way to explore the relationship between company law and civil law. Starting from case analysis, this paper explores the difference and connection between the civil law and the company law by taking the forged shareholder signature as an example, and provides new ideas for the method of studying the company law under the background of the Civil Code, so as to promote the development of civil and commercial law[1-13].

## 2. COMMENT AND ANALYSIS ON THE CASE OF FORGING THE SHAREHOLDER'S SIGNATURE

Through a comprehensive analysis of the forged shareholder signature case, starting from the basic situation of the case to explore the gist of the judgment and further scientific analysis, in-depth exploration of the gist of the judgment of the case, scientific analysis of the legal behavior behind the forged shareholder signature, which is the basis of the method points from the case analysis to the study of the company law.

### 2.1 Summary of the case

Yin Binglin is the shareholder of Guangzhou Kun Rong Computer Service Company (hereinafter referred to as Kun Rong Company), accounting for 20% of the shares. On December 13, 2016, KongXianglu, Guangzhou Juyu Investment Co., Ltd., and Rongbang Technology Co., Ltd.,

the other shareholders of Kunrong Company, made a company resolution through the shareholders' meeting without notifying Yin Binglin. In addition, he forged the signature of the plaintiff Yin Bailin on three documents, including the Articles of Association of the Company, the Shareholders' Contract for Transfer of Capital Contributions and the Resolution of the Shareholders' Meeting, and went through the formalities of industrial and commercial registration. On September 18, 2017, without informing Yin Binglin, Kun Rong Company informed other shareholders to hold a meeting of shareholders together, and made a resolution of the meeting of shareholders and a resolution of the meeting of shareholders to amend the Articles of Association, forged the signature of Yin Binglin, and went through the formalities of business registration.

Now the first-instance judgment confirmed Kun rong company on December 13, 2016 to the shareholders' committee resolution, limited the company's articles of association shall be invalid, cancellation Kun rong company made on September 18, 2017 the shareholders' committee resolution, the limited the company's articles of association. A second trial court for the appellant Yin Binglin appeal cannot be established, the first-instance judgment if the facts are clearly ascertained, applicable law is correct, Therefore, the original judgment was upheld.

### 2.2 The essence of the judgment

Forging a shareholder's signature is a typical corporate law problem. However, in this case, the judgment of first instance supported almost all the appeals of the plaintiff Yin Bailin, except for the Shareholder Transfer of Capital Contributor Contract, which identified the internal transfer of equity by shareholders. The judgment of the second instance supported all the basis and viewpoints of the first instance.

On the court in accordance with the civil law of the entrusted agency, unauthorized agency, by ruling that the civil legal norms related to identified Yin Binglin daughter instead of Yin Binglin signatures and other shareholders on the corporate resolution instead of Yin Binglin signature belongs to the unauthorized agency, and do not have appropriate power of attorney, shareholders Yin Binglin no subsequent ratification, decided that instead of signature properties as unauthorized agency, Therefore, it is invalid to judge that the two resolutions of the shareholders' meeting infringed Yin Binglin's right to participate in the shareholders' meeting as a shareholder. Because the shareholders' internal transfer of equity does not involve the issue of pre-emptive right, it is judged that the shareholder transfer contract is valid. This is the whole idea of the judge in this case.

### 2.3 Theoretical analysis

Above all, the author is not approbation of the judgment result and legal basis. The reason is that the resolution effectiveness of forged signature is a typical problem of the company law, but the court chooses to apply civil legal norms to achieve the purpose of protecting the personal interests of shareholders, which is obviously not in line with the spirit of the company law. This kind of judgment thought is actually standing on the position of protecting the personal interests of shareholders, ignoring the protection of the interests of the company. The application of civil law to forge shareholder's signature does not adhere to the accuracy and impartiality of judicial judgment. Although from the appearance, the basis of judgment is still based on law as the basic principle of trial, but because of the mistakes in the application of law, the "law" of the trial by law has deviated from the correct track.

Therefore, from the perspective of the Company Law, in order to protect the interests of the company, the resolutions and articles of association that are invalidated and revocable in the above cases should be valid. The validity of shareholders' meeting resolution in company law should not be judged by applying the legal thinking of civil law. Civil law is mainly to protect the interests of oneself, while company law should give priority to the protection of the interests of the company. In this case, all the resolutions of the shareholders' meeting and the revised articles of association of the company have been registered with the industry and commerce, and legal benefits have been generated out of trust. Moreover, the shareholder Yin Binglin sued the resolution of the shareholders' meeting and the articles of association of the company for the cancellation or invalidation of the resolution of the shareholders' meeting and the company's articles of association occurred more than one year after the shareholders' meeting was held. At this time, the request to confirm that the company's resolution is invalid or revocable will in fact affect the normal and stable operation of the company, which is obviously not in line with the requirements of the company law to maintain the stability and continuity of the company. Therefore, the author believes that this judgment excessively protects the personal interests of Yin Binglin, the shareholder, while neglecting the protection of the overall interests of the company, and does not reflect the legal thinking of the company law.

### 3. SECOND, STUDY THE METHOD OF COMPANY LAW FROM FORGING SHAREHOLDER SIGNATURE

The above analysis of the specific circumstances of the case and the relevant judgment and legal basis has a guiding role for the study of the method of company law. From the analysis of this case, it can be concluded that the method of exploring the company law should be analyzed from two levels: abstract and concrete. The abstract level should be analyzed from the legal thinking and value orientation, while the concrete thinking should be analyzed from the legislative technology.

#### 3.1 Legal thinking

Good legal thinking is the basis and premise of accurate understanding of law. The judicial thinking of the case mentioned above belongs to the typical civil law thinking, without considering the thinking of the company law. When it comes to the difference between the civil law and the company law, the legal thinking of the civil law is the thinking of protecting one's own interests. Compared with commercial law, civil law is a kind of ordinary private law. Therefore, the adjustment scope mainly focuses on the legal relationship between equal subjects such as natural persons. On the premise of protecting personal interests, civil law takes into account the protection of national interests and public interests. The thinking of civil law can trace back to its source with a kind of humanistic concern, which also stems from the fact that the original intention of establishing civil law is to better show the concern for natural person and protect the development of human dignity of natural person through legal means. Therefore, the thinking of civil law is to protect fairness and justice, maintain social stability and development.

Therefore, it can be seen from the above judgment that Yin Binglin himself, the shareholder, has not been infringed on the rights and interests of his shareholders. In fact, the judgment in essence, is to protect the interests of the individual shareholders. Therefore, the applicable legal norms are also civil rules and civil legal provisions. Obviously, the thinking of civil law is very important, but it should not be applied in the cases of the company law at will. The particularity of the company law as a commercial law should be respected.

The legal thinking of company law should first be identified as the thinking of group law. We should realize the characteristics of self-restraint and self-management in group law. In other words, for group law, the first thing to realize is that its legal subject should be a whole rather than an isolated individual, which is also the reason why majority rule is often adopted in the self-management and self-restraint of the company as a legally artificial person in the company law rules. In terms of the company law, the most important interests to be protected are the interests of the company, and the members of the company, namely the shareholders, are responsible and obligated to the whole group of the company. The core element of shareholders' duty of loyalty to the company is that the controlling shareholders should not put their own interests above the interests of the company when exercising their control over the company, but should give priority to the interests of the company and minority shareholders.

#### 3.2 Value orientation

To understand a law, we should first analyze it from the value protected by the law, that is, the value orientation. The judgment of value orientation should be combined with the legal thinking mentioned above, so as to more accurately grasp the core of a law from a macro perspective.

When it comes to the value orientation of civil law, it is to protect the interests of oneself, protect social fairness and justice, and protect the interests of the public. From the development course of the value orientation of modern civil law, from the autonomy of private law to the

protection of people, from the equality of civil subjects to strengthening the protection of the weak. We are always constantly improving and developing the scope of the protection value of civil law in the process of social development, but in general, the value orientation of civil law is still around the individual, mainly to protect their own interests and static interests. In fact, the nature of civil law is a law to protect rights, so we should build a system of private law centered on civil rights, and implement the basic idea of autonomy of private law in civil law.

The value orientation of the company law is to protect the interests of the company first. Although the current company law also has the protection of shareholders' rights and interests in the legislative guiding ideology, the fundamental and most important thing is to protect the interests of the company. Only when the company can survive and develop for a longer time can the vitality of the current market economy be promoted. In terms of the value orientation of company protection, it is inevitable that the individual rights of shareholders will not be protected. For this kind of situation, we need to combine the legal thinking of the company law mentioned above to understand together. At this time, if the case is tried in accordance with the legal thinking of the Company Law, the personal interests of Yin Binglin, the shareholder, may not be protected. Of course, the legal interest protected by the company law itself is of value orientation. It has also been mentioned above that in the order of protection of the Company Law, the company is ranked before the interests of shareholders.

### 3.3legislative technology

In combination with the contents of legal thinking and value orientation, we can see the contents of company law and civil law concretely, and what is embodied in the legal norms is legislative technology. To learn the company law, it is necessary to first understand the legislative spirit, legal thinking and value orientation of the law from the macro perspective, and then understand the specific legal system and provisions from the micro perspective. Only in this way can we grasp the company law from the macro to the micro, from the subjective thinking to the objective provisions and from all aspects more effectively.

From the legislative technical point of view of the company law, there are also relevant legal provisions on the agency of exceeding authority in the company law. Article 170 of the Civil Code stipulates the norms of commercial agency, clarifies the legal source of the power of agency in commercial agency, and establishes the provisions on the effectiveness of the agency beyond the power of commercial agency within the scope of its functions and powers. The legal agent in the company has many powers in the management and implementation of the internal affairs of the legal person, but these powers are subject to constraints, which include: first, by the legal provisions of the constraints. Second, the company is bound by the articles of association. If we follow the thinking of the company law, this case may not be applicable to the agent exceeding his authority in the company law, and the analysis is only made on the case that the reason for application in the court decision is the

representative exceeding his authority in the civil law.

As mentioned above in the order of protecting interests in the Company Law, the priority is to protect the interests of the company, followed by the interests of shareholders. In this case, how to protect the interests of shareholders on the basis of protecting the company is the requirement of the current legislative technology. According to Article 3 of the Judiciary Interpretation (I) applicable to the Company Law in this case, Yin Binglin, the shareholder, can apply to the law for cancellation within 60 days after the shareholders' meeting makes a resolution. It is a trade-off between the stability of the company and the interests of shareholders. Legislation technology shows that it is very clever to balance the interests of all parties within a certain scope. The judicial interpretation is that the provisions can not only effectively guarantee the stability of the company, after all, 60 days compared with the three-year statute of limitations for civil infringement of civil rights, has greatly reflected the efficiency pursued by the company law and the stability of the company. At the same time, it also gives shareholders a certain way of relief, and can request the court to revoke it within a certain period of time to protect the interests of shareholders.

### 4.STUDY THE RELATIONSHIP BETWEEN COMPANY LAW AND CIVIL LAW FROM THE METHOD OF COMPANY LAW

The purpose of studying the method of company law is to accurately explore the relationship between civil law and company law. In the concrete practice, we should fully and accurately grasp the relationship between the civil law and the company law, "when the people is the people", "when the business is the business" is to better achieve judicial fairness and justice. Correct understanding of the modesty of civil law is conducive to the development of civil law and company law under the background of optimizing the business environment.

#### 4.1 When the people are the people

As can be seen from the above method of studying company law, civil law is different from company law in many aspects. For example, in legal thinking, civil law is individual law and corporate law is group law; In terms of value orientation, the civil law protects individual interests while the company law protects the interests of the company. However, in the current law, there are legal issues in the company law to the civil law, which is obviously not in line with the legal development. In the course of judicial practice, the interpenetration of civil law and commercial law forms the problem of the application of norms which is worth taking seriously. In today's civil and commercial integration of the legislative system to pay full attention to civil law, commercial law adjustment of social relations are equal between the main body of social relations , emphasize the commonality of private law norms and the unity of private law, can better achieve the unity of civil law, commercial law concept.

Since civil law and company law are two different kinds of private law in nature, it should be realized that the legal issues in the field of civil law should be applied accurately, rather than the general application of civil law no matter what the problems in the field of private law. It is also

necessary to recognize that civil law, as a citizen's right law, infringes upon the rights and interests of individuals; When static interests are infringed upon; When social stability is violated; Civil law may be applied in such cases as when the public interest is violated. This is the conclusion that combines the legal nature of civil law and legal thinking and so on. Therefore, when the people are the people, the people should not hesitate to apply the civil law, respect the civil law as an independent department of law status, and more respect the legal nature and legislative purpose of the civil law.

#### 4.2 When business is business

When the commercial legislation is insufficient, the relevant rules of civil law are applied to solve the problem, which is to fail to correctly understand the particularity of commercial rules. The logical path of civil law, which is people-oriented and centered on rights, is not applicable to commercial law. Since its birth, commercial law has centered on "profit making". Therefore, in the case of different legal thinking, a correct understanding of the particularity of commercial rules can help us better understand the relationship between "civil law and company law".

In fact, the thinking of commercial judgment is still based on the building of commercial thinking, such as the thinking of respecting and protecting the transaction in commercial judgment; Efficiency thinking; Respect for corporate autonomy and so on. Any act of a commercial subject shall be presumed to be a commercial act with a profit-making purpose, unless it is expressly or implicitly non-profit-making. This is one of the manifestations of the protection of trading and profit-making thinking in commercial activities. The short-term prescription system in commercial law aims to promote the rapid settlement of commercial transactions, and it gains quick social benefits at the expense of the creditor's prescription interests, which reflects the value orientation of modern commercial law. The emphasis on efficiency in commercial conduct urges the commercial trial to proceed promptly without delay. At the same time, due to the activity of commercial activities, many commercial trading opportunities exist for a very short period of time, which also makes the period of commercial trial tends to shorten. For example, some small procedural defects in the trial of the company do not affect the effectiveness of the company's resolution and so on, which are in order to ensure the efficiency of the company's litigation. According to Article 14 and 15 of the fourth judicial interpretation of the Company Law, it can be seen that the court also fully respects the company's autonomy of will when judging the shareholders' rights such as the right of distribution within the company.

Based on the diversity of commercial laws and the technicality of commercial rules, we recognize the particularity of commercial rules, which should be adjusted by commercial laws. Therefore, under the circumstances of grasping the particularity of commercial rules, it will help us to correctly understand the legal connotation of "the supplementary application of civil law". As a special private law, commercial law should be

protected to a certain extent.

#### 4.3 Correct understanding of the modest principle of civil law

Exploring the legal relationship between civil law and commercial law is a perennial question. In China, the legal circle generally believes that the relationship between commercial law and civil law should be defined as the relationship between special law and general law. The adoption of the "civil and commercial integration" legislative style in China is not simply a complete incorporation of commercial law norms into the civil law. On the premise of distinguishing the commercial legal relations from the civil legal relations, it is believed that the civil law is the general law of the commercial law and the particularity of the commercial law should be affirmed. Commercial law and civil law belong to the category of private law. However, how to treat the status and mutual relationship between the two in the legal system, is still a problem that remains to be further explored. In terms of the application of law, civil law and commercial law can not be simply summed up as private law that can be applied to each other by specific relevant legal provisions. Although the civil law is regarded as a general law and commercial law as a special law, it is in line with the legal thinking under the current legislative system of integrating civil and commercial law in China, it is still necessary to correctly understand the legal relationship between civil law and commercial law in application.

First of all, the author does not deny that both civil law and commercial law belong to the category of private law in China's legal system, and jointly contribute their own indelible strength to the construction of a social legal system with Chinese characteristics. Under the current legislative system of civil and commercial integration, the legal provisions of the civil law are regarded as general legal provisions, while the commercial law is regarded as special law. In the case of commercial legal problems, the special law is superior to the general law. This is the choice made by the civil and commercial legislative system in combination with China's current social conditions. However, when there is no way to solve the commercial legal problems within the scope of commercial legal norms, it is actually an embodiment of the omnipotence of civil law to directly consider the application of civil law instead of categorizing and applying specific problems. In today's civil and commercial integration system, almost natural at the same time accompanied by the lack of civil law, excessive problems. The insufficient commercialization will lead to the double weakening of the application mechanism of the commercial law rules reflecting the commercial demand in the legislative theory and the interpretation theory, while the excessive commercialization will harm the rationality of the general civil rules and the self-sufficiency of the institutional system. This requires us to accurately grasp the specific problems in the application of civil and commercial law. Second, in today's rapid development of economic and social environment and the country to develop the business under the influence of environment of policy, to correctly grasp the legal relationship of civil law and

commercial law in the applicable, is not only for us to realize the connection between the civil and commercial law, is actually more important for our correct understanding of the civil law and commercial law is to protect the interests of the different. Although civil law provides commercial law with some ideas and tools of private law, commercial law has its own special ideas. The interests protected in civil law are actually their own interests, static interests, with emphasis on fairness and justice. The interests protected by commercial law are the dynamic interests, the interests of the third party, emphasizing the security and efficiency of transactions. Only by recognizing the differences in legal thinking between civil law and commercial law can we better grasp how to apply civil law and commercial law in practice. Finally, on the basis of clarifying that the relationship between civil law and commercial law not only has similarities, but also has differences, we should consciously consider the legal thinking that civil and commercial issues need to be treated differently in different contexts and situations. We should not advocate "civil law imperialism", nor should we make a one-size-all approach to the legal application of commercial issues. We should dig out and analyze the deeper legal thinking behind the legal issues in terms of jurisprudence. It is necessary not only to protect the "modest nature of civil law" but also to reflect the "modest nature of commercial law".

#### 5.CONCLUSION

In this paper, the judgment result of Yin Binglin, as a shareholder of the company, is not accurate in the case of the shareholder's signature being forged because he did not participate in the resolution voting of the shareholders' meeting, which leads to a discussion on the method of studying the company law. As a standard of commercial law, the company law insists on the particularity of commercial law, and should not tend to use civil law norms to solve problems in the application of specific laws. The problem behind the judgment reflects the current dependence of some judges and scholars on the thinking of civil law, without a clear understanding of the connotation and significance of the Company Law fundamentally. In this context, the method of talking about company law is actually a very meaningful topic. In judicial practice, we should pay more attention to the method of the company law, so that every case can reflect the fairness and justice of the judiciary. As the main body of the market economy law, the company law's promoting

role in optimizing the current business environment is also unpredictable. Under the dual background of the official introduction of the Civil Code and the strengthening of the legal guarantee to optimize the business environment, the connotation of the method of company law will also be richer.

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# Modular Construction of Civil Engineering Courses in Colleges and Universities

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**Abstract:** The modular construction of curriculum group is the key field of the current stage of college reform. Only with the construction goal and the main line of all courses can the advantages of curriculum group be played out. At the present stage, the talents cultivated by civil engineering majors in universities in China lack of innovation and practical ability, and the construction of course groups is more conducive to the current social demand for compound talents, and more in line with the training goal of compound applied talents. This paper discusses the course teaching of civil engineering major in colleges and universities, puts forward the teaching idea of integrating practice and theory, and puts forward the modular construction of course group according to its teaching method.

**Key Words:** Universities; Major In Civil Engineering; Curriculum Group; Modular

## 1. INTRODUCTION

Engineering colleges and universities have certain differences from other colleges and universities. The talents cultivated should not only have good comprehensive quality, but also have professional theoretical knowledge and strong practical ability, so as to have the ability to solve problems in future work. Therefore, majoring in civil engineering disciplines require students to master the basic theory and knowledge, and basic training in engineering ability and innovation spirit, and in professional practice process typically involves knowledge and joint application of many subjects, but teaching courses relating to the integrated application of practice are extremely few, led to the students lack a certain innovation spirit. Therefore, it is necessary to establish the modular construction of the curriculum group in the teaching process, so that students can establish the connection of the overall knowledge and promote the comprehensive development of students.

## 2. REASONS AND NECESSITY OF MODULAR CONSTRUCTION OF CIVIL ENGINEERING COURSES

### 2.1 Reasons for the creation of course groups

A group of courses is a grouping of all related courses in civil engineering. It was first put forward by Beijing Institute of Technology. Its principle and goal are similar to "modular" teaching, which takes the optimization of the overall teaching plan as the goal in course construction. The idea of curriculum group construction is to achieve mutual influence and orderly interaction in the teaching plan in order to reorganize and plan the curriculum, and build a new holistic curriculum organic integration. In college education, each course is an independent and complete system, the content of the course is extensive

and comprehensive, so there is the phenomenon of repeated content in the interrelated courses. However, the course only tells about the relevant content, and cannot connect the course to achieve integration. This kind of teaching mode makes the time for students to study the professional courses become less and less, and increases the difficulty of the professional courses. Based on this situation, the course group was born. Because of the superiority of its teaching ideas and ideas, many universities have also launched the construction of curriculum group, and it has become the direction of curriculum construction in colleges and universities.

### 2.2 Necessity of curriculum group construction

Curriculum group construction is an inevitable trend in the development of civil engineering major. The important difference between curriculum group construction and curriculum construction is the reform of curriculum content and system. The course group is based on the system of construction, so it is necessary to delete the repeated parts in the civil engineering courses, retain the different contents of the courses, and recombine them, but the system of each course is not required.

Theoretical mechanics, mechanics of materials and structural mechanics are related to each other, but they have their own characteristics. At the present stage of university, from the aspect of curriculum construction and reform content, cutting down the class hours and streamlined content of the course is the trend of the current development, only in this way can promote people to have a deeper thinking and reform of the establishment of the new content system, to carry out exploration and practice in this process. Then the contents of the three "mechanics" courses are organically divided and organized, and recombined into a new civil engineering course group, which is conducive to the construction of civil engineering courses in colleges and universities, and also lays a solid foundation for the subsequent theoretical courses of civil engineering. The construction of civil engineering curriculum group can implement a more reasonable allocation of class hours, and use the spare time obtained from the simplified content in the teaching of analytical mechanics, and use the spare time in the mechanics course experiment and extracurricular practice. It can cultivate senior civil engineering talents with solid theoretical foundation, rich professional knowledge, strong practical ability and innovation ability, which are more suitable for compound applied talents needed by the current society, and further promote the prosperity of the country [1].

## 3. TEACHING STATUS OF CIVIL ENGINEERING COURSES

3.1 The time interval of related courses is relatively long  
The courses of civil engineering major are interrelated

with each other, because the courses of civil engineering major contain many grades and involve a wide range of fields. So set up courses of civil engineering specialty, caused the key points in the course content is relatively chaos and loose, in the course of mutual contact if there is deviation learning sequence or interval course time is long, can cause the students' knowledge, the key points in the course can not be connected for accurately and master, Make the students' learning effect is low, and then affect the effect of teaching.

3.2 The teaching process is boring and it is difficult to arouse students' interest

Because the courses of civil engineering technology are relatively strong, dull and boring, and there are a lot more difficult knowledge points, concepts, terminology is also very much, need a lot of rote memory and understanding of knowledge is very much, let the students feel very dull and boring, leading to the students of civil professional lost my interest in learning.

3.3 More content, less class hours

The contents of civil engineering courses are very large, and students cannot complete these knowledge points in the limited time. Taking the course of civil engineering materials as an example, it covers several chapters, such as lime, gypsum, cement, concrete and mortar. However, there are very few internal connections among these chapters, and there is no logic or coherence between chapters [2]. The theoretical knowledge of this course alone lasts for 30 class hours. What's more, six periods of experimental teaching are included. However, the actual classroom teaching time is only 24 hours, so it is a very difficult challenge for teachers to transmit all these knowledge points to students in the limited time.

3.4 Less practical teaching hours, students' application ability is poor

The practical teaching of civil engineering major is the most important way to cultivate students' basic ability, basic skills, vocational ability, technical application ability and innovation ability, and is also the important core connotation of the current application-oriented undergraduate education. However, in the actual teaching process, the theory teaching period of civil engineering major is too much, while the teachers do not pay attention to the practical teaching period, which makes the practical teaching period less, and the students lack practical experience. As a result, many students do not understand the simple professional common sense when they practice on the construction site.

#### 4. EXPLORATION AND PRACTICE OF CIVIL ENGINEERING CURRICULUM GROUP CONSTRUCTION

4.1 Develop scientific and reasonable talent training programs

Talent training is the main outline of teaching activities. The civil engineering major should take the engineering application ability as the core of training, so as to reflect the needs of talent training in the new era. Colleges and universities should make reasonable allocation of teaching resources, reasonable optimization of teaching content and orderly arrangement of teaching activities, so as to

integrate the course system, teaching methods, teaching links and evaluation mechanism into one, so as to mobilize the enthusiasm of teachers and students. In the process of talent training program, it is necessary to link up the modular construction of course group, take it as the focus of training, carry out in-depth discussion and scientific demonstration, so that the modular construction of course group is more suitable for the training of civil engineering professionals.

4.2 Revised course syllabus

The course syllabus was revised, and the theoretical mechanics, structural mechanics and material mechanics were combined to establish the course group again, so as to realize the principle that the teaching content applied in practice was consistent with the teaching syllabus. From a specific point of view, different mechanics courses have different integration methods, and the integration of teaching content is no longer a single pursuit of integrity and systematism in the mechanics curriculum system. The way of assessment becomes more diversified, and then the reform of assessment and evaluation of practical results can be strengthened, so as to provide an important practical basis for the construction of mechanics course group.

4.3 Theoretical teaching reform and practice

4.3.1 Integrate and optimize the teaching content

The teaching form and content of civil engineering courses in the present stage should be continuously integrated and excellent, and the original course content should be simplified and rationally arranged again. Delete the content of teaching and the chapter content in civil engineering professional contact less, and the original of the course content is associated to the integration of teaching content before and after contact more closely, and then let the students can more easy to digest the contents of the courses, to enhance the teaching effect and teaching quality [4].

4.3.2 Reasonably realize the modularization of course groups

Curriculum group is composed of more than three courses together, and each course has its specific content and hierarchy, and the courses, content, system and scientific theory direction is interlinked, such as mechanics course group, materials and construction of course group, building structure, construction technology group, construction management course group, etc. The principles of relevance, integrity and independence should be observed in the course of curriculum group construction. All courses are connected through a main line, and the civil engineering courses, including basic professional courses, professional courses and practical courses, are connected to form a complete system. Because the construction of course group is to enable students to better learn and absorb the knowledge points in the course, so as to achieve the goal of cultivating high-quality talents. Therefore, in the continuous integration and optimization of the course group, the integrity of a single course is no longer required to build relatively independent knowledge modules, and the links between the courses must be clear, clear and permeable, so that the

relevant contents of the course can achieve the connection and communication, and further improve the teaching effect. At the same time, we should pay attention to the combination of theoretical knowledge and practical content in teaching, and appropriately add knowledge modules in software teaching, so that students' practical ability and innovation ability can be improved. And on the basis of the original course content to re-adjust and layout, cut out the content and unnecessary important chapters irrelevant to the training of civil engineering professional senior talents, and weakened the course content divorced from the actual society, increase the teaching content in line with the social needs.

#### 4.3.3 Strengthen the construction of teachers and give overall consideration to the theory and knowledge of the curriculum group

Because the construction of a curriculum group involves the integration of several courses, the problems involved are more complex than that of a single course. It not only involves the adjustment of the curriculum, the coordination of the curriculum and the formulation of the curriculum syllabus, but also involves the teaching effect of the integration of the courses. All of these are completed by the teachers, so whether the goal of the curriculum group can be completed has an important correlation with the teachers. The teaching team of the course should be transformed into the teaching team of the course group, constantly strengthen the cultivation of their own practical ability, select excellent teachers to conduct in-depth learning and exercise in construction enterprises, so as to understand the technical needs of civil engineering and learn the methods of enterprise management, and timely feedback and adjustment of the knowledge learned in teaching. Secondly, colleges and universities should regularly send teachers to enterprises to exercise and learn, so as to improve the ability of teaching practical experience; Thirdly, colleges and universities should carry out lectures and symposiums, and invite experts with architectural experience to give lectures so that teachers can learn effectively. Finally, arrange teachers to study in a planned way, so as to promote the improvement of teachers' teaching and scientific research ability and improve the construction of teachers. Through the above methods, teachers can learn from each other's strengths and complement each other's weaknesses, cross integration and cooperation, and solve the problems of insufficient engineering practice experience and teaching experience of some teachers.

#### 4.4 Practice teaching reform and practice

##### 4.4.1 Increase practice teaching hours and improve the quality of practice teaching

Increase the investment of experimental funds and the construction funds of experimental bases. Teachers should add experimental teaching courses according to the requirements of the contents and teaching objectives of civil engineering courses, and at the same time, according to the different accepting ability of students and their interests. Then, the basic experimental content can be transformed into comprehensive extracurricular practice, so that the original experimental nature of verification to

comprehensive, inquiry to achieve the transformation process. In traditional experimental teaching, due to the lack of experimental funding, there are fewer instruments in the experiment, which cannot ensure that each student can independently operate the time. However, with the large investment of experiment funds, not only the number of group experiments for students is ensured, but also the time for students to operate independently. This kind of comprehensive experiment combines many courses in civil engineering major, and applies a variety of knowledge points in it, showing the integration and crossover of course contents, so that students' independent thinking ability is constantly increased, and they can complete the experiment independently, and promote the development of students' comprehensive application ability.

#### 4.4.2 Increase rich and diversified approaches to practice

Whether students' practical ability is improved depends on whether universities attach importance to it. Colleges and universities should hold a variety of practical activities, so that students can combine theoretical knowledge with practical content, to achieve the purpose of training senior engineers. Professional competition can promote students' theoretical teaching, experiment, practice and other courses. It can stimulate students' desire to win or lose, transform them from passive learning to active learning, and then generate enthusiasm for learning and interest in practice. Teachers can also lead students to participate in cognitive learning in the engineering team, so that students can effectively participate in the project construction, and then open up students' second classroom learning; Schools can also invite enterprise experts to the school to give lectures or lectures, so that students can deepen the understanding of practice in the classroom and lectures, and then can understand civil engineering in detail, to promote the improvement of students' comprehensive application ability.

##### 4.4.3 The strengthening of practice should be combined with engineering practice and professional practice

By combining engineering practice with professional practice, students can acquire basic theoretical knowledge and professional skills, so as to improve their practical ability and the ability to solve practical problems. For example, students in the direction of bridge can combine the development status of bridge engineering and arrange practical tasks according to the type of bridge. On the basis of understanding the engineering background, bridge composition and construction drawings, students can simplify the mechanical calculation diagram of the bridge structure and analyze the internal force of the structure. In addition, taking the bridge construction as Beijing, the mechanical analysis of bridge construction suspension construction and plank construction is carried out. In the structural mechanical analysis, Midas software and PKPM software are combined to analyze, so as to improve the students' computer modeling and analysis ability.

#### 5. CONCLUSION

In a word, civil engineering is a comprehensive, practical and applied discipline, involving a number of disciplines,

colleges and universities want to train students into composite application-oriented talents, then the original teaching of civil engineering must be reformed. Implement curriculum group construction, optimize and integrate the contents of civil engineering major, and promote the continuous development of teaching activities with discipline compatibility. Modularized course teaching enables students to grasp the knowledge points more firmly and apply them. The independence between modules makes the course easier to teach. After achieving the reform of the combination of the two aspects, it is more conducive to the cultivation of comprehensive development of high-quality composite applied talents.

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# Analysis on The Practical Value of Stratified Teaching Method in Swimming Teaching

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**Abstract:** The application of hierarchical teaching method has obvious value in swimming teaching. Teachers should fully grasp the basic situation of students, integrate the concept of hierarchical teaching into the teaching process, promote the improvement of teaching level, and help students master swimming skills. Therefore, this paper mainly analyzes the value of stratified teaching method in swimming teaching.

**Key Words:** Hierarchical Teaching Method; Swimming Teaching; Application Value

## 1. INTRODUCTION

Swimming is an important part of sports, and in recent years, more and more attention has been paid to it in physical education activities. On the one hand, it is conducive to enhancing students' physical quality, on the other hand, it can also improve students' comprehensive ability [1]. Therefore, how to improve the teaching quality, fully reflect the value of swimming teaching is extremely important. At present, there are still many deficiencies in swimming teaching. Teachers pay more attention to the training of students' swimming movements and skills during the teaching period, but do not actively innovate teaching methods and contents, and do not fully consider the actual situation and different needs of students, resulting in unsatisfactory teaching quality. As a new teaching method, hierarchical teaching method focuses on teaching students in accordance with their aptitude. Combining with students' actual learning conditions and abilities, it is divided into study groups of different levels and carries out targeted teaching for different groups to improve the comprehensive ability of students at all levels, so as to improve the overall teaching quality. Therefore, this paper mainly analyzes the value of stratified teaching method in swimming teaching.

## 2. DEFICIENCIES IN CURRENT SWIMMING TEACHING

Under the current environment, swimming teaching is more and more important in physical education, its teaching methods and course content are gradually enriched, and the teaching staff is growing. However, there are still many deficiencies in the actual teaching, such as the serious shortage of infrastructure, which directly affects the development of teaching activities; The teaching content is single, the teaching method is traditional, the student participation interest is not high. At the same time, teachers lack of correct cognition of various new teaching methods, and their practical application ability is poor, which affects the teaching effect. In addition, the current swimming teaching still takes the teacher as the main body, the teacher conducts teaching according to the fixed template, does not

consider the different situation of students and individual needs, the teaching content is lack of rationality.

## 3. ADVANTAGES OF STRATIFIED TEACHING METHOD APPLIED TO SWIMMING TEACHING

Hierarchical teaching method plays an important role in teaching management and greatly reduces the difficulty of teaching management. When applied to swimming teaching, its advantages are reflected in the following aspects.

3.1 It is beneficial for teachers to master the overall situation of students' swimming learning. By dividing students' swimming level into multiple levels, we can make targeted teaching objectives and teaching methods according to different levels in the teaching process, refine teaching content, intuitively understand students' learning situation, and improve the teaching quality as a whole.

3.2 Promote students' interest in learning. By dividing it into multiple levels, it is more in line with the learning needs of students. The content that students learn is of appropriate difficulty and also takes into account some challenges, which is conducive to enhancing the exploration desire and enthusiasm of students.

3.3 Enhance the interaction of teaching activities and build an interactive mode between teachers and students. The hierarchical teaching method pays more attention to the interaction between teachers and students in the teaching process. By increasing the frequency of communication, it is conducive to help students quickly grasp the key points of swimming and solve the existing problems. At the same time, get feedback from students, understand the learning situation of students, adjust the teaching plan appropriately, and ensure the effectiveness of teaching content.

## 4. PRACTICAL APPLICATION STRATEGIES OF HIERARCHICAL TEACHING METHOD IN SWIMMING TEACHING

### 4.1 Scientific stratification to master students' actual learning status

The emphasis of applying hierarchical teaching method lies in scientifically and reasonably stratifying students. Before conducting teaching tasks, we should first understand the status of students' mastery of swimming knowledge and skills, and divide them into different levels to ensure the rationality of stratification [2]. Some students have been exposed to swimming before the swimming teaching, or have received professional training, with certain swimming foundation. But at the same time, a large number of students have never participated in swimming. Therefore, teachers need to carry out surveys in advance to understand students' actual swimming level and provide basis for scientific stratification. According to the swimming level of

students, can be divided into novice, junior and senior three groups. The novice group is mainly the novice who has not been exposed to swimming and lacks the theoretical knowledge and skills related to swimming. Elementary group of students mainly refers to have a certain swimming foundation, master the basic movements and skills of swimming, but in some professional movements are still not standard. Senior group mainly refers to the students can skillfully use all kinds of swimming movements, related movements still need to be further improved and perfected. According to the above methods, students can be divided into different levels, and corresponding teaching can be carried out according to the level of students, so as to grasp the learning situation of students in real time. At the same time, combined with the learning progress of students at different levels, adjust and improve the teaching content, plan the teaching objectives, and make the teaching content more precise.

#### 4.2 Grasp the needs of students and carry out targeted teaching

Teaching is carried out at different levels, and teaching plans are made in combination with students' learning ability, learning situation and specific needs, which are consistent with the actual teaching objectives, so as to ensure that students at all levels can improve their learning ability from the teaching content in accordance with their own learning ability and ensure good teaching effects [3]. For example, when teaching freshmen, the lesson content is focused on helping students get familiar with water, gradually understand and master various swimming forms, and promote students to quickly adapt to swimming state. At the same time, some interesting activities can be added in the teaching process to change the boring teaching process in the past, improve students' interest in learning, and enhance their enthusiasm to participate in swimming activities. For the primary group of students, the teaching content is focused on the specification of swimming movements, can take the way of group contrast practice, to correct the wrong swimming movements. At the same time, according to the learning situation of students, the corresponding professional swimming skills can be guided, so that students can see the learning results, enhance their learning enthusiasm and improve their confidence in learning. For the advanced group of students, although they have mastered the basic swimming technology and a variety of swimming movements, but some of the swimming skills need to be optimized. Through targeted training focus on improving students' speed, endurance and other aspects of the ability to further enhance the comprehensive quality, at the same time, the school swimming team training combined with the way to

provide more space for students to improve their swimming skills.

#### 4.3 Teach students in accordance with their aptitude and arrange teaching plans reasonably

In the actual teaching process, students are usually first organized to teach, the teacher explains standard swimming movements and key points according to the teaching plan, and then the students practice. In this process, the teacher observed the learning situation of students at all levels. When the advanced group of students could finish the swimming movements in a standardized manner, they could have free activities, or they could increase the difficulty of training a little and conduct independent training to keep the enthusiasm of learning. For novice students, teachers should be patient enough in the teaching process to help students master standard swimming movements. The combination of advanced group and novice group can also be adopted to implement one-to-one assisted teaching to speed up the learning progress of novice students and master swimming skills faster. For the primary group of students, teachers should correct students' wrong swimming movements, ensure that the movements are standardized, give detailed guidance to students, conduct more training, and gradually master the essentials of movements.

#### 5. CONCLUSION

To sum up, the layered teaching method integrated into swimming teaching is a supplement and improvement to the traditional teaching mode, and further improve the teaching level. Through scientific stratification of students' individual learning status, reasonable arrangement of teaching contents for students at different levels, and standardization of teaching plans, to ensure the realization of teaching objectives at all levels, and ultimately promote the overall improvement of students' swimming ability.

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# Study on the System and Mechanism of Mixed Ownership in Higher Vocational Colleges

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**Abstract:** Mixed ownership in higher vocational colleges is an innovative measure of mixed ownership economic form in the field of education under the background of the new era. It not only has national policy guidance and institutional arrangement, but also is an important demand of higher vocational education. Therefore, mixed ownership in running schools is deeply attached importance to. Starting from the connotation of mixed ownership in higher vocational colleges, this paper analyzes and discusses its significance and school-running mode, in order to promote the modern mixed ownership in higher vocational colleges to make greater progress in school-running mode.

**Key Words:** Higher Vocational Colleges; Mixed Ownership; School-Running Mode

## 1. THE CONNOTATION OF MIXED OWNERSHIP IN HIGHER VOCATIONAL COLLEGES

Mixed-ownership school-running means that vocational colleges fully realize the effective sharing of social resources through the mutual integration of different forms of capital and complementary advantages. It is a new school-running mode with multiple subjects. This kind of school-running pattern are two basic attributes, which is the fusion of different ownership capital and diversified investment subject, its characteristic is to make in addition to other investment subject outside of school to participate in the school, joint investment, joint recruit students, develop together, joint management and joint development of new major, common to carry out the practical teaching, cooperation and win-win, risk-sharing, We will build a new community of shared interests that integrates diverse actors in various forms[1-3].

## 2. SIGNIFICANCE OF MIXED OWNERSHIP IN HIGHER VOCATIONAL COLLEGES

First, the mixed ownership of higher vocational colleges helps to break the traditional system constraints of higher vocational colleges. Promote mixed ownership in running schools. Multiple social subjects, even school staff, will be included in the category of running subjects, and the management of running schools will be carried out in accordance with the operation mode of marketization and shareholding system. This is not only conducive to the flexible running of schools according to the market demand, but also conducive to the integration of social resources, complementary advantages, resource sharing, collaborative education, the formation of a diversified school body governance structure is more reasonable, stronger governance ability, more in line with the requirements of modern vocational education system.

Second, mixed ownership in higher vocational colleges helps solve the problem of lack of capital link and

mechanism guarantee for school-enterprise cooperation in higher vocational colleges. The system of mixed ownership in running schools can promote the establishment of stable and in-depth interest ties between schools and enterprises, resource sharing and mutual benefit, so as to achieve the purpose of deepening school-enterprise cooperation and the deep integration of industry and education. Enterprises participate in running higher vocational colleges, on the one hand, enterprises regard talent training as a duty, so that talent training more close to the needs of the industry and enterprises; On the other hand, the school takes providing technical support and service for enterprises as its duty, gives full play to the social service function of higher vocational colleges, and serves the local economic development to the maximum extent.

## 3. MIXED OWNERSHIP MODE AND DEVELOPMENT OF HIGHER VOCATIONAL COLLEGES

### 3.1 Enrich the form of mixed ownership in higher vocational colleges

First of all, break the shackles of the dual thinking of non-public and private. Between public ownership and non-public higher vocational colleges as a new educational system, the mixed ownership form arises at the historic moment, urgent desire to break the traditional public ownership, and the non-public sector of the isolated from opposition and widens the contradictory relations, in order to improve the government-led, social participation, the educational subject diversity, variety of forms, the system full of vitality. Secondly, we should deeply practice the reform of the multi-subject cooperative school-running mode of vocational education. As an important attempt to reform and develop the system and mechanism of vocational education, the group running schools and the integration of production, education and research are characterized by multiple cooperation, openness and sharing, complementary advantages and mutual benefit. Finally, explore the effective realization form of mixed ownership in higher vocational colleges. With an open resource allocation ability and flexible market operation mechanism of mixed ownership characterized by educational reform has broken the rational flow of higher vocational education resources ownership barriers: one is the introduction of social capital in public vocational colleges, the second is the vocational colleges run by social forces into public capital, three new vocational colleges are different capital cooperation.

### 3.2. Improve the mixed-ownership governance structure of higher vocational colleges

Firstly, the property rights system of schools should be perfected and the property rights trading market of higher

vocational education should be established. In order to meet the needs of mixed ownership in higher vocational colleges, firstly, the value of investment elements such as knowledge, technology and management should be clarified to provide an effective basis for the change of property rights and the transformation of shareholding system. The second is to create a fair competition, orderly circulation of education property rights trading market, on the premise of ensuring the loss of state-owned assets, promote the circulation of education property rights elements, to achieve the maximum extent of investors' returns and efficient allocation of social capital. Secondly, the corporate governance structure should be improved and the mode of multi-participation and joint governance should be established. First, we should improve the governance structure of external legal persons, overcome the administrative governance of the government and get rid of the management defects of one-way, restrictive and vertical nature. Second, we should improve the internal corporate governance structure of vocational colleges, including the meeting of shareholders, the board of directors, the board of supervisors and the president, so as to fundamentally eliminate the disadvantages of insufficient autonomy in running schools, excessive administrative color and low degree of democratization in decision-making. Finally, the modern school system should be established by referring to the concept of modern enterprise governance. Higher vocational colleges and universities mixed ownership only established on the basis of clear property rights, can to a certain extent promote the higher vocational education schools bottleneck and the solution of the key areas and crucial problems such as resource allocation, to achieve internal and external governance mechanism of flexible and marketization, to establish the good development space for the training of technical skills.

### 3.3 Improve the top-level design of mixed-ownership education in vocational colleges

Mixed ownership education reform in higher vocational colleges is a long-term, complex and systematic process of interest adjustment, which needs sound laws, regulations and policies as an important support. First of all, the legal system should be improved to provide legal basis for higher vocational colleges with mixed ownership. In view of the current without some basic problems on the reform of higher vocational colleges and universities mixed ownership of the common legal framework, we need to revise, on the one hand, clean up the current does not adapt to the content of the mixed ownership of running a school, on the other hand, a clear definition of the concept of higher vocational colleges and universities the

mixed ownership and property, in order to better respond to the legal appeal of mixed ownership reform of running higher vocational colleges. Secondly, relevant incentive policies should be formulated to provide a driving force for higher vocational colleges to run mixed-ownership schools. On the one hand, it has formulated supporting policies such as financial support and preferential taxes and fees for running mixed-ownership schools in higher vocational colleges; on the other hand, it has provided policy support for social capital to enter the vocational education field. Third, the pilot work should be steadily promoted to explore the way for higher vocational colleges to run mixed-ownership schools. Due to the different development levels and various forms of running schools in different regions, and there is no ready-made experience for reference, it is a relatively safe way to develop mixed ownership running schools in higher vocational colleges by promoting pilot projects and encouraging different regions to try and take the lead.

### 4. CONCLUSION

In conclusion, the mixed ownership of higher vocational colleges is conducive to improving some problems faced by higher vocational colleges in the process of running schools at the present stage. It is not only the innovation of higher vocational colleges in the system of running schools, but also ADAPTS to the development trend of The Times. Therefore, higher vocational colleges should also proceed from the actual situation, fully grasp the local industrial structure and specialty nature, actively build the mode of running a school with mixed ownership, and strive to give full play to the advantages of running a school with mixed ownership.

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# Innovative Reform of Library Information Work Under the Background of Digital Information

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**Abstract:** The high-quality economic growth drives the innovation and development of science and technology, and promotes the progress of society and the change of The Times, digitalization, information, big data, etc., can be said to be the product of the development of The Times. This article mainly starts from the perspective of digital information background environment, studies the innovative reform of library and information work under this perspective, and explores the development of library and information work under the social background of the new period, so as to promote the library and information work to better adapt to the needs of the social times.

**Key Words:** Digital Information Background; Library And Information Work; Innovation

## 1. INTRODUCTION

Digital information technology is the most widely used innovation technology in the current social development process. It has a wide range of audiences and powerful functions, and has gradually penetrated into all aspects of social life. In the past, the library and information work is an important way for people to understand the development of things in life, but with the update of science and technology and the expansion of digital information technology, the traditional library and information work has obviously been unable to meet the needs of people, so in the social background of the new era, the library and information work needs innovation and development.

## 2. ANALYSIS OF LIBRARY AND INFORMATION WORK

### 2.1 Analysis of relevant content

The work content of library and information work is more systematic, usually has a set of operating system, and its work involves a wide range of work steps are complex, work content is rich. The library and information work is not only related to the development of the library, but more important to the readers' reading feelings. The library and information work without readers is empty shell and has no real social value. In daily life, library and information work is the management, classification, statistics, induction of library and information, and at the same time, the merger and establishment of archives and archives sealing, and at present, including the storage of digital resources. If content errors occur in library and information work, academic misconduct and information errors may occur.

### 2.2 Analysis of social value

From the perspective of social value, library and

information work can be said to be an important assistant to promote the development of national scientific research. Library and information work is generally closely connected with universities or related academic research, which is more closely related to academic research papers, or some related professional academic papers abroad, and may also involve some scientific research results. So, books intelligence work embodies the academic achievements of social application value, it has been driving the self-improvement of the ordinary people, to broaden the application of academic papers and research achievements, under the background of digital information books intelligence work if you can't achieve innovation and development, then society will likely lose many promote people [1] the content of the learning and growth.

## 3. CHALLENGES FACED BY LIBRARY AND INFORMATION WORK UNDER THE BACKGROUND OF DIGITAL INFORMATION

### 3.1 Reform of library system

Library and information work is generally in the library, but under the background of digital information age, people's way of life has changed dramatically from the original, to the library to study and borrow the learning mode is less and less, the development of the Internet gradually let people out of the library as a fixed place. Every day at the same time, the world is as high as 8 just paper, it is a huge data, for the library, the operation under the traditional system of clearly enough to chase the huge digital information, so need to run the library system reform as soon as possible, so the development of book intelligence can occur as a result of the library change must change.

### 3.2 Changes in job requirements

The society is developing in the progressive era. Under the background of the digital information age, all walks of life in the society are seeking for innovation, and the promotion of library and information work is naturally facing new opportunities. The most critical one is the change of work requirements. Under the background of digital information, the staff have to deal with the core problem is the application of innovative technology, digitalization, informatization and intelligent application development of advanced science and technology, required books intelligence work cater to this change, so the application of the said book intelligence and technology require related staff to learn, to cognitive, reorganize [2].

### 3.3 Technical construction

This technology is mainly refers to the application of advanced science and technology, especially for books intelligence work, the developed and rapid popularity of computer and Internet technology, has taken a hit caused books intelligence work, and the job involves more content is academic research achievements, if intelligence work in this environment books don't make relevant technical construction, Then its prospects are precarious. Therefore, the innovative reform of library and information work needs to strengthen the technical construction, including the introduction of advanced technology, the introduction of advanced technical personnel, and the strengthening of information security protection, etc., the strengthening of technical construction is the key to guarantee the development and stability of library and information work under the background of digital information.

#### 4. INNOVATIVE REFORM OF LIBRARY AND INFORMATION WORK UNDER THE BACKGROUND OF DIGITAL INFORMATION

##### 4.1 Innovative function services

Under the background of digital information, the development of all walks of life in the society is seeking for digitalization, intelligence and convenience, such as self-service scanning code ordering in restaurants, scanning code riding in buses, etc. The primary task of innovation and reform of library and information work is naturally to innovate functional services. Library and information work should be in-depth social research, the purpose is to grasp the social and people's needs in the context of digital information, so as to timely update functions and services, and should improve the relevant after-sales service, promote the realization of user needs and experience to improve work, so as to ensure that effectively meet the development requirements of the new era. In addition, innovative function services should pay attention to information protection. The birth of new functions is often accompanied by the emergence of new problems, and early warning and protection mechanism should be prepared for a rainy day.

##### 4.2 Improve the comprehensive ability of workers

The core of library and information work lies in people, so under the background of digital information, the innovative reform of library and information work must improve the comprehensive ability of related workers. First of all, recruitment needs should be changed according to the work requirements of the new era, and the threshold should not be lowered because of the shortage of talents. Secondly, it is necessary for on-the-job personnel to have innovation training, including the promotion of theoretical and practical ability, especially the use of digital information technology; Finally,

attention should be paid to periodic summary and improvement of work results to ensure timely detection of problems and improvement deficiencies, so as to ensure that there is no lag in staff work [3].

##### 4.3 Strengthening the application of innovative technologies

Under the background of digital information, the key of innovative reform of library and information work lies in the application of innovative technology and strengthening the use of new technology, which can realize the goal of innovative development fundamentally. Books intelligence work due to the timely introduction of advanced digital, information technology and extensive application in the actual work, at the same time pay attention to the learning and use of advanced information security protection technology, so that when using the new technology can also be to ensure the integrity of books information and security, to ensure to innovation in books intelligence work more firmly.

#### 5. CONCLUSION

In a word, under the background of digital information, library and information work should be innovated and developed according to the changes of The Times, otherwise it will be difficult to meet the needs of the society and the people. Only by ensuring that the library and information work ADAPTS to the social times can it be guaranteed to have sufficient sustainable development power. The innovation of library and information work under the background of digital information mainly includes the innovation of functional service, the improvement of workers' professional ability, the application of innovative technology and so on. The realization of innovative reform of library and information work can guarantee its good meeting the challenges of The Times, promote the sustainability of development and enhance the social value.

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# Discuss How to Design Ac Permanent Magnet Synchronous Servo Motor Control System

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**Abstract:** In this paper, permanent magnet synchronous motor (PMSM) servo system as the object, respectively from the perspective of software and hardware to explore the design method of the system. In terms of hardware design, including main circuit, drive circuit and amplifier circuit. In software design, including the main program and interrupt subroutine. Through the study of this paper, it can be seen that the servo control system has a broad development prospect because of its fast response speed, high tracking accuracy, stable and reliable operation.

**Key Words:** Servo Control; Permanent Magnet Synchronous Motor; Signal Processor

## 1. INTRODUCTION

At present, with the rapid development of manufacturing in China, the position of servo control system in the industry is constantly improving, and its advantages in terms of price and performance are increasingly emerging. Permanent magnet synchronous motor as an important content of servo control system, in the era of science and technology gradually presents digital characteristics, the scope of application in China is expanding day by day, but there is still a certain gap compared with foreign countries. In this regard, the system hardware and software design and upgrade should be strengthened, so that it can not only play its advantages in the manufacturing industry, but also contribute more to the aviation, defense and other industries.

## 2. HARDWARE DESIGN OF PERMANENT MAGNET SYNCHRONOUS MOTOR CONTROL SYSTEM

### 2.1 Structure and function

Taking PMSM servo system as an example, the operating frequency of the system is 150MHz, which can greatly improve the chip processing speed and control accuracy. Internal 128K× 16-bit flash memory space, capable of on-site software upgrade and programming, with a 12-bit analog-to-digital converter, sampling capacity of 16.7m/s, so that signal accuracy and real-time can be effectively guaranteed. After the optimization of the event manager, the general programmable counter can be used to collect unit information, and a variety of complex algorithms can be relied on for calculation. There are also a large number of communication ports on the chip, which can provide communication interfaces for test equipment, display screen and host machine.

### 2.2 the main circuit

The power device used in this system is FGA25N120IGBT, with a voltage withstand value of 1200V and a maximum current of 25A, which meets the experimental requirements, as shown in Figure 1 below. Rectifier diode 10A10 model, the maximum current of 10A, reverse voltage value of 1000V. Capacitor C1 uses

electrolytic capacitor to regulate voltage, which is characterized by high resistance and high voltage, and C1 with relatively small capacitance is used for filtering.

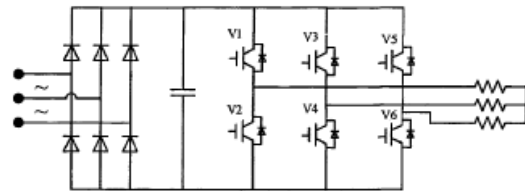


Figure 1. Schematic diagram of main circuit of the system

### 2.3 Drive Circuit

Due to the limited driving force of DSP output pins, the power can be increased to the maximum with the help of an external driver. In order to better drive IGBT, the system uses IR2110 driver chip. The chip is composed of an output protection module, logic input and level shift. Under the application of CMOS manufacturing process, the frequency can reach 500KHz, the switching delay time is short, and the input channel is in an independent state, which can effectively eliminate the internal interference of the chip. The logic level can be matched with TTL and CMOS and ranges from 5 to 15V. In addition, it also has a unique high-end bootstrap suspension power supply, and each inverter bridge only needs one group of power supply, which not only saves the design cost, but also makes the circuit simpler [1].

### 2.4 Amplifier circuit

During the design of the control system, in order to avoid interference between the strong and weak circuits, it is necessary to set an isolation circuit between the main circuit and the control circuit, to isolate the two, to ensure that there is no interference during the control, and to promote the anti-interference ability of the circuit. The system uses 6N137 isolation chip, with the help of optical signal transmission, can speed up the transmission rate, strengthen anti-interference ability. In addition, unidirectional transmission during optical coupling also protects the integrity during precision, and the switching rate is up to 10MHz, making it possible to transmit signals in real time.

## 3. PERMANENT MAGNET SYNCHRONOUS MOTOR CONTROL SYSTEM SOFTWARE DESIGN

### 3.1 Main program design

The servo system is composed of the main program and interrupt subroutine. The former is used for the initialization operation of the whole software design, determining the position of each register and defining parameter variables. The subsequent operation can be carried out only when the initialization is reasonable. In practice, the sub-modules include ADC conversion

module, position determination, PI regulator and SVPWM generation module, etc. After the main program starts, initialize the system state and register, close the interrupt program, initialize the interrupt and timer, assign the interrupt vector address, and then initialize the function submodule and rotor position, open the interrupt and wait for the interrupt.

### 3.2 Interrupt subroutine design

Interrupt as the core of servo control software, can complete most of the control strategy, such as current acquisition, speed calculation, PI control and software generation, etc., the program design includes the following content.

3.2.1 SVPWM subroutine. The function of this module is to draw THE SVPWM waveform according to the input reference voltage space vector according to the corresponding algorithm, and finally form a circular magnetic field to ensure that the motor is always in normal working state. For THE SVPWM waveform, the timing period should be set first, and then the register should be set, so that the timer is always in the continuous increase or decrease of the counting trend. 6 pin output modes of PWM are selected through the behavior control register. During the operation of the system, the values of the timing counter and register are compared. If they are equal, the match is successful [2].

3.2.2 Current acquisition subroutine. When generating SVPWM, the stator voltage space vector is needed, and the vector is obtained by comparing the initial and feedback, and the stator phase current detection needs to be implemented with the help of this module. Since the INPUT voltage of DSP is between 0-3.3V, signal modulation is carried out before the signal is transmitted to DSP, and the current is transformed into digital signal through A/D module. The reference voltage converted by A/D is changed to 3V, and the maximum value of 12 digits relative to it is 4096, then the relationship between the output digital value and the input analog value can be expressed as follows:

$$Q = A_u \times \frac{W - ADCLO}{3}$$

Where, Q represents the digital output value;  $A_u$  stands for magnification; ADCLO stands for reference level. During the subroutine operation, the ADC register must be set first.

The sampling mode consists of concurrent sampling and sequential sampling, which are selected by control register 3. The system adopts sequential sampling, two samplers are cascaded, and the number of conversion channels is set to 2. During the conversion period, the mean value can be obtained for many times, so that the sampling accuracy can be significantly improved [3].

3.2.3 PI regulator subroutine. The system consists of three closed-loop control systems, each of which is controlled by a PI regulator. In the design process, we should adhere to the principle of first inner ring, then outer ring, from current ring to speed ring, and finally to position ring. Because of the simple operating principle of PI controller, high cost performance, and in the state of structural parameters can not be determined, it is still suitable for PI control algorithm.

### 4. CONCLUSION

To sum up, in order to meet the needs of the development of modern manufacturing industry, the performance of servo control system is constantly improved, and the distance with developed countries is gradually narrowed. In the design and upgrade of the system, we should start from the software and hardware, introduce the modularization idea into the software programming, and realize the digital programming of SVPWM, signal acquisition and PI regulation by means of interrupt triggering functions. The performance of the servo motor is more stable, innovation and practicability are comprehensively improved.

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# Cultural Confidence and The Output Integration of Cultural Elements Under the Background of The New Normal

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**Abstract:** In the new normal social development background, China needs to carry out more efficient cultural output, through the construction of cultural confidence to further enhance the world's understanding of China's core values and culture. Starting from the new normal development background, this paper discusses and analyzes the extreme importance of cultural strength, and puts forward the path and method of the output integration of cultural confidence and cultural elements, which provides a reference for the establishment of cultural output and discourse system in China.

**Key Words:** Cultural Confidence; New Normal Background; Cultural Output

## 1. INTRODUCTION

Since the eighteenth congress, xi general secretary on various occasions repeatedly mentioned the importance of cultural self-confidence, in the current world political and economic development order has been very big change, the comprehensive strength of a country and its culture soft strength's contact more and more high, therefore, in the process of the development of country and society, all walks of life should improve for the attention of the traditional culture, So as to strengthen cultural confidence, better cultural output.

## 2. THE EXTREME IMPORTANCE OF CULTURAL STRENGTH IN THE CONTEXT OF THE NEW NORMAL

The so-called "new normal" means that the current development situation at home and abroad has changed to some extent. On the one hand, the transformation of economic system and structure around the world has brought new opportunities for industrial development. On the other hand, China has also ushered in a new stage of development and new changes have taken place in socialist modernization. Therefore, social and economic development must adapt to the situation and characteristics of this new stage in order to seek more efficient development [1]. Under the background of the new development normal, the cultural soft power of various countries has become an important factor in the competition of comprehensive national strength. Cultural strength has extreme significance, which is mainly reflected in the following aspects. First of all, culture is the important foundation of a country and a nation. Without rich culture and ideas, the actual development of a country will lose its support, and it cannot achieve the improvement of comprehensive national strength in a real sense. Secondly, the current situation, resources and

transmission means more rich, across different geographical, ethnic international communication has become possible, while promoting the cultural communication, but many western bad thoughts such as historical nihilism, hedonism, in an attempt to corrosion of the national mind, on the run from the polluted air in our society, for this problem, We must strengthen our own cultural strength, in order to strengthen the national cultural self-confidence, to resist the invasion of foreign ideas to our ideology. Finally, the promotion of cultural strength is also conducive to the construction and establishment of national image. From the perspective of a long-term in the international exchange, China's foreign communication and publicity does not reach the designated position, not only by the order of transmission, people in many countries, also makes for our country the overall image of cognitive biases, in order to reduce eliminates cognitive obstacles and problems in our country, should improve their own cultural soft power, strengthen the cultural output.

## 3. THE INTEGRATION PATH OF CULTURAL CONFIDENCE AND CULTURAL FACTOR OUTPUT

The export integration of cultural confidence and cultural elements can further promote the spread of Chinese traditional culture in the world, so we must take corresponding paths and means.

### 3.1 Firmly guide cultural confidence

The first step is to strengthen the guidance of social thought, to help the people strengthen cultural confidence, improve ideological leadership. First of all, attention should be paid to the publicity of traditional cultural elements. China has a long history. In the process of development, a variety of cultures have emerged. There are not only tangible cultural heritages such as terracotta Warriors and Horses in Xi 'an and the Great Wall, but also intangible cultural elements such as tea culture and Peking Opera culture. They not only have a certain economic value, but also have a certain value of artistic appreciation, so we should pay attention to strengthen their publicity and application. Secondly, based on the above analysis, under the background of new media, there are still some acts that deliberately smear Chinese culture and transmit bad ideas in the current cyberspace. Relevant public opinion management departments should strengthen the control and supervision of such remarks, and reduce the impact of remarks that shake the ideological and cultural confidence on Chinese audiences.

### 3.2 Construction of Chinese discourse system

At the same time of cultural export, more attention should

be paid to the construction of the Chinese discourse system in the world, so as to promote the improvement of the level and quality of external communication. First of all, cultural exchanges and interactions should be actively conducted to promote the export of China's cultural system, deeply analyze the forms and priorities of national development, seize opportunities, innovate the communication situation, and further master the discourse power. For example, in the run-up to the 2022 Beijing Winter Olympic Games, some cultural experience halls can be opened in the Olympic Village, so that more international friends can experience the charm of traditional Chinese culture in depth. Secondly, the current international communication order has undergone certain changes, and communication resources and means are gradually dispersed. As a leading developing country, China has also mastered some foreign communication resources. In order to build a good national image, attention should also be paid to strengthening external communication. On the one hand, in the process of diverse cultural communication and collision, the spirit of defending national and national culture should be maintained; On the other hand, when foreign countries deliberately smear China and try to belittle our culture, they should respond in a timely manner and take a stern stand against China.

### 3.3 Innovate and develop the cultural industry

In order to further strengthen the output of culture, attention should be paid to guiding enterprises to carry out corresponding attempts and development. Firstly, enterprises should be encouraged to develop more cultural products so as to promote the output of culture. Secondly, more support should be given to many traditional craft design industries, including certain policy and financial support, so that they can better spread Chinese traditional culture. Finally, pay attention to innovation in the form of output. At present, new media resources bring new opportunities for cultural output. Industrial brands can imitate the communication form of "Plum seven" and use short video platform for cultural output to enhance their own attractiveness.

### 3.4 Respect cultural diversity

General Secretary Xi has stressed many times that "cultures are only colorful and colorful." Therefore, while strengthening cultural confidence, we need to pay

attention to the protection of cultural diversity. First of all, in the process of the output of cultural elements, attention should be paid to the firm position of cultural confidence to ensure that the basic policy does not waver. Secondly, we should also pay attention to the foreign culture, can not take a supercilious attitude. The cultural development of other countries should be respected and the cultural charm of a country or nation should not be completely denied [2]. Finally, we should pay attention to the attitude of using foreign culture. The design and output of cultural works should not be carried out in a completely closed situation, neither completely negating the advantages of a culture, nor fully accepting the invasion of culture, but carefully discriminating and scientific absorption. Therefore, in order to better promote the export of culture, we must fully absorb and absorb the advantages of foreign cultures, and further promote the integration of cultures.

### 4. CONCLUSION

To sum up, in today's rapid social development and accelerated pace of economic globalization, in order to further strengthen and promote cultural confidence and establish a good national image, it is necessary to pay attention to the output of cultural elements. Attention should be paid to firmly guiding cultural confidence, constructing Chinese discourse system, innovating and developing cultural industries, and respecting cultural diversity, so as to promote the export integration of cultural confidence and cultural elements under the new normal, and to spread Chinese culture on more international stages.

### ACKNOWLEDGEMENT

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# The Effective Way of Vocal Music Teaching Reform and Innovation in Colleges and Universities

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**Abstract:** The development of the present society is in the stage of transformation, which has a positive impact on the work of music education in colleges and universities. College music teaching has obtained a good opportunity for development, but also ushered in a certain challenge. In the context of rapid social development, the state pays more and more attention to the development of college education and teaching work, and advocates the application of science and technology to promote the implementation of teaching work, in order to improve the efficiency and quality of teaching work, and vigorously reform and innovate the teaching model. Under the situation of conforming to the trend of social development, it is necessary to take students as the teaching subject to carry out the people-oriented teaching work, to let students play their own subjective initiative in teaching, and also to cultivate students' creative consciousness and ability, which is conducive to the reform and innovation of vocal music teaching.

**Key Words:** College Vocal Music Teaching; Reform And Innovation; Effective Way

## 1. INTRODUCTION

Modern education teaching in colleges and universities work closely associated with the development of the society, and in the present education reform under the background of innovation, the vocal music teaching in colleges and universities needs to keep pace with The Times, and to be able to adjust teaching system and mode of scientific and reasonable, to cultivate students' practical application ability as the main teaching goal in education work, promote the development of personalized student, students on the basis of mastering the knowledge, Also improve their own skills, at the same time the students' vocal music appreciation ability has also been exercised and promoted. This paper analyzes and discusses the current situation of vocal music teaching in colleges and universities as well as the specific ways of reform and innovation, so as to provide references for relevant personnel.

## 2. CURRENT SITUATION OF VOCAL MUSIC TEACHING IN COLLEGES AND UNIVERSITIES

With the rapid development of social economy, colleges and universities are constantly expanding the enrollment scale, and the quality of education and teaching in colleges and universities is also constantly improving. Some universities have set up music courses to enrich the content of the courses. The vocal music teaching in colleges and universities can cultivate students' good

musical art aesthetic ability, and students can be well infected and edified through learning, so it can produce good learning results. However, there are some problems in the specific teaching, which will affect the normal development and implementation of vocal music teaching in colleges and universities. The specific manifestations are as follows:

### 2.1 The teaching content is not uniform

Some institutions of higher learning vocal music curriculum in the present our country as the education content is not unified, excessive emphasis on some teachers teach students knowledge of vocal music, and playing method, cultivating the students' ability of singing, teaching content is not scientific and reasonable, and there is no clear teaching goal, teaching goal not closely around the teaching materials and students' ability in singing. Some teachers do not implement vocal music education according to the requirements of the education syllabus. Students can master certain vocal music knowledge and exercise good vocal music skills through vocal music learning. Due to the vocal music teaching content of some universities only pay attention to impart students' singing and vocalization, cultural theory, stage performance, works appreciation and so on, the teaching ability of teachers is not ideal, so there are differences in the effect. In some colleges and universities, vocal music courses are actively integrated with other art courses, which will result in not obvious correlation between them and affect normal practical operation and practice. Moreover, students' vocal music playing ability and performance ability can not be well cultivated and exercised.

### 2.2 The teaching mode is not practical

Different regions have certain differences, including the level of economic development and social and cultural background, which leads to the differences in the teaching scale of colleges and universities in their regions, as well as the differences in the staffing of teachers and the training objectives of talents. Although some universities are able to pay positive attention to the allocation of teaching facilities and equipment, the teaching content is flashy and the teaching mode is not practical, which affects the teaching efficiency and quality [1]. For example, some colleges and universities in order to conform to the trend of social development, keep up the pace, let the students learn some pop songs, asked the students, according to independently created by the pop songs and the popular songs and can't attract students, can't stimulate students' creative enthusiasm, and student participation enthusiasm is not high also, so it will affect

the normal teaching work. There are some students with solid professional knowledge not solid, and vocal skills master is not ideal, when work so it is difficult for students and demanding, difficult to meet the needs of work, which would hit the students' learning enthusiasm, reduce the students' learning motivation, students will lose confidence, for a long time Therefore, we can know that this teaching mode is not conducive to students' vocal music learning. Although some basis in colleges and universities to students of vocal music and vocal music skills to master teaching strategy and design the teaching plan formulation, a targeted teaching job, but students perception of things is there are differences, this also causes the teaching effect is not ideal, at the same time, the teaching of teachers and teaching facilities equipment configuration didn't get the attention, Therefore, it is difficult to cultivate professional and versatile musical talents [2].

### 2.3 Lack of practicality in curriculum setting

Music is a special type of art, and music course is an important part of education and teaching work, which can enrich the content of teaching work and have a positive effect on the edification of people's artistic sentiment. Moreover, vocal music teaching in colleges and universities can cultivate students' good ability of music aesthetic appreciation and enhance their artistic cognition. Although some colleges and universities have opened the vocal music curriculum, but teaching mode taken by the more traditional machinery, and teachers' teaching idea did not keep pace with The Times, the teachers in the teaching theoretical knowledge as well as the teaching of vocal music skills, students in this teaching mode can only passively, being lack of practical curriculum, Moreover, students have no chance to apply the vocal music knowledge and vocal music skills they have mastered to practical operation, so it will affect the cultivation and improvement of students' vocal music playing ability. In many cases, students can only learn vocal music knowledge on the Internet and give play to their subjective initiative. Under this teaching mode, the physical and mental development of students will be affected, making students lack of playing experience. Although some students have good vocal music foundation and sound condition, it is difficult for them to show and play in this teaching mode. However, the practical teaching of college courses has not been scientifically designed, which can not make up for the defects of vocal music teaching mode, and this communication mode can not guide students to study, thus affecting the quality of teaching.

### 2.4 The supporting facilities are not perfect and the teaching staff is weak

Some colleges and universities have opened vocal music courses in teaching, but through analysis and investigation, some colleges and universities supporting facilities are not perfect, teaching teachers are weak, and this will affect the development of vocal music teaching work. Some vocal music education content has high requirements for training venues and vocal music supporting facilities, and some universities lack facilities and equipment as well as the building of teachers, which cannot meet the basic

needs of vocal music teaching and cannot promote the application of diversified teaching methods in vocal music teaching [3]. There are also some schools due to the restrictions of teaching conditions, so that in the vocal music course teaching a lot of students share a set of facilities and equipment, students do not have the opportunity to operate more. At present, the construction of music curriculum in some colleges and universities is gradually becoming mature, but because of the unsatisfactory investment of teaching funds, it is difficult to promote the improvement of the vocal music ability level of middle school students in the vocal music curriculum. There are also some colleges and universities teaching teachers level quality is not high, vocal music teaching professional quality is low, the construction of teaching teachers is relatively weak, and vocal music teaching for teachers higher requirements, ultimately affecting the teaching effect. In this case, students can not have strong interest and enthusiasm for vocal music learning, and it is difficult to master vocal music playing skills in teaching, so it affects the good development and implementation of vocal music teaching in colleges and universities.

### 2.5 Students' learning ability is different and their comprehensive quality is not high

The current national vocal music education in colleges and universities work and give a positive attention to the local education management reform and innovation of vocal music teaching in colleges and universities to give the support and help, some colleges and universities on the recruitment of students scale are increasing, and master the basis of current students for vocal music knowledge not solid, for vocal music professional knowledge is not enough, Therefore, it affects students' understanding of musical works. In the current situation of the rapid development of Internet technology, pop songs affect the teaching of professional songs in music teaching, which will affect students' learning of professional vocal music knowledge, and also cause a weak teaching atmosphere, which can not cultivate and exercise students' imagination and creativity, which will eventually lead to a vicious circle [4].

## 3. EFFECTIVE PATH OF VOCAL MUSIC TEACHING REFORM AND INNOVATION IN COLLEGES AND UNIVERSITIES

### 3.1 Reasonable allocation of teaching facilities and equipment to improve the level of teaching staff

Institutions of higher learning in the set up and implement the working process of the vocal music teaching to adapt to social development trend, combined with modern features, increase teaching manpower and material resources, financial resources, the rational allocation of teaching facilities, and vigorously develop the teaching course, in the teaching professional field, after a certain amount of money to build and purchase some professional teaching facilities, Students can have a place to practice, and students have more opportunities to show themselves and practice vocal performance. In this process, it is also necessary to actively introduce professional vocal music teachers, who are required to have high professional



quality and teaching ability, so as to improve the teaching quality [5]. In this process, it is necessary to increase the salary level of teachers as much as possible, which can attract more high-level and high-quality teaching talents. And music course in colleges and universities need to create high quality teaching faculty, in the case of qualified can introduce professional singing actor, can strengthen the teachers in colleges and universities, and can improve the comprehensive quality of teaching faculty level, for students, can have more choices, but also is beneficial to students accumulate experience in stage performance, Therefore, it can produce good teaching effect.

### 3.2 Pay attention to the cultivation of students' creative ability

Work in college vocal music teaching need teachers to keep pace, change the traditional teaching idea, introduce advanced teaching ideas, in the teaching innovation and continuously optimize the teaching mode, to breakthrough the limitation of the traditional teaching concept and teaching model and constraints, which requires the students as the main teaching, pay attention to the cultivation of students' creative ability, Under the positive guidance and correct guidance of teachers, students' learning knowledge can be gradually improved, and they will also have a strong interest and enthusiasm in vocal music learning. The innovation and reform of the teaching work can promote the continuous development of the education work, and the vocal music teaching in colleges and universities need to permeate the innovative ideas to promote the good development of the education work, and need to make clear teaching objectives, so as to carry out the vocal music teaching work, the teaching effect is more ideal. In addition, also need to optimize the vocal music teaching form, enriching the content of vocal music teaching, and application of diversified teaching methods for students of vocal music appreciation ability training, and can be further excavate the potential of students for vocal music course can effectively improve the students' ability of vocal music appreciation and aesthetic temperament and interest, make students for vocal music learning can have a profound understanding of, This is also conducive to the exercise and improvement of students' acting ability [6].

### 3.3 Actively implement interactive teaching mode

In the traditional vocal music teaching, the teaching mode has affected and restricted the improvement of students' ideas and understandings, and also restricted the training and expansion of students' thinking ability. In the teaching mode, the teaching class is usually dominated by teachers, neglecting the mobilization of students' enthusiasm for participation and the cultivation of students' innovation ability, and students will lose their enthusiasm for learning in the passive learning state. Therefore, at the present stage, the vocal music teaching reform and innovation in colleges and universities need teachers to closely combine the development trend of The Times, actively implement the interactive teaching mode, take students as the main body of teaching, and enhance the communication between teachers and students as well as students, which

can mobilize the enthusiasm of students to participate in, and achieve the purpose of interactive teaching.

Teachers according to students' ability in vocal music foundation and vocal skills to master, innovating teaching methods, optimize the teaching content, break through the bondage of traditional teaching concept and pay attention to students' learning motivation, which requires teachers to give positive guidance, and provide a good help, according to the specific situation of the students and learning ability will be actual feed into the teaching of life, In this way, students can combine life with knowledge learning and skills training.

In after-class time, teachers can design some teaching tasks for students to complete independently, and guide students to participate in extracurricular exercises, so as to cultivate and exercise students' performance ability and performance ability. In addition, still can combine the Internet information technology to strengthen the online communication, so that students learn not affected by time and space and limits, and the teacher can also give students a good guidance and help, for students in the concrete practice of confusion and problems, teachers need to be able to give timely solution; And will improve the relationship between teachers and students, reduce the distance between teachers and students, students learn to gradually put forward some problems to teachers, and teachers can also provide good help, help students to set up the vocal music learning self-confidence, assist students to master the methods and skills of vocal music study unceasingly, not only to enhance the students' learning effect, Moreover, the level of teaching ability has also been improved [7].

### 3.4 Strengthen the reform and innovation of teaching methods

In the current vocal music teaching in colleges and universities, vocal music teaching is facing a situation of reform and innovation, so it is necessary to strengthen the reform and innovation of teaching methods. In order to meet the needs of social development for vocal music teaching, and to carry out the diversified teaching mode, so college vocal music teaching work need to get the comprehensive reform and innovation, taking the quality education of students, to the cultivation of the students' learning ability and practice ability to apply and improve as the main target of teaching, abandon the traditional teaching ideas and teaching mode, It is necessary to assist students to achieve personalized development and cultivate students' innovative and creative ability [8]. In the specific teaching, teachers need to change and optimize the teaching methods, abandon the traditional mechanical teaching methods in time, actively implement the innovation of teaching methods, introduce the modern advanced teaching models, and establish the correct advanced teaching concepts, so as to promote the students to achieve good personalized development. In this need teachers closely combining the Internet information technology and multimedia equipment online teaching courseware, can let the students to learn knowledge more vivid image, but also can improve students' understanding of music works, thus is advantageous to the student and

inner resonance in music works, improving the students' learning experience, also to enhance the students' learning achievement.

#### 4 CONCLUSION

Through the above analysis and research, we can know that the modern society for the vocal music teaching requirements in colleges and universities are constantly improving, in the teaching need to improve students' learning understanding, cultivate students' good practical application ability, as the main teaching task objective, improve the reform and innovation of vocal music teaching. So you need to rational allocation of teaching facilities, enhance the level of teaching team, pay attention to the cultivation of students' creative ability, actively carry out interactive teaching mode, strengthen the innovation of teaching methods, so that they can constantly improve and perfect the vocal music teaching system and mode, improving the students' practical application ability, to promote the reform and innovation of college vocal music teaching.

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# Study on Current Situation and Countermeasures of Wushu Teaching in Colleges and Universities

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**Abstract:** Under the new situation, wushu is one of the main name cards of Chinese national traditional culture, and also a part of hanruoxinghe traditional culture. Under the series of activities of "Wushu into campus", the development of wushu in colleges and universities has made certain progress, which has laid a good foundation for the promotion of the nation. Martial arts education in colleges and universities is a platform for the inheritance and development of martial arts, and a "bridge" connecting martial arts between schools and society. However, in the real life, wushu teaching in colleges and universities has been unable to meet the needs of the current development of The Times, it is necessary to combine the regional characteristics and the actual situation of schools, based on the current situation, targeted to formulate scientific solutions.

**Key Words:** Colleges And Universities; Martial Arts Teaching; Countermeasure

## 1. CURRENT SITUATION OF WUSHU TEACHING IN COLLEGES AND UNIVERSITIES

Chinese martial arts are widely spread and belong to the national sports based on the masses. It not only has the function of sports, but also, to a great extent, has the function and value of shaping the national spirit of self-improvement and unyielding of the Chinese nation. The development of martial arts in colleges and universities has entered a stable period and is deeply loved by students. Students will be full of vitality when they first come into contact with martial arts, but as time goes on, they will lose their initial passion [1]. The professional teachers in colleges and universities are weak and the level of teachers is low. Lack of martial arts teaching materials suitable for ordinary college students, teaching methods, single, lack of good economic security. At this time, it is urgent to get rid of the "superficial prosperity" of martial arts in colleges and universities, promote the development of martial arts and complete the reconstruction of education quality. In view of this, how to promote the reform of wushu teaching based on reality? It becomes the focus of current analysis.

## 2. COUNTERMEASURES FOR WUSHU TEACHING IN COLLEGES AND UNIVERSITIES

### 2.1 Improve the professional teachers and strengthen their professional quality

In the treasure house of Chinese traditional culture, Chinese wushu is not only competitive, but also of high practical value. With the increase of learning time, it can be found that the level of teachers directly affects the

quality of teaching. At this time, teachers need to take the main responsibility of "preaching and educating", and in a disadvantaged position. General colleges and universities also need to base themselves on reality and establish a team of high-quality talents. Integrate the foundation, improve the quality of classroom construction, meet the current development path, and provide a good foundation for future development. Colleges and universities also need to optimize the knowledge structure, age and educational background structure in combination with the teaching focus, improve the accomplishment of wushu teachers, and provide wushu teachers with more opportunities for further study and training [2]. Strengthen the construction of professional ethics of martial arts teachers, in the vision of love and dedication, teaching and educating people, towards the direction of lifelong learning implementation extension.

### 2.2 Improve traditional teaching methods and create a good curriculum atmosphere

School physical education is an effective transition and development on the basis of lifelong physical education, so wushu teaching also needs to pass on knowledge and help students develop good martial arts habits on the basis of cultural inheritance and lifelong physical education. Pay attention to the cultural value of wushu and give full play to its educational function. Pay attention to the reform of wushu teaching content and teaching method, consider local characteristics, stimulate students' interest in learning, meet the development needs of sports characteristics, reflect the strong practical value. Strengthen the education of martial arts etiquette, strengthen the foundation, increase the perception of cultural heritage and cultural connotation, and provide a good foundation for future development [3]. In addition, colleges and universities also need to adapt to the development trend of The Times and regional characteristics, effectively combine theoretical knowledge with practical knowledge, provide good basic conditions for students to learn martial arts, and maximize the practical value of martial arts. For example, organizing martial arts competitions, martial arts lectures, martial arts culture salons, etc. Give play to the main advantages of the network, improve the interest of classroom teaching, increase students' subjective initiative.

### 2.3 Choose and compile textbooks suitable for college students

For different colleges and universities, the characteristics of students and the characteristics of the region are different, if all use one version of martial arts teaching

materials, then it can not meet the personalized needs of students. As you can see in the TV series, wushu schools can also be divided into Wudang school, Emei school and other types, so the types of martial arts in different regions are not the same. At this time, it is necessary for colleges and universities to combine their own realistic situation, reasonably maintain the standardization of martial arts teaching materials, but also need to show their own characteristics. Moreover, the learning of martial arts itself is a gradual process, which can not be completed overnight. It requires long-term persistence to achieve satisfactory construction results. At this time, when compiling the teaching materials, not only the regional characteristics, but also the current development trend of martial arts should be combined. According to the characteristics of the subject and the teaching staff of the school, their own characteristics should be displayed to help the brand development.

#### 2.4 Increase financial support and establish martial arts clubs

Martial arts venues and equipment are the foundation for martial arts teaching activities that require funds as the basic conditions. Only by improving the equipment can we establish our own basic activities [4]. Schools can also make use of quality outside the school to establish wushu resources, strengthen school-enterprise cooperation, and enrich corresponding resources and conditions. From the traditional point of view, martial arts content is only a small part of the general sports class, most of the time is to learn general sports knowledge. At this point, teachers need to combine the practical, in the school to establish clubs, and the introduction of auxiliary teaching part. The club can not only make up for the deficiency, but also increase the auxiliary teaching, and inherit the spirit of martial arts. Scientific use of teaching methods and management methods, establish effective learning interest, in the actual combat, exercise students' martial arts spirit, establish the connotation of unyielding, increase interaction, enhance students' subject consciousness. In addition, in the practice of the club, also need to feel the broad and profound martial arts. Under the guidance of martial arts, pay attention to their behavior civilization, sense the stable connotation of martial arts. To achieve the construction of moral norms, to realize the internalization of knowledge, to achieve the function and value of moistening things quietly.

#### 2.5 Perfect wushu assessment and evaluation system

In the course of wushu teaching optimization, it is necessary to optimize the evaluation system and improve the corresponding system assessment in combination with the actual situation of the school, so as to meet the multi-dimensional evaluation mode. It is not only necessary to

pay attention to the movements and techniques of wushu, but also need to increase students' in-depth understanding of wushu. To implement the extension of diversified evaluation methods, a reasonable choice can be the evaluation between students, between teachers and students, or self-evaluation. No matter which way, the quantitative construction can be increased and the extension of functions can be maintained. On the basis of the whole, the development function should be established, the resources of the school should be enriched and the curriculum content should be optimized.

#### 3.CONCLUSION

With the progress of society, wushu teaching in colleges and universities needs to establish the teaching idea of lifelong physical education, give full play to the educational function of wushu, improve the construction of teachers, and optimize the teaching method and content. Based on regional characteristics, the compilation of their own martial arts teaching materials. Increase the investment in wushu teaching and enhance the sense of patriotic identity. Improve practice construction, establish activities, competitions, lectures, clubs, etc., promote the integration of teaching in and out of class. The establishment of scientific evaluation system, combined with students' interests and hobbies, rich content, help students establish the idea of lifelong sports.

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# Exploration of Innovative Paths for College Employment and Entrepreneurship Guidance in The New Media Era

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**Abstract:** New media technology with full development in recent years, under the background of the new era of colleges and universities should be reasonable use of new media technology, to carry out the employment entrepreneurship guidance work, change the previous employment entrepreneurship work thinking curing, changing the concept of entrepreneurship of university students' employment, so as to promote the employment entrepreneurship work to informatization, science and technology development road. The new media environment provides greater opportunities for the employment and entrepreneurship guidance of colleges and universities, but at the same time, it also faces certain challenges. To this end, this paper will analyze the innovation path of college employment and entrepreneurship guidance in the new media era.

**Key Words:** New Media Era; College Employment And Entrepreneurship; Innovation Path

## 1. INTRODUCTION

Entrepreneurial university students' employment situation has been got the attention of the party and the state, the new employment policy explicitly pointed out that in the process of social development should always uphold the preferential policy of employment, take a more active employment policy, employment policy, perfecting to speed up the employment entrepreneurship development, give enough support to new employment form, make jobs more flexible [1]. This not only provides a new direction for the guidance of employment and entrepreneurship in colleges and universities, but also puts forward higher requirements for the reform of employment and entrepreneurship in colleges and universities. With the wide application of new media technology, new media is no longer limited to the platform for college students to exchange and obtain information, but gradually transformed into an environment. The new media environment provides greater opportunities and challenges to the employment and entrepreneurship guidance of colleges and universities. Therefore, this paper will analyze the innovative paths of the employment and entrepreneurship guidance of colleges and universities in the new media era.

## 2. OPPORTUNITIES FOR COLLEGE EMPLOYMENT AND ENTREPRENEURSHIP GUIDANCE IN THE NEW MEDIA ERA

New media technology is characterized by no limitation of time and space, rapid propagation, real-time, massive information, etc. With the widespread application of

microblog, wechat and other new media, it provides great convenience for people's life [2]. At the same time, it also causes great changes to people's life and learning behaviors and habits, prompting people to change the previous communication mode and inherent thinking. Under the new media era, provides a new environment for the employment entrepreneurship guidance work and opportunities, through new media technology to establish the real-time information exchange platform, instant startup employment for master students and demand, and communication with the students on the platform for interaction, mining, integration of employment entrepreneurship resources, do a good job in information collection and release Provide students with timely employment and entrepreneurship guidance services. It can be seen that the application of new media technology transforms the traditional concept of college education management, breaks the restrictions of traditional employment and entrepreneurship guidance, and provides a new way for college employment and entrepreneurship guidance.

## 3. CHALLENGES OF EMPLOYMENT AND ENTREPRENEURSHIP GUIDANCE IN COLLEGES AND UNIVERSITIES IN THE NEW MEDIA ERA

Although people can get a lot of information immediately in the new media era, it is also filled with a lot of bad information, which exerts a subtle influence on the employment concept of college students, interferes with their normal employment, and greatly increases the difficulty of employment and entrepreneurship guidance in colleges and universities [3]. For example, at present, there are some comments on the Internet such as Peking University students selling pork after graduation, and they are "biding their fathers" for employment, which has an intangible impact on the employment concept of college students, resulting in the decline of their employment confidence, the formation of negative emotions, and the increase of study pressure and burden, which is not conducive to their mental health. At the same time, there are still some Internet pyramid selling network, such as salary of hundreds of thousands of false employment information, for some of the worse is ability of college students respectively, easy to form a soaring ambition, grandiose ideas, not to establish a correct concept of employment, employment, miss some good jobs, even when the situation. In addition, new media technology has changed the way of communication among college students. More and more college students choose online application, video interview and other forms in the process

of job hunting, resulting in excessive reliance on new media means. As a result, many students are unwilling to participate in the recruitment activities organized by the university, delaying the employment opportunity, and forming a huge impact on the traditional employment and entrepreneurship guidance work in colleges and universities.

#### 4. INNOVATIVE PATHS FOR COLLEGE EMPLOYMENT AND ENTREPRENEURSHIP GUIDANCE IN THE NEW MEDIA ERA

Under the current new media era, the employment and entrepreneurship guidance work of colleges and universities faces some opportunities and challenges. Colleges and universities need to actively use new media technology resources, constantly innovate the employment and entrepreneurship guidance work mode, and promote the sound development of employment and entrepreneurship guidance work

##### 4.1 Change the thinking of education and establish a new concept of employment and entrepreneurship

At the present stage, new media technology has been widely applied in all walks of life, which provides diversified options for college students' employment and entrepreneurship in this environment. The previous "infusion" employment and entrepreneurship work mode does not meet the requirements of employment and entrepreneurship in the new media era. Therefore, the employment and entrepreneurship workers in colleges and universities need to combine the development trend of the new media era, change the traditional education concept, focus on how to enhance the participation and enthusiasm of college students, and establish a new concept of employment and entrepreneurship. First, enhance college students' ability of employment and entrepreneurship through new media technology. This requires colleges and universities to strengthen new media technology related training for college students, improve students' ability to use new media technology. By receiving new media technology training, help students to independently search enterprise information and independently apply for job by using new media technology. Second, use new media technology to establish employment and entrepreneurship education system. Colleges and universities need to break through the barriers of traditional employment and entrepreneurship mode, make full use of animation, audio, video and other new media technologies, and make use of new media channels such as Weibo and wechat to transform employment and entrepreneurship education into a form that college students are willing to accept and integrate with educational work. Third, build employment and entrepreneurship network training base based on new media technology. To provide students with employment and entrepreneurship practical training simulation platform, so that students can find their own problems in the network practical training platform, understand the employment and entrepreneurship knowledge, master job-hunting methods, stimulate students' enthusiasm. At the same time, change the thinking of employment, gradually improve their comprehensive ability, enhance the

competitiveness of employment and entrepreneurship.

##### 4.2 Build a new media information platform to provide employment and entrepreneurship guidance

New media technology has penetrated into every link of People's Daily life. Communication and information acquisition in college students' study and life cannot be separated from new media technology, which also has a profound impact on college students' behavior habits and ways of thinking. Therefore, colleges and universities need to pay attention to the employment and employment needs of college students, actively carry out employment and entrepreneurship education themed activities, use new media technology to build employment and entrepreneurship guidance platform, push employment and entrepreneurship related information to students, publicize the latest progress of employment and entrepreneurship, and provide comprehensive services for students' employment and entrepreneurship.

##### 4.3 Integrate teacher resources and establish a new team for employment and entrepreneurship

In order to promote the development of employment and entrepreneurship guidance to informationization and science and technology in the new media era and meet the diversified job-hunting needs of college students, it is necessary for colleges and universities to establish a new team of employment and entrepreneurship with professional level and strong professional ability. First of all, colleges and universities should actively attract employment and entrepreneurship guidance talents with rich experience, who can skillfully use new media technology to supplement the teaching staff with fresh blood. At the same time, we will provide professional training for existing employment and entrepreneurship staff to ensure that they have an effective grasp of new media technologies and enhance their ability to guide employment and entrepreneurship.

#### 5. CONCLUSION

To sum up, under the new media environment, employment and entrepreneurship workers in colleges and universities should have a correct understanding of the opportunities and challenges it brings, fully understand and master new media technology, reasonably use new media technology in employment and entrepreneurship guidance, innovate employment work forms, and meet the personalized needs of the new era.

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# An Analysis of Vocational Skill Training Of "1+x Certificate System "For Architectural Engineering Technology Majors in Higher Vocational Colleges

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**Abstract:** In the current society, all walks of life are in continuous development and progress, and as a very important society in today's education industry has also obtained a good space for development. Under the background of the current new curriculum reform, the traditional higher vocational teaching has been reformed, and now the new "1+X certificate system" has been introduced. Under the reform of the system, the current higher vocational teaching should develop and progress in this direction, and adopt better vocational and technical training strategies for talents under the role of the system. In order to effectively improve the quality and efficiency of current vocational teaching.

**Key Words:** Higher Vocational College; Major In Architectural Engineering Technology; 1+x Certificate System

## 1.INTRODUCTION

Construction engineering technology major is a relatively common professional content in current higher vocational colleges. Teachers should adopt better methods to carry out teaching in the teaching process of this professional content, so as to achieve a good teaching effect. Under the background of new curriculum reform of current can use certificate system of "1 + X" teaching, in order to develop the professional is a practical strong professional, so using the theory of the traditional teaching is not effective teaching to improve overall efficiency and quality, in the certificate system of "1 + X" teaching can transform, under adopt better teaching methods. This paper also focuses on the analysis and discussion of the current vocational skills training of "1+X certificate system" for architectural engineering technology in higher vocational colleges, hoping to help people in need.

## 2. SET UP PROFESSIONAL COURSES REASONABLY

In the traditional courses of architectural engineering technology in higher vocational colleges, most of the courses set by colleges and teachers actually have some mistakes. It is precisely because of such mistakes that the overall teaching efficiency and quality are relatively low, and the relevant talents cannot be effectively cultivated. In this context, teachers and institutions need to set up the current professional courses reasonably [1]. In the current under the background of certificate system of "1 + X" want to achieve a good effect is needed in the current curriculum to improve the proportion of practical courses

and practice courses, through practice, and practice methods to help students improve their ability of practice, in order to strengthen its real to grasp and understanding of the contents of this professional.

Secondly, in the course setting process, different students have different levels of knowledge and foundation, so different students have different levels of learning needs. In this context, teachers should also set the corresponding course content according to different situations. For example, the class can be divided into public basic course module, professional basic course module and professional practice module according to the mode of module. In this context, the corresponding teaching is carried out around the "1+X certificate system", and students' core qualities can also be cultivated and developed under this system. At the same time, this curriculum can also meet the needs of students at different levels, so as to help students more effectively targeted learning. But in the course setting process always need to pay attention to the matter is not to forget the core professional course content, in the guarantee of professional content on the basis of the corresponding course content, in order to ensure the effectiveness of teaching.

## 3. CREATE A PRACTICAL CURRICULUM ENVIRONMENT

In colleges and universities in the teaching process, in order to be able to let the students well in practical course and practical teaching content, teachers and schools will need to provide the students with a good practice environment, only in good practice environment to let the students real learning and mastering the classroom teaching content, through the way of practice to grasp and deep understanding of it. In order to achieve such effect, schools should provide students with a good practice environment, fixed in colleges and universities internal construction site, in such a teaching process and teachers also need to change the traditional course, through the way of reasonable setting practical courses to help the students to practice, in the classroom teaching process, Students can also grasp and understand the importance of practical lessons. In addition, in the context of the current "1+X certificate system", colleges and universities also need to respond to the call to build a corresponding practice place and environment within the universities, in order to meet the corresponding needs and standards, to provide a good foundation and background for students' professional

learning and development. At the same time, schools should also cooperate with enterprises to carry out the corresponding practical course learning in a school-enterprise joint way, so as to achieve a good learning effect and quality.

Colleges and universities in the current under the background of certificate system of "1 + X", colleges and universities should also and fight for cooperation and strengthening cooperation between enterprises, try in the current teaching background to inside colleges and universities set up a good professional skills training base and practice base, at the same time can also be based on enterprise internal study and master the content in order to develop the corresponding professional skill test, etc., Such a method can not only keep the teaching content up-to-date in real time, but also effectively improve students' professional skills and keep them in the most advanced stage. Only in this context can teaching effectively improve the overall teaching quality and efficiency [2]. For students, such teaching can effectively help them master the most advanced and good knowledge and skills. For enterprises, the cultivation and teaching of colleges and universities can also provide enough excellent talents for enterprises in the future.

#### 4.CONCLUSION

To sum up, in the current teaching context, certificate system of "1 + X" represents the traditional teaching needs to be improved, and for construction engineering

technology specialty in higher vocational colleges, in such a teaching background also need to optimize the traditional teaching contents, in the current teaching process first need to optimize the traditional curriculum and improvement, Secondly, cooperation between schools and enterprises needs to be strengthened. Only in this context can teaching truly cultivate excellent professionals, so as to jointly promote the good development and progress of the education industry, the construction industry and the whole society.

#### ACKNOWLEDGEMENTS

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# Application of New Media Technology in Film and Television Media

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**Abstract:** With the rapid development of society today, almost all fields have been revitalized, with more and more modern progress. Film and television media is one of the more representative ones. Especially under the promotion of new media technology, the field of film and television media has a rapid development trend. In view of the current situation, the development of new media technology is very rapid. The field of film and television media should continue to strengthen the application of new media technology, and further explore the value brought by this technology, so that it can further promote the progress of film and television media. In this paper, the application of new media technology in film and television media has been deeply analyzed.

**Key Words:** Film And Television Media; New Media; Technology Application

## 1. THE ADVANTAGES AND CHARACTERISTICS OF NEW MEDIA TECHNOLOGY

### 1.1 Fusion Features

In modern society, new media is the latest product to help the development of The Times. With many advantages, it can help the industries using this technology to improve economic benefits and achieve better development [1]. In addition, in the new media technology, fusion characteristics is one of the most obvious advantage of the technology as a new media form, it has diverse forms, can convey information by means of micro video, can also according to the ads in the form of the information presented to the public, in order to enrich the public business, to make it more timely access to social news. In addition, the above two methods can also be combined with multimedia methods, which can greatly improve the quality of information on the original basis, provide people with more accurate news, and make the information spread one by one, one by one, and one by one.

### 1.2 Extensive interaction characteristics

Under the background of the current information age, widespread interactive features is also one of the most important in the new media technology characteristic, the emergence of the technology are widely used, the main reason is that this was not the only new media technology advantages, have a number of characteristics, better able to break the bondage of traditional media technology and restrictions, more open, To provide people with more comprehensive services. Not only that, the new media technology also provides digital TV, Internet and mobile phones, and other intelligent electronic devices, greatly to solve the problem of people surf the Internet, let people through the network can do what you want to do, published their own views, so that not only broaden the

scope of information interaction, also increases the interaction between people, It provides a guarantee for the harmonious and stable development of the society.

### 1.3 Instant Features

At present, the advantage of new media technology is mainly manifested in the real-time characteristics, compared with the traditional media technology, the accelerated the speed of information transmission, let people never leave home can access to information, real-time grasp the situation of the society, on the basis of the original greatly improve the quality of the information and deliver value, improve the efficiency of the related staff.

### 1.4 Free Features

At present, if the new media technology has been reasonably applied in film and television, it will give full play to the advantages and roles of new media technology, increase the amount of information and information value, and provide convenience for people. In addition, micro-blog is becoming more and more popular in this society. Almost every young person has this software in their mobile phone. On this platform, people can learn about the current hot news and events at any time and express their own opinions, which makes the public opinion gradually develop towards the direction of populization. Therefore, the emergence of communication platforms better meet people's needs, so that it plays a positive role in the development of film and television media. At the same time, new media technology also includes the feature of freedom, which provides great convenience to the film and television media industry, makes the information dissemination more free, creates a loose social environment for the audience, provides a good living environment, and ensures the harmonious and stable development of the society.

## 2. TECHNICAL PERFORMANCE OF NEW MEDIA IN FILM AND TELEVISION MEDIA

### 2.1 Expression Vector

In today's rapid social development, China's emerging technologies continue to appear, can be applied to a wider range of more and more, to provide more convenient conditions for each field, let it develop in a better direction. At present, new media technology has various forms and types under the background of technological development, namely mobile phone, computer, iPod, etc., which provides great convenience to people's life [2]. In addition, new media technology in the corresponding social software by mobile phone, computer and some other facilities in the end to spread the information of intelligent electronic products, the emergence of the technology to the development of film and television media industry has played a positive role, when the new film & tv industry works, application of the technology can greatly improve

the quality of work, promote efficiency, Do one, ten, one hundred, let more people know.

## 2.2 Propagation Effect

In modern society, the emergence of new media technology can be widely used in the film and television media industry, because this technology can help the industry to complete propaganda when forwarding and interacting with works, which not only saves time, but also improves work efficiency. It can also be said that the most difficult work can be completed in the shortest time. In addition, generally before the official release of the work, film and television media enterprises will make a trailer to attract the audience's attention, and use various video software to release it, to complete the promotion of the work in the interaction, to be able to get higher ratings when the work is released, to achieve the desired effect.

## 3. APPLICATION OF NEW MEDIA TECHNOLOGIES IN FILM AND TELEVISION MEDIA

### 3.1 Interactive network technology

In the application of the new media technology, the use of interactive network technology can make the information in the network and digital TV to achieve effective interaction, compared with the traditional media technology, the advantages of interactive network technology will be more, can improve the propagation speed of information, better to change the way to obtain information of movie resources, broaden the channels of access to information. In addition, modern society has been gradually popularized the mobile terminal network equipment, digital TV has been into every family, the after the combination of computer and Internet technology, the TV and computer their advantages in combination with each other, can let the audience the be fond of according to oneself to choose favorite TV show to watch, so as to meet the needs of the masses of users.

### 3.2 Mobile multimedia technology

In the new media technology, mobile multimedia technology is one of the crucial one type, the technology is mainly used in mobile devices, can better help film & tv industry of information and the spread of film and television program signals, on this basis, the technology also can automatically block out those information

causing interference signal, greatly improve the quality of the film and television program and playback, Thus bringing visual enjoyment to people [3]. In addition, mobile devices also have an advantage, that is, small size, convenient to carry, their application in film and television transmission can provide great convenience to the audience, facilitate them to watch film and television programs at any time, to meet the visual needs.

## 4. CONCLUSION

To sum up, with the continuous development of society, China's science and technology progress by leaps and bounds, has entered the information age. Modern society, the emergence of new media technology has been widely used, one of the most prominent is the field of film and television media, in the industry, the scientific application of the new media technology is the need of times development, only make full use of the advantages of this technology, can help the industry to achieve a good development, improve the economic benefits of society. In addition, under the current information background, online cinema and network TV are gradually popularized in this society, which are changing people's living conditions, lifestyle and quality of life, greatly facilitating human beings, leading the society into a new media era and achieving good development.

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# Research on Three Learning Forms of Gill Withdrawal Reflex in The Aplysia

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**Abstract:** Based on the analysis of the neural mechanism of invertebrates and the neurobiological basis of learning and memory, this paper analyzed in detail the three learning forms of the gill withdrawal reflex in Aplysia, namely habituation, sensitization and classical conditioning. Firstly, the advantages of Aplysia as a representative of invertebrates as an experimental object were introduced. The nervous system of Aplysia was simple, the number of neurons was few, and the single nerve cell was large, which was convenient for experimental observation. The concept of neuron and the development of artificial neural network are introduced. Secondly, three learning forms and forgetting forms of gill withdrawal reflex were analyzed from the aspects of neural mechanism and molecular level. Finally, on the basis of the principle of Aplysia gill withdrawal reflex of artificial neural network model is established, the contrast before people use hardware circuit of the electronic synapse - "memristors" to achieve habituation, sensitization and the classical conditioning form three kinds of learning, the realization of the hardware circuit is not flexible, from the angle of information processing, artificial neural network to simulate the human brain structure and function, through the artificial neural network model, three forms of learning and forgetting processes are successfully realized, which makes the neural network have more space for development in biology, medicine, control and other fields, and is of great significance to promote the development of artificial intelligence.

**Key Words:** Gill Withdrawal Reflex; Artificial Neural Network; Habituation; Sensitization. Classical Conditioning; Learning Form

## 1. INTRODUCTION

The human and animal brains are the most complex and efficient information processing systems in the world. It receives environmental change information from visual, auditory, smell, taste, touch and pain, and realizes pattern recognition through complex processing (calculation) and learning, so as to guide organisms to make appropriate response, so that humans and animals can survive and develop in the ever-changing environment.

Both human and animal brains are plasticity, changing their functions in response to events experienced by individuals. The most bizarre plasticity is learning and memory [1]. Learning is the process of acquiring new knowledge, while memory is the process of preserving acquired knowledge. A series of important advances have been made in the study of learning and memory processes

through comprehensive analysis at the holistic, systematic, cellular and molecular levels. There are three simple forms of learning that can be studied: habituation, sensitization, and classical conditioning. At present, the study of learning and memory mainly used invertebrates as experimental materials, because their "brain" is composed of a few large cells, but it has the basic characteristics of vertebrate learning and memory. A prominent example is the study of Aplysia [2]. The largest nerve cells of the Aplysia are up to 1 mm in diameter, and the smallest ones are larger than those of the human brain. The position, shape, and physiology of many cells are prominent and can be replicated in individuals of the same species. These characteristics are beneficial to the study of the neurobiological basis of learning and memory.

From lower invertebrates to higher mammals, habituation and sensitization are two kinds of learning behaviors [3]. However, the nervous system structure and function of vertebrates are complex and variable, so it is not easy to analyze and model certain learning behaviors. When Eric Kandel, an American neurobiologist, first studied mammals, in the late 1960s, he used the gill withdrawal reflex as an example of the Aplysia Californica, which has a simple nervous system and few neurons. At the cellular level, the habituation and sensitization learning of Aplysia have been deeply studied and a breakthrough has been made [4].

## 2. NEURONS AND ARTIFICIAL NEURAL NETWORKS

### 2.1 Overview of neurons

The study of neurons has been going on for a long time. Biologists have known the composition of neurons since 1904 [5].

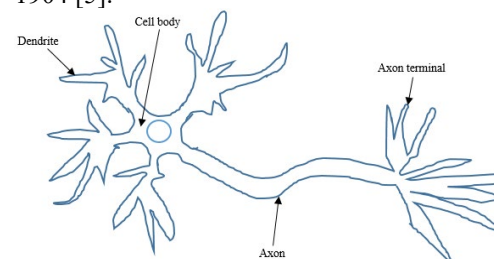


Fig.1 single neuron

Neurons, or nerve cells, are electrically excited cells that communicate with other cells through special connections called synapses. It is a major component of nerve tissue in all animals except sponges and mucous animals. Plants and fungi have no nerve cells. All neurons have three basic structures, a cell body containing a nucleus, an axon, and

many small dendrites [6].

The axon of a typical neuron shoots from one end of the cell body and can stretch for several feet. An axon often divides into one or more branches; The terminals of these branches are tiny axonal terminals. Several dendrites often appear at the other end of the cell body (Fig.1). Most neurons receive signals through dendrites and cell bodies and emit signals along axons [7].

According to the function of neurons, they can be divided into the following three types [8] :

2.1.1 Sensory neurons: located in the skin and various sensory organs, they respond to specific stimuli in the external world -- mechanical pressure (touch), light (vision), sound waves (hearing), or special chemical molecules (smell and taste) -- and transmit these information to the brain. Some of the terminals of neurons are free, while others differentiate into cells or tissues that are specialized to receive a particular stimulus. In the reflex arc, the interneuron is generally connected.

2.1.2 Motor neurons: Axons are emitted from the brain stem and spinal cord to effectors, such as muscle and gland cells. Nerve impulses are transmitted from the axons of the cell body to the ends to cause muscle withdrawal or gland secretion. In the reflex arc, the connection with interneurons is generally convergent, that is, many afferent neurons form synapses with the same neuron, so that many impulses from different sources act on the same neuron simultaneously or successively.

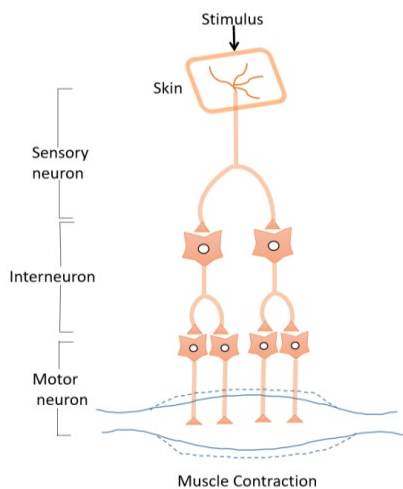


Fig.2 Three types of neuron

Three types of neurons are distinguished by Cajal [9]. Each type of neuron in the brain and spinal cord has a specific function. Sensory neurons respond to external stimuli. Motor neurons control the activity of muscle and glandular cells. The interneurons are the relay stations between sensory and motor neurons.

2.1.3 Interneuron: the neuron with the largest number in the brain, which acts as the information transfer station between sensory and motor neurons. Receives a nerve impulse from another neuron, and then transmits the impulse to another neuron. Interneurons are distributed in the brain and spinal cord and other central nerves. It's the most numerous of the three types of neurons. The more interneurons involved in the reflex, the more complex the

reflex activity caused. The human cerebral cortex is thought through the extremely complex reflex activity of a large number of interneurons. The complex connections of interneurons are the structural basis of the highly complex nervous system. Interneurons play a very important role in the neural activity of gill withdrawal reflex in Aplysia.

2.2 Structure of neurons

In 1943, psychologist McCulloch and mathematician Pitts published an abstract neuron model MP[10], referring to the structure of biological neurons.

The neuron model is a model that contains input, output and computational functions. The input can be likened to the dendrite of a neuron, the output to the axon of a neuron, and the calculation to the nucleus. Here is a typical neuron model [10] :

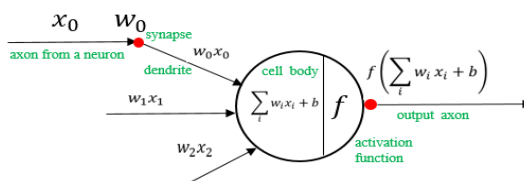


Fig.3 Typical neuron

2.3 Artificial Neural network (ANN)

Artificial Neural Networks (ANN) is an algorithmic mathematical model that mimics the behavior characteristics of biological neural networks and processes distributed and parallel information. Depending on the complexity of the system, such networks process information by adjusting the weight of the interconnections between a large number of internal nodes (neurons). Artificial neural network originated in the 1940s and 1950s. It is based on the modeling and connection of neurons, the basic unit of human brain, to simulate the human brain nervous system and form an artificial system with intelligent information processing such as learning, association, memory and pattern recognition, which is called artificial neural network.

3. RELATED WORK

3.1 Gill withdrawal reflex of Aplysia

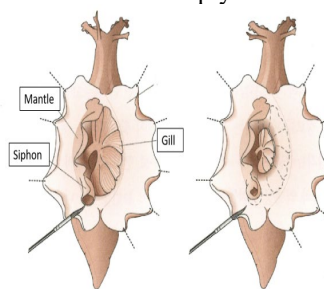


Fig.4 Aplysia gill withdrawal reflex and siphon withdrawal reflex

Aplysia are marine soft-bodied animals whose external respiratory organs, called gills, are partially covered by a mantle, and the back of the mantle forms a fleshy tube called a siphon, through which the seawater in the breathing space of the mantle cavity is discharged. When a weak or moderate stimulus is applied to the siphon or

mantle, the gill retracts into the mantle cavity. This is the gill withdrawal reflex. It is clear that the gill withdrawal reflex has a defensive physiological significance, protecting the vital gills from injury. The diagram below shows Kandel in one of his books [3] demonstrating the gill withdrawal reflex in *Aplysia* and the locations involved in it.

The neural circuitry of the gill withdrawal reflex is known to be quite simple. In the ventral ganglion, there are 24 sensory neurons activated by siphon afferent, 6 motor neurons innervating gills, and 3 interneurons (two of which are excitatory and one is inhibitory). Sensory neurons can communicate with motor neurons directly or indirectly through interneurons. Owing to the large size of *Aplysia* nerve cells and the simple neural circuitry of gill withdrawal reflex, therefore, it can be used to make an in-depth research on the original row pattern of learning-habituation and sensitization.

### 3.2 Habituation of the gill withdrawal reflex

Habituation refers to the process in which the behavioral response gradually weakens when the original new stimulus is repeated. In experiments with *Aplysia*s, when the siphon is lightly stimulated repeatedly, the reflex is seen to gradually weaken until it does not appear, which is habituation. The gill withdrawal reflex can be restored after the siphon stimulation has ceased for some time. According to the process of gill reflex, can be used divide into short - term and long - term two forms. If a single round of 10-15 stimuli is given, the gill withdrawal reflex takes about 1 hour to 1 day to recover, which is a short-term habituation. If the stimulation is given 10 times per round and repeated 4 times, the recovery of the gill withdrawal reflex takes several weeks, which is long-term habituation.

What is the neural mechanism of habituation? Studies on ventral ganglion neurons of *Aplysia* using microelectrode technology and electrophysiological methods have found that a considerable excitatory post-synaptic potential (EPSP) can be generated in motor neuron L7 when sensory neurons are directly stimulated with an appropriate intensity of current [11]. If sensory neurons are repeatedly stimulated in accordance with the time series used to train short-term habituation, the EPSP amplitude generated by L7 will gradually decrease and parallel to the behavioral habituation. Further studies showed that the decrease of EPSP amplitude was caused by the reduction of the transmitter mass released by the sensory neurons. These results suggest that the generation of short-term habituation is mainly caused by the temporary decrease of synaptic function.

Observations of the EPSP of L7 suggest that the key site for long-term habituation is also at the synapse. Three groups of *Aplysia* were compared, one as an untrained control, and the other two after a day and a week of long-term habituation training (four days of training). The results showed that 90% of the sensory neurons in the control animals had functional connections with L7, that is, when sensory neurons were stimulated, EPSP could be habituated at L7 for a long time. One day and one week after the training, only 30% of sensory neurons were

functionally connected to L7. This suggests that, after simple learning, previously effective synaptic connections between neurons become inactivated, and that this inactivation lasts for more than a week. It can be seen that long-term habituation is caused by the interruption of previously effective functional connections at the synaptic site for a long time.

### 3.3 Sensitization of gill withdrawal reflex

To sensitize an animal or cell to any subsequent stimulus, including a harmless one, to produce a strong response. Sensitization is a little more complicated than habituation. In the experiment, when the *Aplysia* is used to the repeated stimulus siphon reflex, if the head or tail of the animal is given a harmful or strong stimulus, the animal will appear strong gill withdrawal reflex. The recovery of habituation behaviors by harmful or strong stimuli is called sensitization or deshabituation. Obviously, sensitization is also a form of learning, in the sense that it teaches an animal to pay attention to a stimulus that may have dangerous consequences.

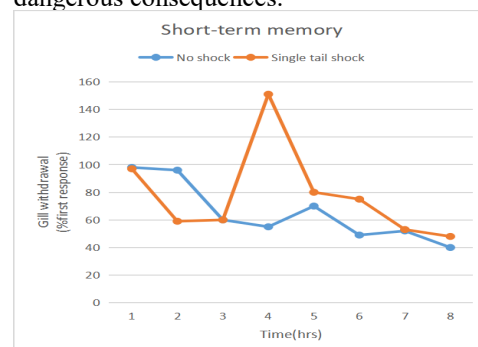


Fig.5(a) The enhanced response to a single stimulus lasts only a few hours, which is called short-term sensitization

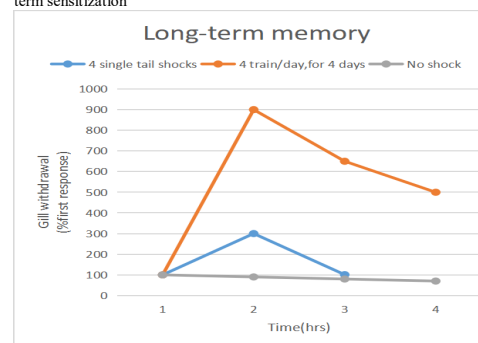


Fig.5(b) If repeated shocks are received, they will last for several days

What is the neural mechanism of sensitization? Using the same method used to study habituation, it was observed that stimulation of sensory neurons during sensitization can increase the release of peripheral transmitters and cause the increase of motor neuron EPSP. Further studies have shown that the mechanism of sensitization is presynaptic facilitation. The detailed process is [12] : afferent head or tail noxious stimuli activate interneurons in the ventral ganglion that can cause facilitation. The end of this interneuron terminates near the end of sensory neuron, and the transmitter it releases can facilitate the end of sensory neuron, that is, the amount of transmitter released by the end increases. This causes the EPSP of motor neurons to increase. Recent intensive research has demonstrated that the mediator of the interneurons that cause facilitation is serotonin; Presynaptic facilitation



may be due to the increase of  $Ca^{2+}$  in the peripheral. The increase of  $Ca^{2+}$  may be due to the increase of  $Ca^{2+}$  flow in the presynaptic membrane or the indirect effect of cAMP.

Fig.5. This figure shows the adaptation of the gill withdrawal reflex in Aplysia after repeated siphon stimulation and the acquisition of a single stimulus to the tail, which maintained an enhancement for approximately one hour. This behavior can be altered over a period of days or weeks by repeated paired tail and siphon stimuli, suggesting that simple long-term memory forms, whereas for a single tail shock, the gill withdrawal response is sensitive for a short period of time, and tail stimulation for several days leads to prolonged sensitization of the gill withdrawal reflex.

3.4 Classical conditioning of the gill withdrawal reflex

In classical conditioning, animals and cells respond to harmless stimuli with equal intensity after multiple pairs of harmful and harmless stimuli are presented. Classical conditioning teaches animals to associate an unpleasant stimulus, such as an electric shock, with a common stimulus that elicits no response. The neutral stimulus must always precede the negative stimulus, which seems to predict the latter.



Fig.6 Aplysia have tactile stimulation and electrical stimulation, and Pavlov's dog has a bell and food

For classical conditioning, the conditioned stimulus must precede the unconditioned stimulus, usually by no less than 0.5 seconds. What is the mechanism of this strict timing relationship? An important temporal relationship in the conditioning process of the gill withdrawal reflex of Aplysia is the convergence of conditioned and unconditioned stimuli in sensory neurons [13]. These are axon-to-axon connections between the sensory neurons receiving the conditioned stimulation and there is a presynaptic facilitation that leads to sensitive behavior. If after the sensory neurons responded to the conditioned stimulus, interneurons unconditioned stimulus activated immediately, then can get even bigger presynaptic facilitation, on the contrary, if the middle neuron activation before the sensory neurons are activated, then there is no facilitation phenomenon, that is to say, sensory neurons activate follow after the unconditioned stimulus is impossible to establish a conditioned reflex. Since the conditioned stimulus produces action units in sensory neurons just before the arrival of the unconditioned stimulus, the facilitation enhancement is called the dissimilation enhancement of activity dependence. In the unbound unconditioned stimulus pathway, sensory neurons did not act before the conditioned stimulus, so the  $Ca^{2+}$  channel was closed. Only the unconditioned stimulus acted on the tail could activate the interneurons to release 5-HT and cause a series of biochemical processes. The cAMP second messenger system is critical for synaptic

plasticity as well as learning and memory.

4.MODEL

Based on the principle and mechanism of the gill withdrawal reflex in Aplysia, we can better understand some behaviors and phenomena in daily life by studying the three learning forms of habituation, sensitization and classical conditioning. Currently, most of the studies on these three forms of learning use hardware circuits to simulate. For example, memristor [11] has become a hot research topic in recent years to simulate synapses or neuron functions. It has been proved to be characterized by low power consumption, high speed operation, simple circuit and efficient information processing, and is considered to be the hardware implementation with the smallest volume closest to the properties of single synapses or neurons [5].

The concept of memristor was proposed by Cai Shaotang in 1971 based on the completeness of the circuit [14][15]. The circuit element exhibits characteristics similar to memristor, so it is called memristor. Although the physical device of the memristor was not found at that time, the voltage and current curves of the memristor obtained by establishing the experimental model were different from the common waveform in the RLC circuit. In 2007, HP Information and Quantum Systems Laboratory prepared solid-state devices that exhibit current-controlled resistance properties using double-layer titanium dioxide films [16][17]. This double layer titanium dioxide film is the world's first memristor physical device.

Although memristor research has appeared in hardware circuits that can demonstrate some forms of learning that mimic neuronal signals in the brain, its drawbacks are obvious. In the hardware circuit, the experimental results will be affected by the characteristics of the components themselves and the value of the input signal, and can not completely simulate the freedom and randomness of the brain neural network. Therefore, artificial neural network is adopted in this paper to process information by imitating the behavioral characteristics of biological neural network and adjusting the weight of interconnections among a large number of internal nodes (neurons). Based on the three forms of the gill withdrawal reflex in Aplysia mentioned above, a simple table can be used to represent it: "1" in the 2 and 3 columns of the table indicates the presence of stimulus, and "0" indicates the absence of stimulus; In column 4, "1" means that there is a gill withdrawal reflex, "0" means that there is no gill withdrawal reflex, and "2" means that there is a strong gill withdrawal reflex.

Table 1 Three manifestations of gills reflex

Learning rules	siphon stimulation	Shock tail	Gill withdrawal reflex and intensity
Habituation	1	0	1->0 0->1
Sensitization	0	1	2->short/long
	1	0	2->0
Classical conditioning	1	1	2

The neural network model was constructed and trained Input layer: the siphon and tail were stimulated by the gill withdrawal reflex of Aplysia. Therefore, the input layer of this neural network was composed of two neurons,  $x_1^0$

representing the siphon and  $x_2^0$  representing the tail.  
 Hidden layer: there are four layers in total. In the process of processing the data set flowing into this layer, the hidden layer carries out linear weighted sum of the data vector input from the previous layer and the weight value of each hidden layer, and performs nonlinear processing and transformation.

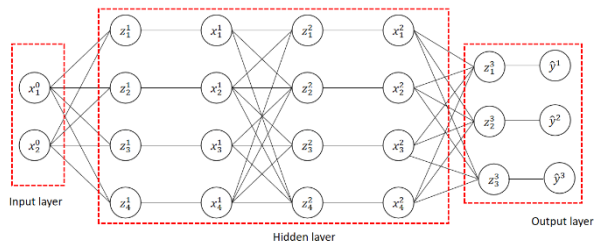


Fig.8 Artificial neural network model

Output layer: it is the last layer of the neural network, its main function is to output the results needed to be obtained. The number of neurons in the output layer is related to the specific problems analyzed. In this neural network, we need to judge the gill withdrawal reflex and the degree of response of Aplysia given different stimuli. Therefore, the output layer is composed of three neurons, representing non-gill withdrawal reflex, weak gill withdrawal reflex and strong gill withdrawal reflex respectively.  
 Backpropagation (BP) algorithm is used to train the constructed neural network, and the results are as follows:

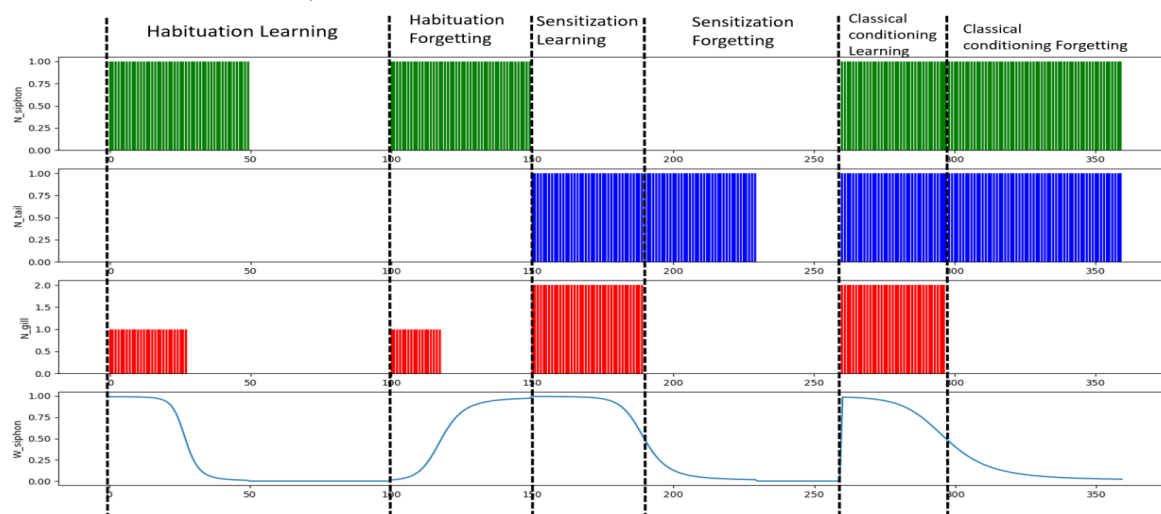


Fig.9 The simulation result

The simulation results are shown in Figure 9.  $N_{siphon}$  and  $N_{tail}$  are used to represent the stimulus siphon and the stimulus tail respectively, and  $N_{gill}$  represents the gill withdrawal reflex.

In the stage of habituation learning, siphon is stimulated separately for a period of time. At first,  $N_{siphon}$  can trigger  $N_{gill}$  to cause the gill withdrawal reflex, but after a period of time, the peak frequency of  $N_{gill}$  also gradually decreases and disappears, which is the phenomenon of habituation.

In the amnesia stage of habituation, siphon is stimulated continuously. After a period of time, the gill withdrawal reflex disappears, and the value of  $W_{siphon}$  begins to rise in the amnesia stage, indicating that habituation behavior is gradually recovering and memory amnesia occurs during habituation.

In the process of sensitization learning, the shock to the tail alone will produce the phenomenon of gill withdrawal reflex which is stronger than the habituation response, that is, sensitization.

In the sensitization amnesia phase, if the shock to the tail is sustained for a period of time, the gill withdrawal reflex disappears.  $W_{siphon}$  decreased in the sensitization forgetting stage, and memory forgetting occurred in the sensitization process.

In classical conditioning learning, siphon and tail are entered at the same time, i.e.,  $N_{siphon}$  and  $N_{tail}$  are

entered at the same time for a period of time. This is a learning process. At this time, there is a strong gill withdrawal reflex phenomenon, which is the classical conditioning phenomenon. "Siphon" and "tail" are input at the same time, if continued over a period of time, the gill withdrawal reflex will disappear. In the amnesia stage of classical conditioning,  $W_{siphon}$  gradually declines and memory amnesia occurs in classical conditioning. This is classic conditioned forgetting.

The simulation results show that the neural network model successfully demonstrates three simple learning forms of gill withdrawal reflex and shows the phenomenon of forgetting, which lays a foundation for the subsequent study of the neural network mechanism of learning and memory.

4.CONCLUSIONS

Kandel's research was carried out in molecular biology and made a breakthrough in the study of habituation and sensitization learning on the cellular level in Aplysia. In this paper, through the simulated neural network model, from the phenomenon of gill withdrawal reflex to the neural mechanism, from the molecular level of research to the construction of artificial neural network simulation, perfect verification of the habituation, sensitization and classical conditioning learning and forgetting process. Compared with previous people who use the electronic synapse of hardware circuit -- "memristor" to realize

habitualization, sensitization and classical conditioning, this paper constructs an artificial neural network model to simulate the information transmission between nerve cells, and uses the simulated neural network model to realize the simple form of learning and forgetting process. In the future, we will continue to study the relationship between learning and memory, what is the essence of memory, and how to express memory with neural networks. Also, the study of neuroscience, not just in terms of physical and chemical changes, but in terms of multilevels, in terms of all aspects, as Kandel summed up his own work, their work, which now provides only A, B, C of the mechanisms of memory, These "letters" can form words or "sentences" with complex specific meanings. This reflects not only the cautious approach of a scientist, but also the complexity of neuroscience and the need for a variety of approaches.

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# Significance and Advantages of New Media Law Popularization

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**Abstract:** With the popularity of the Internet and the rise of new media, there are more and more ways to popularize the law. New media law dissemination has unique advantages, to a large extent to make up for the shortcomings of the traditional way of law dissemination. According to the investigation of people's cognition of legal knowledge, the popularization of law is the need of politics and people, and new media is the need of law popularization, which has more social influence.

**Key Word:** New Media; Popularize The Law; Advantage

## 1. THE SIGNIFICANCE OF THE LAW

The people's rights and interests must be protected by the law, and the authority of the law must be upheld by the people. From the central policy of the state to the common people, they are responding positively to the call for the popularization of law. The popularization of law seeks to make all the common people have the basic knowledge of law as far as possible, so that they can have a reasonable understanding and response to their own or others' illegal and criminal acts. The popularization of law can effectively improve the quality of the people, improve the people's values and outlook on life,

## 2. NEW AND TRADITIONAL METHODS OF POPULARIZING THE LAW

No matter when, what kind of way to popularize the law is based on publicity and education, once we see everywhere posters of legal publicity, painting of legal knowledge patterns, horizontal hanging slogans, there are some legal activities in the village, legal performances and other traditional ways of spreading the law.

The rise of new media can make full use of network resources, producing film and television publicity materials, 3D animation videos, shooting case scene reproduction, writing vivid legal articles and other ways to publicize the law. This way of propaganda is easier and easier to attract people and leave a deep impression.

## 3. ADVANTAGES OF NEW MEDIA

New media has strong permeability, and its dissemination

of information is not limited by time, region and space. As long as we make good use of all kinds of receiving equipment in our hands, we can realize the sharing of resources and information in the whole China and even the whole world. It is also highly interactive, enabling us to have face-to-face communication with each other wherever we are, and to express our correct and reasonable views and opinions on everything in the world without any restrictions. New media law dissemination more effectively save time and material costs, the extensive use of Internet search enables us to find legal knowledge or legal cases in a very short time.

## 4. CONCLUSION

Although new media can make use of the platform of new media to publicize the law more closely to the general public, new media platforms must pay attention to the quality and impact of the content released, ensure the rigor and correctness of the content, and at the same time of humor must not ignore the seriousness of the law. The road to the popularization of France must take the express of new media, with the help of new media, the road to the popularization of France will be more successful.

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# Research on the Supply Mechanism of Grassroots Community Service Under the Background of Community Governance-- Taking Shunde District of Foshan City as An Example

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**Abstract:** The provision and management of grassroots community services is an important part of community governance. This paper summarizes the advantages and effects of the current grassroots community services through the research on the supply mechanism of community services in Shunde District, Foshan City, and provides suggestions on the existing problems and deficiencies in the supply mechanism of community services.

**Key Words:** Social Innovation; Community Governance; Community-Level Community Services

## 1. RESEARCH BACKGROUND

The third plenary session of the 18 in the journal on comprehensively deepen the reform of the central committee of the communist party of certain major issue decision "in the first time put forward the concept of social governance, according to the report, the eighteenth congress" must strengthen the construction of social management and service system, strengthen the function of urban and rural community service, strengthening the enterprises and institutions, people's organizations in the social responsibility of management and service, We will guide the healthy and orderly development of social organizations and give full play to the basic role of the people in participating in social management." At the third Plenary session of the 18th CPC Central Committee, the concept of "innovating social governance system" was put forward. At the meeting, the general secretary pointed out that the core of social governance lies in people, the focus is on urban and rural communities, and the key is the innovation of systems and mechanisms. Strengthening community service and management capacity is a solid foundation for strengthening social governance. Providing reasonable and perfect community services at the grassroots level is an important link in doing a good job in community governance, a basic link in solid social governance, and an important breakthrough in innovating social governance. In order to effectively respond to the new needs of grassroots residents, build a harmonious society and realize the well-being of people's livelihood, it is more inseparable from the construction of a sound and effective grassroots community service system. The Opinions of the CPC Central Committee and The State

Council on Strengthening and Improving Urban and Rural Community Governance emphasize the need to continuously improve the level of urban and rural community governance, among which "improving the supply capacity of community services" is an important aspect of improving the level of urban and rural community governance. Therefore, it is an inevitable trend for the development of community governance to study the supply mechanism of grassroots community services.

Shunde District of Foshan City, as an economically developed region in the Pearl River Delta, has been committed to the innovation of community governance and social service management. As early as 2012, in order to promote the development of social innovation, Shunde established the Shunde Social Innovation Center, learning from the experience of Hong Kong and Singapore, to perform the public function of promoting social innovation by linking the market and society on behalf of the government. Since then, shunde came to prominence on the way of social innovation, and actively explore the innovation in the grassroots community governance, beginning in 2017 for "the gen Shared" program, in 2018, upgraded to "and the" common good "plan, the formation of grass-roots community service provided by the new mechanism, to the research development of grass-roots community service supply mechanism provides strong practice basis. Study of shunde grassroots community service supply mechanism, explore the real effective form and can meet the demand of the residents of community service, at the same time, summed up experience, through the study found that the problem, for the government and related departments to strengthen grass-roots community governance of resources and provide a reference basis of policy making, so as to improve the community service supply mechanism, Improve the level of community service management.

## 2. LITERATURE REVIEW

The provision and management of community-level community services is an important part of community governance. Community-level community public services play an important role in China's community construction (Zheng Xiaoyan, 2019), while the government is the main holder of social resources, so it is also the main provider

of community public goods and services (Kang Xiaoli, 2016). Before the concept of social governance was put forward at the third Plenary Session of the 18th CPC Central Committee, the research on the supply of grassroots community services in China paid more attention to the equal provision of services and the role of the government in the supply process, and paid less attention to the participation of social forces. However, with the development of The Times, social transformation and the advent of the era of "small government and big society", this single government-led community service supply mode is more and more difficult to adapt to the complex and diverse needs of community residents in the new era (Peng Weimin, 2018), and the limitations of the traditional community service mode are also increasingly emerging: Insufficient supply, the main body of a single in supply of community service, community service, service supply and demand structure imbalance, shortage of funds such as community service personnel lacking professional (Peng Weimin, 2018, Chen Yanjie, 2015), and even social governance concept put forward, in the work of grassroots community governance, external strong administrative power still affect the supply of community service, Grassroots communities must undertake a large number of administrative tasks from superiors, and to a certain extent, their professionalism and supply order are seriously disturbed, and the supply of grassroots social services deviates from its essential goal (Yi Zhenzhen, 2016). In the new historical period, in order to effectively guarantee and improve the residents' life and meet their needs, it is necessary to innovate effective basic community service supply mode. Thus, scholars began to pay more attention to the cooperative governance of the community and the participation of multiple subjects, and also began to explore various possibilities of the innovative supply of community services.

In recent years, the government vigorously encourage social forces to participate in community public service, to integrate social resources, to better meet the residents' interests and needs, by "completely supplier" to "based suppliers and buyers," role transformation (he nan jiang, Xue Yongguang, 2019), swallow in the "new public service under the horizon of community public service supply", The government should serve the citizens. Community is not only the meeting point of diverse interest groups, the frequent point of social contradictions, but also the point of force to guarantee and improve people's livelihood. Therefore, the provision of community services should realize collective action through the democratic consultation mechanism. Therefore, the supply mode of community service gradually begins to change from single center to multi center. At present, the local government, the market organizations, social organizations, community residents as the main body of urban and rural grassroots community governance, formed the community (Hu Zhenguang, 2017), a multi-agent governance xiao-li kang think in the main body in the process of community governance should be varied subject jointly participate in community affairs, coordination, cooperation governance (xiao-li

kang, 2016), Hu Zhenguang also believes that through the formation of a cooperation mechanism of multi-subject cooperation and co-governance, the voluntary, enthusiasm and initiative of social forces in participating in community governance can be improved, and the leading role of grass-roots Party organizations can not be ignored. Therefore, the development of community service supply will gradually form a service supply model with the party and government as the leading force, the extensive participation of social forces, and the simultaneous development of public units, private enterprises and non-governmental organizations.

### 3. RESEARCH METHODS

Taking Shunde district of Foshan City as an example, this study studies the supply mechanism of grassroots community services under the background of community governance. The research content mainly involves the analysis of the current situation of the supply mechanism of community-level community service in Shunde district, the performance of the supply mechanism of community-level community service in Shunde District, the interaction between different subjects in the supply process of community-level community service in Shunde District, and the advantages and disadvantages of the current supply mechanism of community-level community service in Shunde District.

This research mainly adopts literature research method, in-depth interview method, observation method and questionnaire survey method to conduct research and analysis. Through the collection of literature and materials to the current domestic and Foshan area grass-roots community governance to conduct a written investigation; Through in-depth interviews, the funders and service providers of grassroots community services are informed of the specific process of the existing community service supply in Shunde, the interaction and role positioning of all parties in the process of service development, and the impact and effectiveness of the existing community service supply in the community. Through the questionnaire survey to understand the community residents on the current community service supply evaluation, focus on the service effectiveness and service feedback content, these data is to summarize the effectiveness, find problems and put forward experience and suggestions.

### 4. ANALYSIS OF RESEARCH RESULTS

#### 4.1 Current situation of community service supply in Shunde District

Shunde District of Foshan City, located in the south of Guangdong Province, is one of the important core areas connecting Foshan and Guangzhou, and has been praised for its strong economic strength. On the other hand, Shunde has always been at the forefront of social reform, and has been constantly trying to reform and innovate the system and mechanism. In 2011, Shunde promoted three major reforms, and social services received special attention. In 2012, The Social Innovation Center of Shunde District was established, becoming one of the first legal institutions to be established. At the same time, social work services began to take root in Shunde. Before

this, the community-level community service in Shunde has always been a traditional government-led model. There are also problems such as imbalance in the supply-demand structure of community-level community service, unsatisfied diversified needs of residents, and insufficient service supply and low supply efficiency caused by the monopolistic supply of government. Even in 2012, the number and service capacity of social organizations in Shunde are still very weak, the overall social service projects are still lacking, and the supply of social forces to participate in grassroots community services is seriously insufficient. In order to mobilize the enthusiasm of functional departments and social subjects in participating in social construction, since 2012, the district government has allocated 5 million special funds for social innovation in the financial budget of the district and town, which has started the early practice of public welfare venture capital in Shunde, and the social service provision in Shunde has become more and more diversified. Different from other areas, which are dominated by civil affairs departments, the public venture capital in Shunde district covers six government departments and mass organizations, including the District Social Work Committee, district Civil Affairs Bureau, District Organization Department, District Federation of Trade Unions, District Women's Federation, and District Youth League Committee. They are organized and implemented separately to respond to the personalized demands of each sponsor. However, the problems existing in this method of decentralized service provision by various departments and organizations have become increasingly prominent. First, the service provision is unbalanced among the districts and towns in the region. Some districts and towns have more centralized funds and services, while some districts and towns have a large gap of funds and services or even no services. Second, different organizers lack a unified communication and coordination mechanism, resulting in repeated application and funding of service projects; Third, the evaluation and evaluation standards of different organizers are different, and the learning cost of applying units to adapt to different rules is high; Fourth, the capital volume of a single venture capital project is small, and the funds for supporting services are in short supply. At the same time, with the deepening of practice, this kind of independent venture capital mode in the operation of some problems, such as the lack of rigorous evaluation and acceptance mechanism, it is difficult to ensure the quality of service; The fund management is weak, the use of the standard is insufficient, the reporting unit and the implementation unit are generally separated, failed to really mobilize the enthusiasm of various departments. In view of this, since 2017, Shunde District Social Work Committee and District Civil Affairs Bureau have jointly promoted the gradual integration of public venture capital, jointly launched the public innovation and sharing plan, supported a total of more than 10 million yuan, and adjusted the operation mechanism of venture capital: Open the application subject, encourage grass-roots governments and functional departments, enterprises and institutions, grass-roots self-governing organizations and

social organizations to actively participate in the application; Set up supervision and support mechanism and evaluation and acceptance mechanism for the project to ensure the quality and quantity of service project completion; It does not distinguish the nature of the reporting units, emphasizes the unity of the application of the "rules", and encourages joint reporting among different entities in order to avoid the separation of the reporting units and the enforcement units. Since then, a new grassroots community service supply model in Shunde kicked off.

In 2017, the public Innovation and Sharing Plan was initiated and sponsored by the Social Work Committee of Shunde District and the District Civil Affairs Bureau of Human Resources and Social Security. A total of 13.175 million yuan was invested in supporting 63 shortlisted projects, including community building, community elderly care, enterprise social work and employment and support services for the disabled. In 2018, based on the operation of a Shared plan framework, shunde commonweal innovation contest, the disabled employment service support programs and peer is integrated into the good plan, by the club committee, areas people club bureau of civil affairs, social innovation center and shunde charities jointly launched the "common good plan, support fund amounted to 34.5 million, a total of 145 projects, support And will declare project service is divided into social service facilities, peers, good charity service and social work, three major parts, covers all aspects of people's livelihood service, at the same time, begin to formulate and improve at the top of the "common good plan design, such as project change management provisions are formulated, make standard of financial management guidance, publicity, and evaluation, and a series of measures for the management system. In 2019, the Public Innovation and Common Good program was continuously carried out and comprehensively optimized. It was jointly initiated by five major bodies, including The Political and Legal Committee of Shunde District Committee (District Social Working Committee), District Civil Affairs and Social Affairs Bureau, District Women's Federation, District Social Innovation Center and Charity Committee, supporting and investing 44 million yuan and 205 service projects. In 2018, "3861" women's and children's public welfare section was added. As an important work of shunde District party building leading the innovation of community governance, the Public Innovation and Common Good (Enjoy) plan has invested a total of 90 million yuan in the past three years to support 405 projects related to social services and grassroots governance, benefiting more than 100 villages in Shunde District and serving more than 1.65 million people. With the mass Innovation and Common Good program blooming everywhere in Shunde area, the basic community service supply in Shunde area presents a situation of a hundred flowers bloom.

4.2 The effectiveness of the current community service supply in Shunde and the interaction between different subjects

4.2.1 Effectiveness of the current community service

supply in Shunde

In order to understand the effectiveness of mass innovation projects, the author visited nearly 20 mass innovation projects based on his previous experience in supervising and evaluating mass innovation projects, and surveyed 95 project audiences with questionnaires. From the point of project implementation party, the author visited the project to declare the main body 70% work for social services, and 15% for the town of functional departments, 15% except for the social work service agencies of other social organizations, the project scope mainly covers counterparts good charity services and social work sector, 62.5% of the project to apply for funding lines between 20-300000, Secondly, 25% of the project funds are less than 100, 000 YUAN, another 12.5% of the project funds are between 100, 000 yuan and 200, 000 yuan, 68% of the project service cycle is one year, and the other 32% of the project cycle is 1-2 years. From the project of the influence of service for residents, 75% of executive party think project service can respond the needs of the community residents have a larger degree or very big, and another 25% execution that level of demand response, similarly, 75% of the project execution after think service project's positive influence in the community residents is large or very large, the general effect of 25%. On the whole, mass innovation project services can effectively meet the needs of the community to some extent.

Combined with the author's interview and survey and questionnaire data collection, the specific service effects of the project implementation and community residents' feedback can be reflected in the effect at the target level and the community level. The results at the level of service object mainly include the following three aspects: First, the solution of the practical problems of the service object, especially the attention to the disadvantaged groups in the community at the base level. In the survey, 78 percent of community residents believed that mass innovation project services have solved their practical problems and difficulties. As usual, home safety rehabilitation projects for the elderly and rehabilitation training programs for mental patients have effectively solved the problems of home safety, rehabilitation training and employment of the disabled. Second, the personal ability of the service object has been improved. In the survey, 80% of the community residents think that the personal ability has been improved through service. Projects such as Sunshine Youth Growth Camp, youth Art Community Study Project, participatory Community elderly service Project, etc., can cater to the growth needs of different groups, from children and teenagers to the elderly. The third is the spiritual satisfaction of the service object and the effective establishment of social support network. 72% of the community residents think that through the service, they can establish more contacts with others and get more channels for help. For example, projects such as the Training project of The Wisha Workers' Association and the mutual aid program for the blind, such as "Running to the Light", enable service objects to have more spiritual sustenance and give full play to the mutual aid role. At the

community level, the results mainly include the improvement of community environment and the creation of community atmosphere. In terms of environment, of the residents were investigated, 65% of people think that by serving the community environment improvement, particularly in terms of community culture environment, such as sand head community ancient activation and cultural conservation project, left the beach village environment and sustainable economic promotion plan, etc., not only created a good community environment, and raise the awareness of community residents. In terms of community atmosphere, 70 percent of respondents believe that service participation improves the sense of belonging of individuals to the community. For example, projects such as youth participation in community building service project and "My Home in the Depths of the stone Lane" not only provide a platform for community residents to participate, but also enhance the community awareness of residents, and more conducive to the realization of community autonomy.

4.2.2 Interaction and role undertaking among different subjects in the Mass Innovation and Common Good Plan  
It can be seen from the above that it is effective for Shunde District to provide community-level community services through the mechanism of mass innovation and Common good plan, and the effectiveness of the project cannot be achieved without the mutual cooperation and cooperation of different subjects in the plan. As of 2019, the Public Innovation and Common Good Plan of Shunde District is the only case in the Pearl River Delta region that has realized the overall planning and in-depth integrated use of budgets of multiple departments. The project involves various government departments and organizations, including the Political and Legal Committee of Shunde District Committee (District Social Working Committee), District Civil Affairs Bureau, Social Innovation Center, Charity Association of Shunde and other grassroots social organizations. The Political and Legal Committee of the District Committee (district Social Work Committee), district Civil Affairs Bureau, Social Innovation Center and Shunde Charity Committee, as the organizers of the plan, are mainly responsible for fund integration and funding guarantee. At the same time, they decide on the basic institutional framework of the plan, approve the list of supported projects and examine and approve major issues through the joint meeting of the organizers. In order to ensure that the planning of overall coordination work, after the host program began in 2017 set up the secretariat and the common good plan, by each sponsor representative involved, specially in charge of the whole plan as a whole, including the top design and improve the planning of system security, coordination meeting and grassroots community service supply and demand to resources docking, etc. It is the bridge between the project applicant and the sponsor to ensure the smooth progress of the public innovation and Common Good plan. In addition, the social Workers Association of Shunde District, The Social Service Association of Shunde District, and the Social Organization Promotion Center of Shunde District act as the third-party supervision and

evaluation agencies of the project, responsible for the supervision and evaluation services of the project implementation parties. The supervision and evaluation of the Mass Innovation and Common Good plan are separated. The supervision services mainly play the functions of professional support, experience and model sorting, resource link and other functions, and assist the secretariat to control the overall risk, so as to ensure the service quality of project execution. The evaluation work is focused on the project effectiveness and financial acceptance, and determine the delay support of excellent projects and unqualified projects and the ban and declaration limit. Declare the subject and project execution party is responsible for the supply of basic social services and the demand of the grassroots community feedback, among the more than 80% of the declaration and the common good plan and project execution party for the same subject, another part is the joint declaration, combine the subject to both sides in close cooperation, to ensure that the project service at the grassroots community takes root.

#### 4.3 Advantages and disadvantages of the current basic community service supply mechanism in Shunde

Shunde the gen common good plan as a resource integration, multiple build, the success of collaborative development platform, promote the development of the grass-roots party organizations and social organizations, to promote the innovation of the community service supplies, is shunde create "work sharing" the vivid practice of social governance structure, its advantage is mainly manifested in the following three aspects:

First, support capital concentration, can reasonably allocate resources. In the past, the supply of basic community services in Shunde district has always been in a state of unbalanced regional distribution. Street towns with relatively good economy, such as Dalang and Ronggui, provide more community services, while street towns with relatively poor economy, such as Junan and Xingtian, provide less community services. As a platform for resource allocation, the mass Innovation and Common Good program can allocate the government's special funds relatively reasonably. On the other hand, the overall planning of funds by the brand has a better institutional guarantee, which can ensure the standard operation of the use of funds.

Second, we should encourage the participation of social forces and encourage cross-border cooperation. The "common good plan early more social organizations at the grass-roots level to declare project, in the relevant departments to encourage, village in the late, enterprises and institutions, social enterprises have joined or united social organization to declare project, pull the participation of the society from all walks of life force, give full play to the enterprise with abundant folk resources, shunde district, the unique advantages of, It arouses the enthusiasm of party, government, social enterprise and people to participate together, and forms a model of diverse participation in social governance, which truly reflects the policy trend of small government and big society.

Third, the implementation of supply and demand to meet the diverse needs of residents. In the past, the basic functional departments and village residents were often unable to meet the needs of residents because of the small number of people and many things to do. Therefore, they were usually not the actual implementer after the project application, or as the implementer, they provided services with a low degree of professionalism. In the "common good plan, through the preaching of project application, link fields of supply and demand, the functional departments at the grass-roots level and the demand of the village in being heard, or encourage the functional departments at the grass-roots level and village house to find suitable social organizations for joint declaration, which can be targeted to provide services, truly meet the community residents of diverse demand.

Fourth, build online platforms to improve the efficiency of service supply. To conform to the common good plan execution efficiency and the requirement of process management, reduce the cost of the participants information sharing the gen program secretary start in January 2018, shunde public cloud platform for project management, through the platform to realize the project of online declaration, evaluation, optimization and supervision, assessment of feedback, such as the whole process management, a certain extent, improve the efficiency of the supply of services. In addition, the social service network of Shunde has been set up to timely release material donations from all walks of life and connect qualified projects and enterprises, so as to improve the efficiency of resource connection and strengthen service guarantee.

Shunde after more than three years since the "common good plan of escalating optimization, has made great strides in shunde grassroots community governance effect, adding to shunde grassroots community service supply of the part a, but the development of any new things are not perfect, shunde OuDeZhong gen common good plan also there are still many deficiencies, mainly for the following several aspects:

First, the contradiction between the nature of financial capital and the uncertainty of venture capital. In the process of using financial funds, there is a high requirement for standard and safety, but venture capital projects are inherently uncertain in funding, and the reporting subjects with uneven financial management ability increase the risk of fund management of the coordinators. On the other hand, the annual nature of the financial fund budget is not consistent with the three to five year growth cycle of the project, so it is difficult to connect the fund and the project cycle.

Second, the cost of cross-departmental capital coordination is huge. Since the plan involves multiple sponsors and the budget belongs to different departments, although it is applicable to unified allocation and follow-up management rules, there are actually different fund management methods or budget approval documents, and the daily approval is also carried out within each supporting unit., shunde district, though, fiscal and taxation bureau actively supports the integration of the

same kind of money, but because of the budget management of departmentalization, part of the venture capital is the stability of the measures for the management of special funds and certain special funds, some is only temporary working funds, therefore, in order to realize the organizers of the integration of overall capital have more difficulties, consolidated decision and operation is also a challenge to the secretariat.

Third, the project supervision and evaluation mechanism remains to be improved. Although the "common good plan for supervising institutions and agencies have a clear division of labor and positioning, but in the concrete to supervise and evaluate the operation conditions are still unclear, thus appeared some projects evaluating the performance of light weight quantitative indicators in the process of service, or project implementation unit for supervision unit, review and evaluation unit of disagreement. On the other hand, due to the differences in the professional level between the project declaration and implementation subjects, there are also differences in the demands for supervision, and the current supervision mode is not able to respond to such differentiated needs. In addition, the investment in project supervision and evaluation is also very limited, for the third party supervision and evaluation of the work of many constraints.

Fourth, the project management cloud platform is not user-friendly. With the advent of the Internet big data era, profound changes have taken place in all aspects of society, and this influence has also been extended to the field of social services. Using big data technology to innovate social services is an effective way to realize the modernization and efficiency of community governance. But the realization of this way depends on the reasonable perfection of the data platform system and the humanized operation. Although the Cloud platform for Shunde public welfare projects developed based on the Mass Innovation And Common Good plan can simplify the project management process, in practice, no matter the project execution side, project supervisor or evaluation side, they all think that the information of the current platform is difficult to fill in and the operation and use process is not user-friendly, so they hope to improve and improve it.

##### 5. RESEARCH CONCLUSIONS AND SUGGESTIONS

To sum up, the shunde district and the "common good plan model is effective for the grassroots community service, create a new situation of the shunde district for basic community governance, leveraging all social forces to contribute to the shunde area society construction, and promote the plan model has been copied to shunde evaluated integratedly level of public welfare of minimally invasive. In order to further improve and develop the supply mechanism of community-level community services in Shunde District, the following suggestions are put forward in view of the deficiencies of the above public innovation and common good plan:

First, provide relevant policy support and guarantee, and innovate the overall coordination mechanism. All the "common good quite a number of challenges in the process of the planning from the integration of funds

between different departments to plan as a whole, this is determined by the nature of financial capital, to solve this problem we must rely on the related department to make relatively flexible capital management policy, in the case of security funds reasonable specification use either, and to comply with the requirements of social service development funds increased flexibility, Thus reducing the cost of multi-department coordination.

Second, further improve the supervision and evaluation mechanism of the plan. On the basis of grasping the needs of the grass-roots community and the requirements of the sponsor for the project, promote the full communication between the sponsor and the project supervision and evaluation agencies, and coordinate with each other, and clearly formulate the operation rules of supervision and evaluation according to different types of projects. In particular, in the aspect of improving the supervision mechanism, it can provide targeted and differentiated supervision according to the different service levels and characteristics of the project execution party. On the one hand, the improvement of the evaluation and supervision mechanism can provide clear guidance for project supervision and evaluation; on the other hand, it can also make the project implementors have rules to follow in the process of providing services, so as to avoid the confusion caused by the disagreement between the project approval, supervision and evaluation parties.

Third, improve the online network platform, optimize the function of the platform. Effective project management cloud platform can simplify project operation procedures and improve service supply efficiency, while complex platform operation will add additional project burden, thus affecting the entire operation process. Users of the project management cloud platform involve multiple subjects, including the sponsor, the reporting party, the executive party, the supervisor and the evaluation party. Therefore, to further improve the existing project management cloud platform, it is necessary to extensively collect user opinions, simplify the operating procedures, optimize the functions and enhance the humanization of the platform operation. In this way, the improvement of service supply efficiency and the full integration and sharing of information resources brought by big data technology tools can be realized.

Fourth, we need to improve the compatibility between supply and demand of grassroots community services. In order to reduce and avoid the grass-roots community service of inefficient supply and the invalid supply, need to be established between the community service providers and users access, information through various channels to understand in a timely and effective manner, master residents demand for grassroots community service, as far as possible to achieve balance between supply and demand of community service, so as to realize the optimal supply of real community service.

##### ACKNOWLEDGEMENT

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# Investigation on the Current Situation of Cross-border E-commerce Enterprises' External Publication Text Translation in China

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**Abstract:** In recent years, China's cross-border e-commerce has developed rapidly. Now it is becoming a new growth point of foreign trade development. The quality of enterprises' English publicity text on the cross-border e-commerce platform is crucial to the information transmission and the effect of external publicity. Across the overall situation of the enterprises' publicity text on the cross-border e-commerce platform in China, there are still some obvious problems. But what are the main causes of the problem? For this, the author has made a questionnaire survey, then has got a more reliable conclusion by sorting out, summarizing and analyzing of the collected data. It has also laid the foundation for research on subsequent solutions.

**Keywords:** Cross-Border e-Commerce Enterprises; Questionnaire Survey; External Publication Text Translation

## 1. TRANSLATION STATUS OF CROSS-BORDER E-COMMERCE ENTERPRISES IN CHINA

In order to integrate and expand the international market and create a good corporate image, cross-border e-commerce enterprises must consider whether the audience can receive useful information furthest. At the same time, they should pay attention to the differences in Chinese and English expressions, make a perfect publication translation text combined with the specific market needs.

### 1.1 Having Definite Functionality

The most direct purpose of the cross-border e-commerce enterprises' external publication is to obtain a positive response from the audience, so as to win benefits for the enterprise. The most direct purpose of the cross-border e-commerce enterprises' external publication is to obtain a positive response from the audience, so as to win benefits for the enterprise. Therefore, it has a very obvious purpose and direct orientation in the translation process, in order to achieve the purpose of promoting advantages and maintaining a good corporate image.

As an example, World Mark Station -- China's cross-border e-commerce leadership brand, its English slogan is "Serve the world, buy and enjoy the world". This shows that the enterprise aims to advocate fair competition between cross-border e-commerce enterprises and build an e-commerce platform that provides quality services for global customers clearly and intuitively. It helps create a good image of enterprises and attracts customers worldwide.

### 1.2 Having Obvious Linguistic Features

From the point of cross-border e-commerce enterprises'

overall external publication situation, the texts have very obvious language characteristics.

First, the tone of statements has been used frequently. For example, following is the external publication text of Changshu Jianhua Mould Co., Ltd. This paragraph has offered a typical instance of this point.

Example:

After many years' renovating, developing and growing, JIANHUA MOULD has three branches Section of present, including Foundry Section, Tableware Mould Section and Container Mould Section.

Secondly, first and second person narrative are used often. Using the first person to introduce their own situation, using the second person to close the relationship with the customers, leave a kind and trustworthy impression naturally.

Here is an example: We get unanimous praises from different leadership in governments...

The third point is used to cater to the discourse aesthetic of traditional Chinese culture. The lyrical language is used quite often in the Chinese publication texts of cross-border e-commerce enterprises in China, classical poetries are quoted mostly to add beauty. At the same time, gorgeous and exaggerated words are used often to render the atmosphere and the language is stacked. While the English translation versions of the publication texts are often conforms to this characteristic, direct translating the texts throughoutly.

### 1.3 Common Language Errors

According to the current situation of the English publication text of cross-border e-commerce enterprises in China, some language mistakes are easy to see.

The first point is vocabulary and grammar errors. As far as the existing external publication translation materials of Chinese cross-border e-commerce enterprises are concerned, the problem of improper words is very common and the translators often carry out translation work based on the literal meaning, not fully understanding the original text, which leads to very vague semantics. Moreover, even if translators have mastered the methods of various sentences translating, they still make grammatical errors in practical translation.

The other point is Chinese-style English(Chinglish) is usually to see. Chinglish refers to the results of direct translation ways according to the literal meaning of Chinese, which shows significant Chinese characteristics and does not conform to the expression habits of English. Due to the great differences between China and English-speaking countries in economic, political, cultural aspects

and people in different countries have different thinking methods and language habits, in the translation process of cross-border e-commerce enterprises, the problems of Chinglish can easily occur, which has an adverse impact on mutual communication.

We may quote a common example, the Chinese trademark "Yu Tu" is often translated as "Jade Rabbit" or "Moon Hare", but "jade" and "hare" are both derogatory in English and prone to negative associations. This is due to the lack of effective attention to cultural differences. Cultural misunderstanding can be always found in the translation of external publication texts.

## 2.THE TRANSLATION STATUS SURVEY ON CROSS-BORDER E-COMMERCE ENTERPRISES IN CHINA

The above article has introduced the translation situation of cross-border e-commerce enterprises in China objectively. While in the progress of real operation, whether these e-commerce enterprises are satisfied with their publicity text? Where the publicity materials used by these enterprises are received by the audience abroad? For the reason to understand these better, a survey has been made.

### 2.1 Basic Situation of Investigation

Subject of investigation: the translation status of cross-border e-commerce enterprises' external publication

Time of investigation: 26th of May, 2020 -- 1st of June, 2020

Respondent of investigation: cross-border e-commerce enterprises in Anhui Province

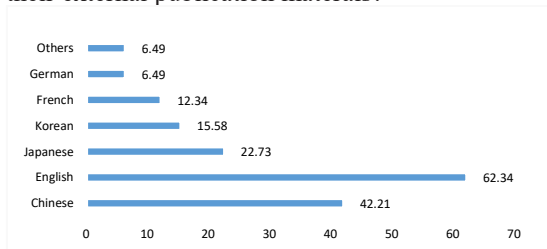
Investigation method: questionnaire survey online

Number of returned questionnaires: 100 questionnaires have been returned, including 99 valid ones.

### 2.2 Main Situation Analysis of Investigation

The questionnaire has designed from the dimensions as following: language use situation of cross-border e-commerce enterprise external publication text, enterprise' importance to publication text, the factors that affect the quality of enterprise' publication text translation, the problems existing in the current publication text translation work, the important influence of the publication text on the development of enterprises, the effective ways of improving the quality of publication text. The questionnaire contains various kinds information, which objectively reflects the overall situation and existing problems of the current publication text of cross-border e-commerce enterprises. The main status can be checked clearly from the following charts.

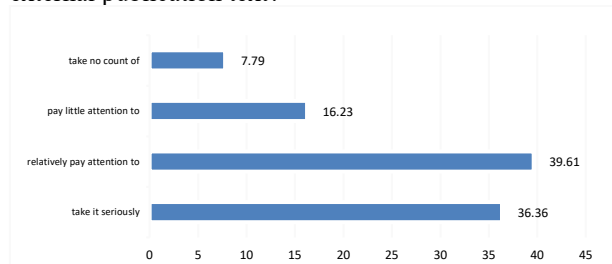
#### 2.2.1 Which kinds of languages the enterorises use often in their external publication maternals?



It shows cleraly in the chart, English occupied the biggest chunk, then is Chinese and Japanese. Thus, the most

important task of publication text translation is English versions.

#### 2.2.2 Do your company attach great importance to the external publication text?

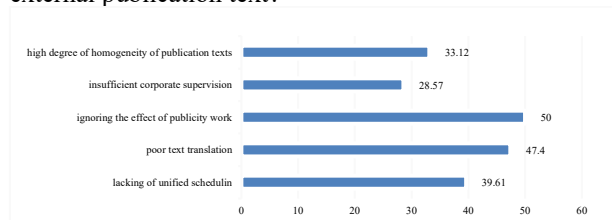


It can be found easily that most enterprises take it seriously or relatively pay attention to it. They understand it is important.

#### 2.2.3 What are the factors affecting the quality of enterpris' external publication text translation?

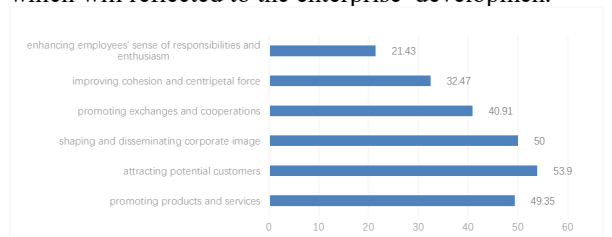
So related personnel in the cross-border e-commerce enterprises thought cultural differences, degree of emphasis, differences in expression between companies and quality and language expertise of the translator will affect the quality of enterpris' external publication text translation work.

#### 2.2.4 What are the problems existing in the translation of external publication text?



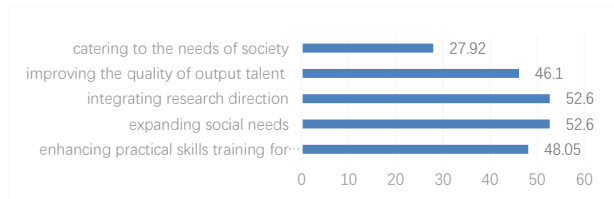
Related personnels thought the problems existing in the translation of external publication text are: ignoring the effect of publicity work, poor text translation, lacking of unified schedulin, high degree of homogeneity of publication texts and insufficient corporate supervision.

#### 2.2.5 The importance of the external publication text which will reflected to the enterprise' developmen.



The importance of the external publication text which will reflected to the enterprise' developmen from these aspects: attracting potential customers, shaping and disseminating corporate image, promoting products and services, promoting exchanges and cooperations, improving cohesion and centripetal force and enhancing employees' sense of responsibilities and enthusiasm.

#### 2.2.6 The effective ways to improve the quality of the publicity text.



How to improve the quality of the publicity text then? The answers of related personnels are as follows. The enterprises can enhance practical skills training for relevant personnel, strengthens the degree of attention to expand social needs. Universities and colleges should integrate research direction to promote the rigor and scientificity of related research, at the same time, they must enhance the quality of output talent. While the education department need to reform the existing theory and cater to the needs of society.

### 3.CONCLUSION

The development of cross-border e-commerce is an important approachs for countries to use the Internet to trade in the modern world. With the further acceleration of the global informatization, the cross-border e-commerce of China has also ushered in a period of rapid development. In the actual operation of cross-border e-commerce enterprises, the external publication text is crucial to the information transmission of enterprises and the effect of enterprise external promotion.

Through the above investigation and research, it canbe found that there are still some problems in the external publication text of cross-border e-commerce enterprises.

For example, enterprises still haven't paid sufficient attention to the publicity materials and the overall translation quality is not high enough. Of course, in the transnational trade, these problems are inevitable due to the language, mindset and cultural differences. How to solve these problems effectively and improve the quality of the publication text of cross-border e-commerce enterprises should be the focuses that relevant fields researchers need to pay attention to in their future research.

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# On the Artistic Features and Cultural Geographic Features of Du Fu's Longyou Poems

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**Abstract:** Longyou culture in our country is reflected, in poetry and literature in the tang dynasty country strong nation under the conditions of the contract are embodied in a lot of poetry genre longyou culture, as the tang dynasty poet du fu, poems also has a lot of longyou poems, between the lines of a lot of natural beauty and social life, in terms of artistic features are more representative, Longyou culture pushes the poetry culture to a certain height, which embodies the artistic characteristics and cultural geographic characteristics are very rich, which needs to be targeted analysis, in-depth exploration of the cultural value behind.

**Key Words:** Du Fu; Longyou Poems; Artistic Characteristics; Cultural Geographical Characteristics

## 1. INTRODUCTION

In du fu's life in different periods of the poetic style has certain differences, among them in longyou period of extremely personality has a great influence on du fu's poetry creation, so you need to combined with analysis of longyou region geography natural amorous feelings and Hu Han culture fusion is analyzed, from multiple perspectives multi-level analysis of du fu longyou poems embodied cultural and artistic characteristics.

## 2. THE WRITING BACKGROUND AND CHARACTERISTICS OF DU FU'S LONGYOU POEMS

Longyou poems geographically is given priority to with the north, from the qin dynasty began to live in the central plains between the efficiencies and ethnic minorities are often war, longyou area as bordering area of regime governance, volatile, frontier fortress scenery beautiful but war-torn, gradually formed in the glorious age of the regional characteristic extremely the longyou, in du fu's poems in his life world amount is great, Longyou poems accounted for a large proportion, which not only reflected the current social situation at that time, but also had rich artistic and geographical and cultural characteristics behind them. At present, there are more than 1, 400 poems by Du Fu in the world, and over 300 poems by Longyou, which truly described the living conditions of ethnic minorities in the border areas of the Tang Dynasty.

In the 'ZongQian yuan two years, du fu resigning, up and down with his family living in tsinchow, during this period of du fu's poetry in the expression and emotional direction have taken place in the great turning point, is located in the frontier of various factors stimulate the monologue of du fu, the regional customs and natural scenery combined

with their own experience of creation, depressed frustration culture atmosphere, push the du fu's poetry achievement to peak, Du Fu's longyou poems are mainly divided into three categories, namely frontier frontier, landscape and war, among which the frontier frontier intention is very rich and has very artistic characteristics.

## 3. THEMATIC ANALYSIS OF DU FU'S LONGYOU POEMS

The style of du fu in longyou period no longer like tang dynasty period, faded "be ling extremely, see the mountains small ambition, also vanished" military GuanShanBei "radical psychological, not as a macro to war for acura, embodied in the poetry more subjective feelings, is more tired of anticipation, for the peace of the war A careful study of the themes of Du Fu's longyou poems can be divided into three categories, which need to be targeted for analysis.

### 3.1 Theme of war weariness

The war-weariness in Du Fu's poems is particularly prominent in "Soldier chariot", "to give birth to a woman, you still have to marry a neighbor, and to give birth to a man, you have to bury it with hundreds of grass." But many areas QingZhuang war frequently play have been grasp to go to military service, died in the war battlefield finally in the frontier fortress of weeds, was du fu in frontier hope to seek a peaceful place around a war, but along with the continuous extension of du fu was attention by all GuJiao QiangDi, thus make tsinchow miscellaneous poems, "Crusades athletes, sunset QiangDi cry." 11. "Everyone is held to be of decline until he speaks to a scholar." The poem not only reflects the poet's worry about the frontier fortress war, but also shows his boredom with the war.

### 3.2 Personal attitude towards war

During his time in Longyou, Du Fu was tired of the war, so he hoped that the war would be ended in the future when the country could have a good equestrian and archers, hoping to quell the rebellion of an state through the ability of generals. This sentiment is reflected in many of Du Fu's poems, "Old Lao thought of flying general, when to discuss building an altar." The Chinese wanted a general like Li Guang to emerge and appoint generals to guard the border, thus saving the war, and during this period the poet's longing could only be expressed in poetry.

### 3.3 When feeling sad

Longyou poem writing background in the war period, the turbulent situation of the people suffered from the war, the war stretches the mountains are steep to make Du Fu sad,

what he saw and heard are faint sad, which of the war complaints and tired gradually evolved into a feeling of sad emotion "smoke alone long look, decline sa is destroyed." "Bow to the sad life, the brook wind for the valiant." Du Fu was full of sadness.

#### 4. ANALYSIS OF CULTURAL GEOGRAPHIC CHARACTERISTICS OF DU FU'S LONGYOU POEMS

Longyou is located in the frontier fortress in the tang dynasty period open cultural blend, although has positive role to the social development, but a lot of ethnic minorities to stay still covet territory of the central plains, frontier ran so frequently, this let du fu is very unwell, during tsinchow "du fu hardship and geographical environment lead to du fu's poems on the thin layer of loneliness, Remote let du fu precipitation gradually repressed, constantly reflect on their own experience, analysis of society and life, gradually putting myself into the natural mountains and longyou natural landscape and folklore for du fu provides adequate material, and many places of interest, including many star relic are refined into written down by du fu, "vast thousands of mountains, give the ravines. No wind and cloud out, not the night of the moon close." Mountains and rivers musquash and regional folk to leave traces in du fu's poetry in the du fu longyou poems, landscapes and more than half of the field, real, real portrayal of the truth, du fu's heart gradually sublimation, continuing to re-examine themselves and social, in turn, will express ideas through famous mountains and great rivers combining wit saturated, with beautiful words to write a desolation, although landscape peculiar but also for style infection, Through the environment du Fu improves the realm of life, and then the artistic characteristics of longyou's poems are more full of beauty [1].

#### 5. ANALYSIS OF ARTISTIC CHARACTERISTICS OF DU FU'S LONGYOU POEMS

Frontier longyou du fu's poems and tang has the very big difference, tang first longyou poems everywhere embodies the aesthetic feeling of passionate, bold and free and easy, the frontier longyou du fu's poetry is different, the sufferings woes and bleak, with exquisite imagery real performance compared with more real, and pay more attention to the use of a natural inclination, its artistic features need scientific analysis.

##### 5.1 Analysis of aesthetic character

Sadness and loss is the basic characteristic of Du Fu's longyou poems. The flames, the smoke, the leaves and the falling leaves made Du feel sad. Although the sadness between the lines is plain, it is real and infectious. "Xiao

Xiao gu plug cold, indifferent autumn clouds low." In Du Fu's eyes, all landscapes are sad, including the sadness of the time background, the loss of life, the unpredictable sadness of the current situation, and the sadness of the natural scene. Looking around, people are sad everywhere. And in the border war and the flames of war without friends also let Du Fu longyou poetry has a bone of desolation, human nature of the beauty of the natural scenery of the poignant beauty.

##### 5.2 Analysis of longyou's poetic characteristics

Du fu longyou poems use plenty of natural imagery, foil destitute qi chu, let these feelings more exquisite and thick, as if will be bogged down cannot breathe, that feeling landscape expression of artistic, not only need particular social environment and the natural environment, also need the height of the poet's own life reaches a certain artistic conception, In longyou poem "autumn cloud" and "GuJiao" "grief clouds" "cold chamber" "autumn" grass bouquet "intention" frequently used, and the glorious age of tang poetry frontier is different is not longing shed romantic breath, the more real approachable, this kind of return uncut jade to real, more real to record, gone with deep and languish sense, this kind of artistic conception is more specific, In addition, it has better artistic expression without any traces of sadness [2].

#### 6. CONCLUSION

Du fu longyou poetry and tang dynasty has great difference, help to understand the era background and spy out the whole picture of the glorious age of tang dynasty, geographical cultural characteristics in du fu longyou poems reached a new level, more real and art performance, will be refined to longyou poems more real intention of aesthetic quality, its artistic value is extremely high.

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# Thinking on The System Construction Of "Double - Qualified" Teachers in Vocational Colleges

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**Abstract:** This article from the "double type" teachers in higher vocational colleges according to the present conditions of the system construction, the concrete analysis of the "double type" teachers in higher vocational colleges problems existing in the process of system construction, and puts forward the innovative strategy, so as to cultivate with a high level of "double type" teachers, rapidly promote the development of vocational education.  
**Key Words:** Higher Vocational College; "Double-Qualified" Teachers; Construction Of Teachers

## 1. INTRODUCTION

Education is the great plan of the country and the Party, and teachers are the foundation of education and the source of education. "Double-qualified" teachers are those who hold technical positions such as engineers and technologists, have obtained teacher certificates and are engaged in vocational education and teaching. In recent years, the Party and the state pay great attention to the development of vocational education, and the requirements for the level of teachers are also increasing, and the double-qualified teachers in vocational colleges have become the top priority.

## 2. THE URGENCY AND IMPORTANCE OF THE SYSTEM CONSTRUCTION OF "DOUBLE-QUALIFIED" TEACHERS IN VOCATIONAL COLLEGES

The development of a country begins with the development of education, and the key to the development of education lies in the development of teachers. Teachers are the foundation of a school. For vocational schools, only with a high level of teachers can the development of vocational education be rapidly promoted. In vocational colleges, the development of double-qualified teachers has become the top priority. The career growth of double-qualified teachers is related to the development quality of the entire vocational education. Only by improving the quality of education can we unswervingly take the road of conserved development of schools.

At present, "double-qualified" teachers have become a major feature and focus in the construction of teachers in higher vocational education. To strengthen the construction of "double-qualified" teachers has become the common voice of the whole society and the education circle. By 2018, China had more than 10, 000 vocational colleges, with an annual enrollment of nearly 9.3 million and 27 million students, according to the Ministry of Education at a press conference on vocational education reform. It can be seen from such data that China's

vocational education has been able to cultivate technical and technical talents on a large scale, which has created a vital human resource support for promoting economic and social development. To sum up, the construction of double-qualified teachers in vocational colleges is urgent.

### 3. PROBLEMS EXISTING IN THE SYSTEM CONSTRUCTION OF "DOUBLE-QUALIFIED" TEACHERS IN VOCATIONAL COLLEGES

#### 3.1 The qualification of "double-qualified" teachers needs to be improved

At present, there is no unified standard to evaluate the qualification of "double-qualified" teachers in China [1]. Many vocational colleges can only identify the teachers with "double certificates" as "double-qualified" teachers. In fact, this is not very accurate and ignores the connotation of "double-qualified" teachers. Therefore, China's current "double-qualified" teachers in both the number and quality are not up to the ideal state. As for how to identify "double-qualified" teachers, a unified standard should be issued as soon as possible to improve the qualification process of "double-qualified" teachers.

#### 3.2 The "double-qualified" teacher evaluation mechanism needs to be improved

On the one hand, assessment and evaluation emphasize results rather than process. In the process of assessment, too much attention is paid to the assessment results while the improvement of education and teaching level is ignored, which is likely to lead to the utilitarian psychology of teachers and affect the healthy development of the school [2]. On the other hand, the evaluation subject is single. At present, the "double type" teachers are the most common way of assessment is to report the leading group and school work, evaluation subject is too single, actually "double type" teachers should also listen to the opinions of the students, because most of their work is to teach students directly, so the evaluation mechanism should also accept opinions from the students.

#### 3.3 The structure of "double-qualified" teachers needs to be optimized

"Double type" teachers in vocational colleges structure still exists many unreasonable problems, is the most important characteristics of "double type" teachers is less "ordinary teachers" in terms of quantity, age also small, but at degree level, the "double division type" education is generally lower than "ordinary teachers" education, relative to their practical experience more rich, Therefore, there is a slight lack of theoretical knowledge [3]. At the same time, due to the lack of teachers in vocational

colleges, "double-qualified" teachers are more likely to teach theoretical knowledge in class, which leads to the inability of teachers to give full play to their own strengths and lack of hands-on experience to guide students to exercise practical ability. This should be gradually improved in the training process.

#### 4. STRATEGIES FOR SYSTEM INNOVATION OF "DOUBLE-QUALIFIED" TEACHERS IN VOCATIONAL COLLEGES

##### 4.1 Innovate the admittance system of "double-qualified" teachers in vocational colleges

To innovate the "double-qualified" teachers admittance system, one is to meet the requirements of The Times and establish dynamic management. In the face of the need for professional talents in the new era, the "double-qualified" teachers in vocational colleges should keep pace with The Times and constantly update their teaching ideas and improve their teaching skills, so as to cultivate talents that meet the requirements of The Times. The second is to highlight the characteristics of vocational colleges to train vocational talents. Therefore, the admittance system and qualification recognition of "double-qualified" teachers should not only meet the requirements of teachers in ordinary vocational colleges, but also highlight the characteristics of vocational colleges.

##### 4.2 Innovate the "double-qualified" teacher incentive mechanism and welfare security system in vocational colleges

Only by improving the economic welfare of "double-qualified" teachers can more excellent "double-qualified" teachers be retained. In order to better improve the quality of "double type" teachers' talents and expand vocational colleges teachers "double type" teachers, because they create a good working environment, and should increase economic welfare treatment, the holidays should be forced to work overtime, at the same time in terms of annual leave with pay may be easing, give corresponding scientific research project is certain economic support policies, The school administrative department should take the number of in-service professional teachers who have obtained the "double-qualified" teacher qualification as an indicator for the increase of school funding [4].

4.3 Establish "industry-university-research" oriented and strengthen the construction of "double-qualified" teachers "Industry-university-research" integration has become a trend of current development, and its meaning is to integrate production with teaching and research work, forming an organic combination. The combination of

industry-university-research can better promote school-enterprise cooperation, make use of the cooperation with relevant enterprises and institutions in the society, actively encourage teachers to participate in the scientific and technological practice projects of enterprises and institutions in the society, and enhance the comprehensive ability of "double-qualified" teachers; At the same time, attention should be paid to the development of human resources in schools. Led by "double type" teachers into the enterprise unit for the practice of learning activities, to the enterprise personnel consult practice experience, to promote the "double type" teachers in the new technology application in practice and scientific research ability, at the same time, combining the can and enterprises, using ordering teaching way, change teaching mode, for the enterprise to create more need of professional talents, Promote the updating and upgrading of the curriculum system.

Although this paper analyzes the current situation of "double-qualified" teachers in vocational colleges and puts forward some suggestions, the feasibility of these suggestions needs to be tested and revised in further practice, which will be the focus of this research in the future.

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# Research and Analysis of Higher Vocational Continuing Education Under the New Era Background

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**Abstract:** Since running a school, higher vocational colleges have a strong connection with the society. Vocational colleges mainly focus on cultivating social professionals, which has made an important contribution to the development of society. Continuing education is an important part of the lifelong learning system, which has a strong connection with the teaching significance of higher vocational colleges. Under the background of the new era, the social demand for talents has further changed, and at the same time, new requirements have been put forward for the teaching of higher vocational colleges. Therefore, under the background of the new era, higher vocational colleges should strengthen the reform, make full use of the existing teaching resources, and continuously explore the continuing education function of colleges and universities, so as to promote the sustainable development of higher vocational colleges.

**Key Words:** New Era Background; Higher Vocational Colleges; Continue To Education

## 1. INTRODUCTION

In terms of the characteristics of continuing education, it has a high degree of agreement with the characteristics of higher vocational colleges. Therefore, strengthening the continuing education function of higher vocational colleges can not only promote the better development of students, but also improve the teaching level of colleges and universities as a whole. There are some differences between higher vocational colleges and undergraduate colleges in the system, so there are some differences in the goal of cultivating talents. In the long-term development of higher vocational colleges, a relatively systematic teaching system has been formed, but the function of continuing education has not been fully played out. Therefore, higher vocational colleges need to carry out a specific analysis of the existing problems to further promote the full use of educational resources.

## 2. THE SIGNIFICANCE OF STRENGTHENING THE FUNCTION OF HIGHER VOCATIONAL CONTINUING EDUCATION UNDER THE BACKGROUND OF THE NEW ERA

In the context of the new era, higher vocational colleges should expand their teaching functions and further strengthen their continuing education functions, so as to effectively promote social and economic development [1].

2.1 Is conducive to meeting the social needs for high-quality talents

The transformation of social economy make the country's demand for talents also great changes have taken place,

strengthen the continuing education of higher vocational colleges function is beneficial to cultivate high quality talents for the society, through strengthen continue to education consciousness can not only can increase students' willingness to learn whole, also can provide many adult society with professional teaching resources. Influenced by past teaching system, a lot of students to the degree of importance are higher than that of the learning process, and in the long-term development in higher vocational colleges not recognised by the height of the society, so a lot of higher vocational education to cultivate the talents with social derailment, and strengthen the continuing education of higher vocational colleges can enhance the social recognition of colleges and universities, Can effectively cultivate more high-quality talents.

2.2 It is conducive to the socialized development of vocational education in China

Different from undergraduate colleges, higher vocational colleges in China have taken serving the society as the main purpose since running their schools, and the talents they train are mainly geared to the society. Therefore, the running style of higher vocational colleges is highly consistent with social life and production.

The advantages of carrying out and implementing the continuing education function of higher vocational colleges are embodied in two aspects: first, it can provide professional teaching and training resources for the social staff; Second, through the integration with the society can strengthen the cooperation with enterprises, can further optimize the teaching policy according to the social situation. Therefore, strengthening the continuing education function of higher vocational colleges is conducive to promoting the socialized development of vocational education in China, and can be recognized by more social people.

2.3 It is conducive to improving the teaching level of colleges and universities

China's higher vocational colleges have formed a relatively perfect teaching system in their long-term development, but there is no limit to learning and progress. Higher vocational colleges can strengthen their ties with society through the implementation of continuing education, and further strengthen their cooperation with related enterprises, so as to realize complementary advantages in the process of cooperation. It can help higher vocational colleges to improve their teaching plans, improve their teaching level, and provide a more real social environment for teaching in higher vocational colleges, which is conducive to cultivating more excellent



compound talents in higher vocational colleges.

### 3. STRATEGIES TO STRENGTHEN THE FUNCTIONS OF HIGHER VOCATIONAL CONTINUING EDUCATION IN THE NEW ERA

Economy plays a decisive role in politics and culture. As an education industry, higher vocational colleges are also constantly affected by economic development. Under the background of the new era, higher vocational colleges urgently need reform and further strengthen their continuing education function [2]. Can undertake from the following several aspects specifically.

#### 3.1 The government should exert its guiding ability to strengthen the continuing education function of higher vocational colleges

Due to the complexity of China's educational situation, higher vocational colleges are still in a relatively weak position in many educational industries. Therefore, in order to further improve the teaching quality of higher vocational colleges and give full play to the continuing education function of higher vocational colleges, the Ministry of Education should first play a leading role.

First of all, the Ministry of Education can strengthen the investment, provide financial support to higher vocational colleges and promote the continuous optimization of their teaching facilities and teaching environment, so as to effectively attract more people from the society.

Secondly, the Ministry of Education should reform the teaching staff of higher vocational colleges by adding corresponding teaching certificates and setting corresponding training exams.

Finally, the Ministry of Education should further improve the construction of relevant teaching system, make the continuing education function of higher vocational colleges conform to the reality, and give full play to its own supervision function to further restrict the level of running higher vocational colleges.

#### 3.2 Define the purpose of continuing education and expand the scope of continuing education

For higher vocational colleges themselves, they should further strengthen their continuing education responsibilities in the teaching process. In order to better improve the continuing education function of higher vocational colleges, colleges can start from two aspects:

First, the purpose of continuing education should be made clear. Different from the general education of higher vocational colleges, continuing education is aimed at a wider range of students and more diverse classes, mainly from some social people. Therefore, higher vocational colleges should make clear the purpose of education when carrying out the practice of continuing education. Higher vocational colleges should respect students' dominant position in teaching, understand the educational background, learning ability, position and personal needs of trainers, and then formulate targeted teaching strategies according to these characteristics, so as to effectively guarantee the quality of continuing education.

Second, higher vocational colleges should expand the scope of continuing education. Higher vocational colleges should reform the current mode of education, to develop

correct education consciousness, higher vocational colleges has a professional teachers team and training equipment, so learn to attract enterprises and institutions to cooperate, through cooperation can not only strengthen the enterprise staff's professional quality, can provide real practice platform for college students, which can achieve a win-win result.

#### 3.3 Pay attention to educational brand construction

Influenced by the traditional education system, higher vocational colleges in China are not highly recognized in the society, and their social influence is also low. Another is cooperation in higher vocational colleges and enterprises, its on time has the characteristics of fluidness, instability, and the quality of the training is relatively low, so in order to strengthen the continuing education of higher vocational colleges function, improve the social influence of higher vocational colleges, higher vocational colleges and universities need to pay attention to the education brand construction and management.

First of all, in terms of providing continuing education, higher vocational colleges can reform the theme and content of training, which can be determined according to the current social development and the demand for talents of posts. Instead of being uniform, they should pay attention to innovation, conduct market research, and improve the scientificity of analysis by using big data.

Secondly, vocational colleges should analyze the educational characteristics of colleges on the basis of respecting the law of the market, keep the individualized, scientific and innovative education, and optimize the education in combination with the market demand and individual demand, so as to further enhance the social influence of vocational colleges.

### 4. CONCLUSION

Implementing and strengthening the continuing education function of higher vocational colleges is not only the inevitable requirement of the development of colleges, but also the need of social and economic development for talents. Higher vocational colleges should analyze their own teaching characteristics and functions, and strengthen the connection with society, so as to constantly strengthen their continuing education function, and then gradually improve the social influence of higher vocational colleges.

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# Study on the agglomeration of tourism industry in Beijing-Tianjin-Hebei Region

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**Abstract:** The competitiveness difference of the tourism industry in Beijing-Tianjin-Hebei region directly affects the coordinated development of the tourism industry in the three regions. This study uses location entropy to carry out an empirical study on the change trend of the competitiveness level of the tourism industry in Beijing-Tianjin-Hebei region. The results show that with the increase of tourism competitiveness in Hebei province year by year, the gap of tourism competitiveness between Beijing, Tianjin and Hebei is gradually narrowing, which plays a role in promoting the coordinated development of tourism industry in Beijing, Tianjin and Hebei.

**Key Words:** Beijing-Tianjin-Hebei; Tourism Industry; Collaborative Development; Industrial Agglomeration; Location Entropy

## 1. INTRODUCTION

Tourism industry has become an important engine to drive the economic development of Hebei Province, but compared with Beijing and Tianjin, there is still a certain gap in its development level. The convergence of tourism industry competitiveness in Beijing-Tianjin-Hebei region can greatly promote the coordinated development of regional tourism. On the contrary, the differences of tourism industry competitiveness among different regions gradually increase, which will cause great obstacles to the coordinated development of regional tourism. This study analyzes the change trend of tourism industry competitiveness and the coordinated development of tourism in Beijing-Tianjin-Hebei region through empirical research.

## 2. RESEARCH STATUS

This study adopts industrial agglomeration theory to study and measure the concentration degree of tourism industry in Beijing, Tianjin and Hebei. The germination of industrial agglomeration started from the classical location theory represented by Johann Heinrich von Thunen (1826)[1]. Johann Heinrich von Thunen was The first to formally study spatial economics and economic geography in *The Isolated State*. On this basis, Alfred Marshall (1890) [2] studied industrial agglomeration from the perspective of classical economics. August Losch (1954) [3] studied regional science and urban economics, and studied industrial layout under the consideration of economies of scale. Hoover (1937) [4] classified agglomeration economy for the first time and caused a research upsurge on the externality of industrial agglomeration. Schumpeter, J.A. (1947) [5] studied the innovation effect and mechanism of industrial agglomeration from the perspective of industrial technology innovation in the industrial field. The precondition for the coordinated development of the

tourism industry in Beijing, Tianjin and Hebei must be the narrowing of the gap in the development level of the tourism industry in the three regions.

## 3. THE CONCENTRATION DEGREE OF TOURISM INDUSTRY BASED ON LOCATION ENTROPY

In this study, the location entropy index is used to measure the industrial concentration degree of the tourism industry. The proportion of the tourism industry in the national economy can reflect the competitiveness and concentration degree of the tourism industry in this region to a certain extent. In this study, domestic tourism income and gross domestic product (GDP) are selected as statistical variables to calculate location entropy, and the degree of clustering of tourism industry is reflected by measuring the location entropy index of different regions. The location entropy index of tourism industry can be calculated as follows:

$$LQ = \frac{\frac{q_i}{\sum_1^n q_i}}{\frac{Q_i}{\sum_1^n Q_i}}$$

Among them,  $q_i$  --  $i$  domestic tourism income of the region;

$\sum_1^n q_i$  --Gross domestic tourism income;

$Q_i$  --  $i$  Gross regional product of the region;

$\sum_1^n Q_i$  --Gross domestic product.

## 4. EMPIRICAL STUDY ON LOCATION ENTROPY OF BEIJING-TIANJIN-HEBEI REGIONAL TOURISM INDUSTRY

4.1. This study uses the statistical data of domestic tourism revenue and GROSS domestic product (GDP) from 2004 to 2019 to conduct an empirical study on the degree of tourism industry agglomeration in the Beijing-Tianjin-Hebei region. The empirical research results show that firstly, from the perspective of the change trend of location entropy index (FIG. 1), the location entropy index of Beijing, Tianjin and Hebei from 2004 to 2019 is all greater than 1, that is, the degree of agglomeration and specialization of tourism industry in Beijing, Tianjin and Hebei are both higher than the national average level. The location entropy index of Beijing showed a significant downward trend, and the location entropy index of Tianjin showed a downward trend before 2017, and a rapid increase trend in the following two years. The location

entropy index of Hebei province showed a steady rising trend year by year.

4.2 in terms of the inflection point of data change, the locational entropy index of Beijing and Tianjin showed a sharp decline in 2011. After that, Beijing continued to show a slow downward trend, while Tianjin basically maintained a stable state and began to rise rapidly in 2018. After 2011, the location entropy index of Hebei Province showed a slow growth trend, which changed the previous state where the location entropy index basically remained unchanged. Among them, according to the results of the fourth National Economic census in Tianjin, the GDP of Tianjin in 2018 was revised from 1, 809.64 billion yuan to 1, 3362.92 billion yuan, which resulted in a significant

decrease in the proportion of tianjin's GDP in the national total, and finally resulted in a significant increase in the location entropy index of Tianjin in 2018.

4.3 from the perspective of the current location entropy index of Beijing, Tianjin and Hebei, before 2017, the index of Beijing, Tianjin and Hebei showed an obvious convergence trend, and since 2018, the index showed a divergence trend, but the difference was not large. Hebei continued to show a steady growth trend, and was higher than Beijing and Tianjin for the first time in 2018 (tianjin's locational entropy index in 2018 was calculated before the revision of the bureau of Statistics data).

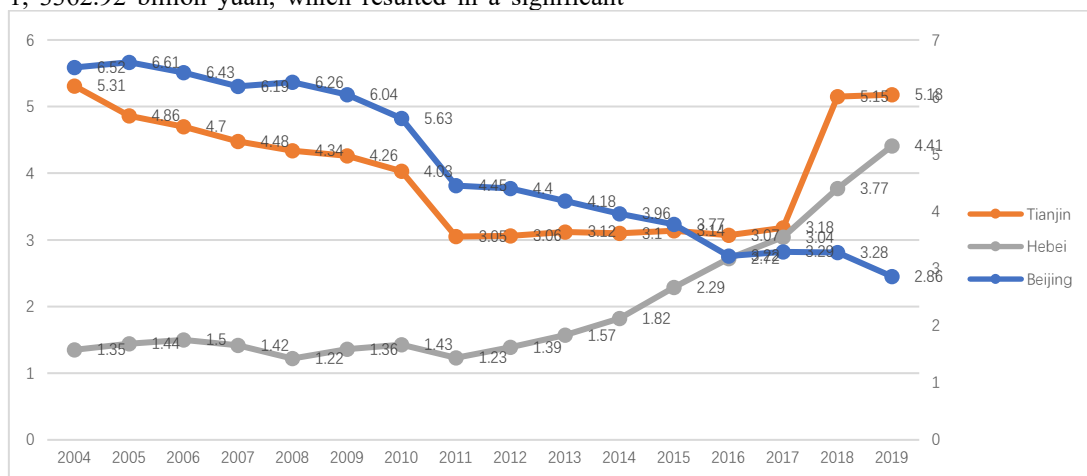


Fig 1 Trend chart of location entropy index of tourism industry in Beijing-Tianjin-Hebei region from 2004 to 2019

The data analysis results show that the first, the Beijing and tianjin in the national tourism revenues accounted for constantly decreases, and areas of the country's total GDP proportion of basic stable, eventually leading to the Beijing and tianjin cities of the location entropy presents the declining trend, namely the nationwide, the Beijing and tianjin, both of the tourism industry cluster competitiveness levels showed a trend of decline.

Second, the location entropy index of tourism industry in Hebei province is rising steadily, the growth rate has an upward trend, and the degree of tourism industry agglomeration has increased. The main reason is that the proportion of tourism income in Hebei province to the national total increases year by year, while the proportion of regional GDP to GDP shows a steady downward trend. Therefore, the location entropy index of the tourism industry in Hebei province increases year by year, indicating that compared with other industries, the tourism industry in Hebei province has significantly increased its role in promoting economic growth, and the degree of agglomeration and competitiveness of the tourism industry in Hebei Province show an upward trend.

Thirdly, the location entropy index of the tourism industry in Beijing and Tianjin and that in Hebei province reached almost the same level of 3.17 in 2017, indicating that the promotion effect of the tourism industry in Beijing, Tianjin and Hebei on the local economic development and the competitiveness level of the tourism industry in the three regions gradually converged. After 2018, as the location entropy index of Hebei continues to increase, the

competitiveness of the tourism industry continues to strengthen, and the absolute gap with Beijing and Tianjin in industrial development continues to narrow, which lays the economic foundation for the coordinated development of tourism in Beijing, Tianjin and Hebei.

5. CONCLUSION

This study believes that the degree of agglomeration of tourism industry in Beijing, Tianjin and Hebei presents a trend of gradual convergence, mainly on the premise of the degree of agglomeration and competitiveness of tourism industry in Hebei province. From the perspective of the development of the tourism industry, the competitiveness of the tourism industry in Beijing, Tianjin and Hebei has gradually converged, and the competitiveness of the tourism industry in Hebei province has been greatly improved. The gradual convergence of the competitive strength of the tourism industry has laid the economic foundation for the coordinated development of tourism in Beijing, Tianjin and Hebei. In order to avoid in the role of market mechanism, economic developed area in economic development of "polarization effect", promote the reasonable allocation of resources in different regions, realize the coordinated development of regional economy, must want to rely on the macroeconomic regulation and control means, to adjust the reasonable allocation of resources and profit distribution, avoid the deterioration of the polarization effect in the economic developed areas.

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# Exploring the Practical Path of Situational Creation in Primary School English Teaching

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**Abstract:** Primary school English teaching is an important foundation of English teaching, pupils because of the younger age, it is difficult to understand abstract English knowledge. The situation creation is beneficial to improve students' interest in learning, help students better understand grammar knowledge, improve English learning effect, and lay a good English foundation. Therefore, this paper mainly discusses the role and practice of situational creation in primary school English teaching.

**Key Words:** Situation Creation; Primary School English Teaching; Practice the Path

## 1. INTRODUCTION

At present, with the continuous promotion of globalization, English, as a universal language in the world, is an important subject in China's modern education system. English teaching in primary schools is of great significance to the construction of English foundation, and it is urgent to improve the efficiency of English teaching in primary schools [1]. Scene creation mainly means that teachers build realistic, vivid and natural scenes for students based on teaching materials and teaching contents. Through scene creation, make abstract knowledge more vivid, let students feel empathy in the scene, facilitate students to understand English knowledge, feel the charm of English, open up the way of thinking, improve the enthusiasm of participating in class, improve students' understanding and expression ability. Therefore, this paper mainly discusses the role and practice of situational creation in primary school English teaching.

## 2. THE SIGNIFICANCE OF SITUATIONAL CREATION IN PRIMARY SCHOOL ENGLISH TEACHING

Scene creation teaching method applied in primary school English teaching, can build a vivid language communication environment for students, stimulate students to participate in the interest. Scene creation constructs an intuitive and vivid scene for students in teaching, so that students can better understand the English knowledge that is not easy to understand. Students can learn from the situation themselves, which is conducive to deepening the impression of knowledge and improving their learning enthusiasm [2]. In traditional English teaching, teachers usually take the form of simply speaking and reading. However, due to lack of sufficient cognitive ability, primary school students cannot understand the knowledge taught, which seriously affects the teaching effect. Through situation establishment will be teaching students are divided into several groups, increase the communication between teachers and students, students and students, is advantageous for the

constant communication between teachers and students, to increase classroom interaction, to cultivate students' teamwork thinking, to improve the communication power of expression, to improve English teaching quality, achieve better teaching effect.

## 3. PRACTICAL APPROACH OF SITUATIONAL CREATION IN PRIMARY SCHOOL ENGLISH TEACHING

### 3.1 Create story-based situations to improve the interest of English teaching

Although primary school students are relatively young and not fully developed psychologically and intellectually, they have more abundant imagination and creativity in language learning [3]. Therefore, teachers in English teaching reasonable use of scene creation, for students to build story scenarios, improve the interest of English teaching content, is conducive to increase students' interest in learning, active participation in English learning. For example on animals such as tiger, pig, dog, vocabulary teaching, teachers can be combined with this kind of words to create scenes, as abstract and boring vocabulary teaching into the story of the scene, to make teachers and students in the scene to create a better interactive, interesting, improve English teaching and the elementary student's psychological law of development, to adapt to the students learning habits, It is conducive to improving the effect of English teaching in primary schools.

### 3.2 Create language scenes to increase students' life experience

For primary school English teaching, the teaching goal is not only to help students understand and master basic English theoretical knowledge, but more importantly, to enable students to use their English knowledge in real life, so as to achieve the effect of learning for practical use. Primary school English teaching, the teacher should be in combination with the practical situation of students' rational planning the teaching goal, the theory of knowledge of English teaching and practice teaching effective fusion, for students to create a daily life scene, let the students finish oral communication in the scene, strengthen students' real emotional experience, experience to express the important role of oral English, so as to improve students' practical application ability of knowledge, Improve English expression and communication skills. For example, when teaching "My Birthday" in the Fifth grade English textbook, the teacher creates a Birthday party situation for the students, so that the students can reasonably use the knowledge to communicate in this situation, and create a positive and vivid teaching atmosphere. T: This... This... This... Is for you. Happy Birthday." Through the creation of the

situation, so that students take the initiative to participate in English teaching, on the one hand can consolidate the knowledge, deepen understanding, on the other hand also let students feel the fun of English learning, is conducive to cultivating interest in learning. For example, when teaching "Shopping" in the English textbook for grade four in primary school, teachers create Shopping scenes for students based on the content of the textbook, guide students to make full use of the Shopping experience in life, and integrate the vocabulary and sentence patterns in the Shopping situation, which is conducive to enhancing students' ability to apply knowledge to life and deepen their understanding of English knowledge.

### 3.3 Create game scenarios to promote students' comprehensive ability

Primary school students in the age stage, with curiosity, desire to explore strong, active and other characteristics, so primary school English teaching teachers should effectively use these characteristics of primary school students. According to the characteristics of students' liking for games, students are more likely to be attracted by games. When creating scenes, teachers should reasonably combine some games and stories to stimulate students' interest in participation, improve their learning enthusiasm, and achieve good English teaching purposes. For example, in English teaching, teachers often Listen to the words "Listen to do... In the game, the teacher presents the instruction "Water the flowers, empty the trash" to the students, and asks the students to make the corresponding actions quickly according to the instruction. The students are divided into several groups for competition, and the group with the fastest response is given some rewards, while the group with the slowest response is required to perform on stage. Through this form, not only the purpose of English teaching can be achieved, but also conducive to cultivating students' team consciousness. At the same time, teachers should also create more cooperative game situations for students, students in the situation to study in a group form, improve the enthusiasm of students in the situation of oral expression, can enhance students' oral communication ability, so as to improve their oral level in a pleasant and vivid situation. The game situation is constructed in the situation creation, so that the teaching

environment is more happy and relaxed, so that students can feel the fun of English learning in the game, stimulate their confidence in learning, and develop the concept of cooperative learning. In addition, teachers can also adopt the mode of independent inquiry in English teaching, such as letting students give lectures in class to enrich teaching interest and increase students' enthusiasm for classroom teaching. In the teaching process, teachers play the role of guider, take students as the main body, practice in the teaching process, actively create the situation, encourage students to play and practice freely in the situation, give full play to students' creativity and subjective initiative, improve thinking activity, promote students' all-round development.

### 4. CONCLUSION

To sum up, the application of situational creation in primary school English teaching is conducive to stimulating students' interest in learning and promoting the interaction between teachers and students. Teachers should fully understand the advantages of situational creation, change teaching ideas, innovate teaching methods, rationally integrate situational creation teaching, give full play to students' subjective initiative, improve the quality of English teaching, and promote the comprehensive development of students' comprehensive ability.

### ACKNOWLEDGEMENTS

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# Application Exploration of Computer Software Technology in The Era of Big Data

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**Abstract:** With the progress of China's society and the continuous development of information technology, the era of big data has come. People can't live without the support of various data, and they are constantly creating new data through it. In this context, through the exploration of the application of computer software technology, can improve the efficiency of the industry, promote the improvement of economic benefits, so as to improve people's quality of life. This paper mainly discusses the development status of computer software technology and its application in the context of big data.

**Key Words:** Big Data; Computer Software Technology; Application Way

## 1. INTRODUCTION

With the continuous development of science and technology, the society has gradually entered the era of big data, and all kinds of information have been effectively analyzed and utilized, which has greatly improved the efficiency of people's information processing. Secondly, the rise of the software industry, all kinds of software rushed to the emergence, greatly enriched People's Daily life. In order to further promote the development of software technology, try to look at it from the perspective of big data era, and explore the application path of computer software technology through the combination of the two to promote the development of the industry.

## 2. THE DEVELOPMENT STATUS OF COMPUTER SOFTWARE TECHNOLOGY

Nowadays, computer software technology has gradually developed and matured, which is involved in all walks of life. Through software technology, people's work efficiency can be significantly improved and the quality of life can be promoted. Common industries such as production industry and education industry are closely related to the software industry. The essence of the application of software technology is that computer software technology can make itself conform to different tasks by establishing corresponding models and presenting personalized characteristics. The input of data in the established models and the prompt of software to process the data and get the results [1]. In many industries, now recognize the importance of computer software technology, especially with big data technology, to realize information collection, sorting, when applied to software technology, can grasp the user's good mental state, to meet the needs of users, make own product can meet the user's expectations, improve the economic benefits of products.

## 3. APPLICATION APPROACH OF COMPUTER SOFTWARE TECHNOLOGY IN THE ERA OF BIG DATA

In this era of numerous data, we can easily collect all kinds

of information needed to help our own development. Big data provides the development source of information for computer software technology. The software industry should firmly grasp the opportunity to realize its own development, which can be mainly applied in the following aspects:

### 3.1 Application in communication

In modern society, communication between people has already broken through the original mode, becoming more convenient and fast, and for enterprises, can better grasp the needs of users. With the assistance of big data, corresponding software can be developed to evaluate the consumer needs of users, so that enterprises can provide targeted services to users, improve the turnover of enterprises and user stickiness, and provide users with higher quality services. On the other hand, through the computer software to the user's consumption demand analysis, broke the previous research, investigation and other field process, save the enterprise's human and material resources, thus reducing the enterprise's operating costs, to create higher economic benefits for the enterprise. At the same time, this kind of analysis and prediction software can also point out the direction for the development of enterprises, reduce the management risk of enterprises, make the development of enterprises meet the needs of society, increase the competitiveness of enterprises, so as to promote the continuous development of the whole industry.

### 3.2 Application in enterprise management

In today's enterprise management, informationization has become the main direction of change. Enterprise informatization management embodied in many aspects, for the enterprise staff management, through the computer software, realizes the enterprise staff attendance, supervision, etc., for example "nailing" has gradually become a large number of enterprise employees to clock out the necessary software, makes attendance more convenient, at the same time for enterprise management personnel, can be more clear grasp of the employee's attendance record, Promote the continuous improvement of attendance system. For enterprise management, computer software is an effective way to improve management efficiency. In the use of "nail", in addition to the daily punching in the card, the software can also be used to release tasks and supervise the process of tasks to urge employees to work efficiently. Secondly, "Tencent Conference" and other online software can provide online video conference for enterprises, which is convenient for enterprises to make timely decisions in response to emergencies, breaking through the restrictions of the previous meeting location. The application of computer software technology in enterprise management can

promote the informatization of enterprise management, reduce the management cost of enterprises, improve management efficiency, reduce decision-making errors, and maximize the economic benefits of enterprises [2].

### 3.3 Application in commercial operation

The commercial operation of enterprises, on the one hand, is to improve the operation efficiency of enterprises, on the other hand, is to improve the service evaluation of users, through the improvement of these two aspects to promote the improvement of enterprise operation and development. The first is to improve the operating efficiency of enterprises. Big data technology can collect, sort out and analyze the information of users to help develop computer software, so as to improve the operating efficiency. For example in the analysis of traffic of milk tea shop, you can point single backend system software, and the store, traffic to the store and online order statistics, analysis of the turnover of one day, at the same time analysis of consumer preferences, product sell like hot cakes in the second day of preparation for more into the raw material, and relatively less popular products is reduced, so as to reduce resource waste, Improve economic performance. Secondly, as for user evaluation, some online review software, such as "Dianping" and "Meituan", are used to evaluate the services and products of enterprises and attract new users with high scores. At the same time, for the aspects with low scores, continuous improvement should be made to improve the service level of the enterprise, promote the upgrading of products, so that the enterprise operation can meet the needs of users and continuously obtain economic benefits.

### 3.4 Application of software technology

At present, computer software technology is mainly divided into cloud storage technology, virtualization technology and information security technology three categories. Cloud storage technology will be a large amount of data stored in network through the network account, made the information storage, use more convenient, in the enterprise has been widely applied to

the data protection and data distributed storage, through building enterprise information database, makes the enterprise information processing to realize remote operation, bringing great enterprise management, improve the efficiency of enterprise's information processing. Information security technology follows. To ensure the security of information stored by enterprises, encryption technology must be adopted to improve the security of accounts. At the same time, the public platform of enterprises is vulnerable to attacks by hackers and other illegal elements, so it is necessary to build their own security system to resist external attacks. In addition, through the computer software virtualization technology, can mode enterprise operation, the operation process of a variety of problems may appear in advance to deal with the measures, reduce the enterprise operation risk, reduce unnecessary losses, so as to save the enterprise operation cost, promote the development of the enterprise.

## 4. CONCLUSION

In the era of big data, the development of computer software technology has obtained sufficient conditions. By applying computer software technology to all walks of life, it can effectively promote the information management of enterprises, help enterprises grasp the needs of users, so that the services of enterprises can meet the needs of users, create higher economic benefits for enterprises, and promote the continuous progress of enterprises, and promote the overall development of the industry.

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# Research on the Application of Modern Machinery Manufacturing Technology and Processing Technology

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**Abstract:** With the development of modernization in the field of machinery manufacturing, many advanced technologies have been applied, which is closely related to China's economic construction and social development. Now for some mechanical equipment, has increasingly motors and intelligent development, which leave the advanced mechanical manufacturing technology and processing technology, and the related technology to move forward, the society for mechanical equipment performance, function also once again put forward higher request, need relevant enterprises can be further optimized, innovative manufacturing technology and processing technology, At the same time, it promotes social development while improving the core competitiveness of its own enterprise.

**Key Words:** Modern Machinery; Manufacturing Technology; Processing Technology; Application

## 1. APPLICATION TREND OF MODERN MACHINERY MANUFACTURING TECHNOLOGY AND PROCESSING TECHNOLOGY

With the rapid development of society today, China's modern machinery manufacturing and processing industry is facing new opportunities and challenges. In modern society, the big data, AI, the emergence of the Internet of things technology has been widely used, one of the most prominent is the modern machinery manufacturing and processing industry, because the traditional manufacturing process have been unable to adapt to the development of contemporary society, and apply new technology to which can better improve the industry competitiveness of the industry, make its development in the direction of the automatic and intelligent. In addition, according to the current situation, most large enterprises have established their own automation projects and teams, and many small and medium-sized enterprises are also gradually developing towards the direction of automation process, so as to improve economic benefits and make more contributions to the society [1]. Not only that, the current country has carried out advanced planning and layout of industry 4.0, the integration of industrialization and information technology, to modern machinery manufacturing technology and processing technology pointed out the direction of development, providing great convenience. In addition, the very fast development in modern society, influenced by the automatic manufacturing technology and intelligent processing technology in the continuous development and innovation, on this basis, the industrial iot, intelligent robots have been

obtained and the support of big data technology, make modern machinery manufacturing and processing of each link can be in strict accordance with the requirements for work, as a result, It not only improves the working efficiency, but also greatly reduces the probability of risk occurrence, so as to develop in a better direction.

## 2. APPLICATION PRACTICE OF MODERN MACHINERY MANUFACTURING TECHNOLOGY AND PROCESSING TECHNOLOGY

### 2.1 Precision casting

In the work of precision casting, modern mechanical manufacturing technology and processing technology are used to divide it into two parts: investment manufacturing and precision casting shell manufacturing, so as to help precision casting work achieve better development. First of all, is a traditional investment casting, wax membrane manufacturing process USES is the archetype of the wax, and the use of this method in precision casting is not reasonable, its main application is forming manufacturing technology, with the help of the rapid prototyping equipment, can produce a wax membrane directly, let it play its role, for engine parts. Second, manufacturing precision casting shell is in the engine parts, when carry out the work of the link, need to take direct membrane shell method and prototyping manufacturing technology to produce precision casting shell, its will in the process of forming a layer of aluminum oxide layer cladding on the surface of workbench, and then use the micro nozzle to silicone injection, so as to form a 2 d contour, By combining silica gel with aluminum powder, and so on, repeating the process several times, the model can be formed. In this way, more compact casting shell manufacturing technology can be obtained on the original basis, and the development of precision casting technology can be promoted.

### 2.2 Welding

In modern society, one of the most commonly used technical processes in machinery manufacturing and processing is welding. With the continuous development of society, welding technology is gradually reforming and innovating, and finally presents the characteristics of diversification, which brings great convenience to modern machinery manufacturing and processing. Not only that, today's welding technology is mainly composed of gas shielded arc welding, resistance welding and submerged arc welding, and the effect of each technology is different. The first is gas shielded arc welding, which takes gas as the arc medium in the process of use, in order to highlight the welding effect. At present, carbon dioxide is the most

widely used arc medium in China. Compared with other media components, carbon dioxide has a relatively low use cost and a wide range of sources. It has a very good blocking effect on air, so most enterprises will take it as the main arc medium to improve work efficiency. The second is resistance welding, which in the process of use through the welding current to produce resistance heat, the corresponding workpiece processing, in order to form solder joints or joints. However, although various technologies have been perfected in modern society, there is still a lack of testing methods for this process, which hinders the smooth development of the work. Finally, the application of submerged arc welding is generally adopted to take corresponding parts for welding arc burning, will also be divided into automatic and semi-automatic control mode, according to the current situation, fully automatic control mode application range is wide, the main reason is that the cost is lower, and it is very convenient to operate, in greatly save time at the same time also can improve the work efficiency, For the better.

### 3. APPLICATION STRATEGY OF MODERN MACHINERY MANUFACTURING TECHNOLOGY AND PROCESSING TECHNOLOGY

#### 3.1 Achieve the goal of win-win economic benefits and ecological environment

At present, machinery manufacturing industry has made many contributions for the society, to achieve better development, the machinery manufacturing enterprises must improve the production technique and technology stress on reform and innovation, strengthen the protection of ecological environment, comply with the requirement of times development and the trend of national development, green road, as a result, not only can improve the economic benefits of enterprises, It can also meet the requirements of sustainable development. In addition, strictly control each link of production is also the crucial thing, because in the mechanical manufacturing process of the past, there will be a lot of waste discharge, brought serious harm to the environment, not conducive to the health of the residents in the so, machinery manufacturing enterprises must be in strict accordance with the standard to control the emission of waste, According to the actual situation of the site to develop a reasonable amount of emissions scheme, to protect the surrounding environment will not be affected, so as to achieve win-win economic benefits and ecological environment.

#### 3.2 Maintain technical unity

Modern society, the process of mechanical manufacturing and processing mainly includes the design, development, manufacturing and inspection, management and so on many important processes, and the role and effect of different process have different, but there is a connection between them but, once a link problems, will seriously affect the follow-up process, so, Machinery manufacturing enterprises must analyze problems from a macro perspective and work out processing goals to meet production needs. By doing so, they can not only ensure the uniformity of technology, but also greatly improve the quality of production and processing, so that enterprises can achieve good development [2].

### 4. CONCLUSION

With the continuous development of society, China's science and technology progress by leaps and bounds, has been widely used in various fields and daily life, to provide people with great convenience, at the same time to the manufacturing process and quality of higher requirements, promote development. However, according to the current situation, the traditional manufacturing technology has been unable to adapt to the development of contemporary society, is not conducive to improve work efficiency and economic benefits. Therefore, this requires the machinery manufacturing industry to continue to learn advanced technology, timely improvement of their own shortcomings, the high technical content of modern technology manufacturing technology applied to it, in order to better enhance the competitiveness of China's machinery manufacturing industry in the market, to achieve good development.

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# Exploration on Teaching Reform of The Course of Computer Application Foundation Under Engineering Education Professional Certification

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**Abstract:** The emergence of engineering education certification and MOOC has accelerated the reform of Computer Application Foundation curriculum. According to the differences of students' majors, the basic knowledge of Python programming is incorporated in the curriculum. As the result of the reform, the teaching content is expanded and optimized, and the requirements of engineering education certification are met.

**Key Word:** Computer Application Foundation; engineering education professional certification; MOOC; SPOC

## 1. INTRODUCTION

The course of "Basic Computer Application" is expected to cultivate non-computer major students' computer application, operation and computational thinking ability, so that they can use computer as a tool to solve practical engineering application problems in their professional fields.

As a high-level programming language, Python is syntactic, supports both procedural and object-oriented programming, and is easier to learn than traditional LANGUAGES such as C and Java. Nowadays, Python is widely used in artificial intelligence, big data, UN computing and other fields, so it is necessary for non-computer majors in universities to promote Python.

## 2. TEACHING STATUS OF BASIC COURSE OF COMPUTER APPLICATION

Basic computer application is usually offered in the first year of non-computer majors. The contents of the course include the basic software and hardware principles of computer, the introduction of common technologies in the field of computer application, and the application of Office software and other programming software in the practice.

As computers become more and more popular, students have mastered some basic operations of computers before entering college. Again after entering the university, students access to the computer, the old teaching content based on Office practice teaching links, in particular, students study enthusiasm down quickly, but from the perspective of all kinds of job submission and on-site assessment link, the students master the situation is not very good, later when it comes to based on C language program design basis, is a spent force, Not very good teaching results, and can not meet the requirements of engineering education certification.

## 3. FEASIBILITY ANALYSIS OF PYTHON LANGUAGE BASIC TEACHING

Python is an interpreted, object-oriented, general-purpose, open source scripting language that is easy to learn and suitable for beginners.

3.1 Python is an interpreted language, without too much syntax requirements, in the process of programming, do not need to pay too much attention to the problem of syntax.

In traditional C language teaching, many students know how to implement the algorithm, but they are not familiar with the grammar rules of C language, so it is difficult to describe how to use C language.

### 3.2 Python is an object-oriented language

Python is object oriented and has many modules. Not only can realize the simple string processing, but also can realize the simple 3D graphics drawing, which is more difficult to achieve in C language.

### 3.3 Python programming using an interactive environment

Python can be used for interactive programming. The following figure shows the Interactive Development environment of Python, as you can see,

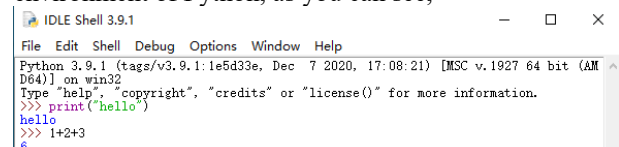


Figure 1 interactive programming environment

Interactive programming can be executed as you type, and a sentence can be executed as you type. In the process of learning, beginners can observe the effect of each statement, which is helpful for beginners to master Python syntax.

It can be seen from the discussion that It is necessary for Python to be the enlightening course of program design in the basic course of computer application.

## 4. TEACHING CONTENT REFORM OF THE COURSE

According to the requirements of the school training program, the class hours of basic computer application course are 32 class hours. According to the normal teaching arrangement, it is impossible to complete the teaching of basic computer knowledge, computer culture and Python program design in 32 credit hours, so it is necessary to choose and reject the teaching content and reform the teaching organization.

### 4.1 In the case of limited credit hours, online and offline MOOC teaching is adopted for teaching

The whole school investigates the computer mastery program of students before entering the school, and adjusts the ratio of online and offline teaching content to 1:1, that is, both online and offline teaching hours are 32

credit hours. Students complete the learning of basic computer knowledge, computer culture and Python theory through the teaching video learning on the Tree of Wisdom and online evaluation, and complete the learning and evaluation of the experimental teaching part of the course in the offline classroom.

4.2 Adjust the teaching content appropriately to stimulate students' enthusiasm for learning

4.2.1 Adjust the teaching ratio of Python and Office. Students' low level of learning is mainly because they have been exposed to computers before entering the university and are familiar with the basic operations of computers. However, the basic operations in Office are similar to those in the computer operating system, so repeated explanations will reduce their learning enthusiasm. Python is a new programming language for students, so the proportion of offline teaching should be increased. The teaching content of Office is mainly Word, Excel, Powerpoint and Access, and the learning of each component is arranged for 2 credit hours. Through the string lecture of online experiment tasks, the unreasonable operation of students in the practice is corrected to ensure the smooth progress of the experiment. The Content of The Python section is set to 24 credit hours, and six modules are set to complete the teaching according to the syllabus of the Python section of the NATIONAL Computer Rank Examination.

4.2.2 Adjust the teaching sequence

The offline teaching of Office is mainly to correct students' irrationalities in the time process. In order to improve students' learning enthusiasm, the easier to master links will be alternated with Python teaching.

First of all, the most basic task of Office operation is to correct students' typing habits. Many people have incorrect keyboard input and fingering, which requires some time to correct and learn, which can be interlaced with Python teaching.

Secondly, students need to strengthen training on some core knowledge points in the process of using Office. These knowledge points are scattered, which can also be arranged after every Python teaching.

Finally, students need to independently complete the large homework of the corresponding components of Office, and the completion schedule varies according to the different conditions of students. The teacher will give concentrated lectures after each Python teaching, which provides enough time support for students to complete the experimental tasks independently.

Table 1 Teaching hour arrangement of basic practice of computer application

Offline experiment Content		
Python, Download and Install\Python, variable\identifier\variable\Basic knowledge of data types	4	
Office, operation-Word\Excel, Fingering practice	2	
Python, The use of common statements	4	
Office-Excel\Powerpoint, Fingering practice	2	
Python The combined data type of	4	
Office, operation-Access, Fingering practice	2	
string	4	
function	4	
Python-Modules and Packages, Computing ecology, Standard Library (I)	4	
Python-Modules and Packages, Computing Ecology,	2	

Standard Library (2)

A total of

32

## 5. REFORM OF COURSE TEACHING MODE

### 5.1 MoOCs teaching environment

The MOOC environment is the foundation of the teaching environment. Before college entrance level is uneven, the presence of MOOC broke the limit of time and space, can let students of different programs tailored course myself study on demand, online testing system with the MOOC can under a uniform test standard, complete knowledge of the self test, and also provide the basis for the late course grades.

### 5.2 Basic skills should be continuously practiced

In basic computer teaching, many knowledge and skills are important and simple, but it takes time to master them. Computers have evolved today but text entry is done with a keyboard. The grasp of both hands and the accurate memory of the position distribution of the keys on the keyboard can realize the fast input of text, which is still applicable on touch devices. Memory needs time to accumulate. After teaching each experiment, special exercises can be conducted to strengthen keyboard memory in the order of middle grade, lower grade and upper grade, and gradually realize fast keyboard text input.

### 5.3 Case design, flipped classroom teaching

In the open course environment, case teaching is not only the teachers use cases to complete the teaching, more importantly, students can offline independent practice. In Word and Powerpoint, let students design a newspaper and a presentation according to their own interests. Design a large information form in Excel, let students complete the text entry, as well as common formula reference; Design a simple database system in Access, complete table entry, primary key and relationship Settings, and finally complete a cross-table search; In the Python experiment, I designed a case close to life, and chose to use Python programs to crawl information. Students use their extracurricular time to study online and apply the knowledge they have learned to the above experimental cases to complete the experiment. In the 32 credit hours of meeting and discussion, they communicate with each other. Finally, they learn the related knowledge of computer common foundation to the maximum through the teacher's classroom guidance and offline question answering. This teaching organization mode embodies the advanced and practical nature of OBE concept, which greatly stimulates students' learning initiative and enthusiasm and improves the teaching quality.

## 6. CONCLUSION

According to enrolled students computer level and demand for computer application foundation course, Python as an introduction to programming language, and organization of computer application basic course teaching, the construction of computer application basic course MOOC platform, according to the engineering education accreditation OBE's idea to optimize the teaching content as well as the practical teaching link, The SPOC flipped classroom teaching environment has been initially formed within the campus, laying a foundation for cultivating compound talents to meet the needs of new engineering, and further promoting the teaching and

research of other professional courses of computer science.  
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# "Experiential Marketing" Under the Complex Commercial Space Design

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**Abstract:** In view of the commercial space, this paper takes its development and change as the starting point, and discusses the evolution factors of commercial space. From the perspective of consumers, combining relevant elements, such as personalization, and based on "experiential marketing", this paper analyzes the improvement design countermeasures of complex commercial space. It is hoped that the research in this paper can serve as a reference for the planning and scientific optimization of commercial space, and achieve the purpose of the development of society and science and technology together.

**Key Words:** Experiential; Commercial Space; Design Strategy

## 1. INTRODUCTION

With the progress of culture and economy, the public has higher requirements in terms of environmental comfort. Substantial material basis, so that many shopping malls continue to carry out space comfort optimization, with more ideal experience space, to provide people with a comfortable buying environment. For shopping malls and buyers, commercial space is a very key link. The core factor of consumption is whether the space can meet people's needs. By updating the commercial space, we can not only create more revenue space, save more materials, but also meet the various needs of consumers, such as entertainment. Based on this, when the commercial space layout, should pay attention to the characteristics of the design, planning a more ideal business environment. Through the good business experience, to further stimulate people's consumer demand.

## 2. EVOLUTION PROCESS AND FACTORS OF COMMERCIAL SPACE

### 2.1 Development process of commercial space

In the context of the new period, commercial space has been born, which belongs to the open space at that time. With the progress of society and the strengthening of production capacity, the immobilized commercial space has been formed. Since modern times, China's commercial space has been gradually developed. In the 1950s, planned economy was the fundamental policy, and retail stores were commercial Spaces, which were relatively simple because consumer demand was not very large [1]. After the reform and opening up, commercial space was gradually improved, and various kinds of commercial space were born, such as shopping malls. Nowadays, with the development and stimulation of online consumption, the former commercial space has gradually become virtual.

### 2.2 factors

2.2.1 Changes in behavior and thinking mode. After joining WTO, with the deepening of global economy, a

new pattern of commercial development was born. Richer horizons and the development of society have led to changes in people's behavior and way of thinking. In the past, people only buy things that the price can afford, now people gradually pay attention to the quality of life, for the purchase demand, in addition to build on the premise of meeting the needs, but also in terms of quality, there are higher requirements, that is, the requirements of buying good goods. On the other hand, with the popularization of Bai and credit cards, most people can consume things that are temporarily difficult for themselves. Based on the role of online consumption, the birth of daigou and so on has promoted the development of online consumption. Some interactive software, in addition to achieving the purpose of communication, also can promote the network of goods. Many factors, such as rising income levels, are driving people to pay more attention to experiential marketing and consumption.

2.2.2 Consumption shock. This century is also called the information century. Based on the in-depth development of e-commerce, a large number of consumers gradually like online shopping and rely on the network for consumption. This has made commodity prices more transparent, and online consumption has gradually become mainstream. This has had a big impact on the brick-and-mortar economy. According to relevant information, Metersbonwe has closed thousands of stores in China. It can be seen that there is a close relationship between the closure of physical stores and the impact of e-commerce. In response, most of the country's business tycoons have made adjustments, such as Xinhua Bookstore, which wants to spur consumers to start setting up cafes in book towns so that consumers can read while drinking coffee. Pinsend, for example, will not only sell books, but also a lot of clothing and bags and other products, through the experiential consumption mode, to help arouse the interest of consumers.

## 3. IMPORTANCE OF "EXPERIENTIAL MARKETING" COMPOSITE COMMERCIAL SPACE DESIGN

Based on the idea of compound commercial design, the commercial space has been greatly changed and gradually developed into a situation of business superposition. For different businesses to achieve greater benefits, they need to collaborate and shift from a single service approach. With the help of unique management style to increase consumer interest, and then drive consumers to spend. For example, Starbucks coffee can be sold in retail stores or supermarkets, but most young people still prefer to consume in physical stores, which is closely related to the design of Starbucks. For most consumers, the reason why they like to spend money in brick-and-mortar Stores of Starbucks is firstly that brick-and-mortar stores have good

marketing effect, and secondly, experiential marketing helps increase people's dependence on business. Through experiential commercial space, goods and space can be better integrated, and on this basis, the development ability can be enhanced, which belongs to the general trend of commercial development.

#### 4. EXPERIENTIAL COMMERCIAL SPACE DESIGN

4.1 Personalization. People's hobbies and personalities are different, which is the difference between people, and the same is true for the compound commercial space. Based on the experiential marketing model, the design of complex commercial space should emphasize personalized design, which is conducive to fully mobilize the interest of consumers and increase their dependence on commerce. For example, a coffee shop takes bicycle as the design theme, which can not only remind consumers of the aroma of coffee, but also evoke their good memories and make consumers feel at home. In this process, emotional resonance is built with the merchants [1].

4.2 Ecologization. The current society is very fast-paced, most of the city residents are yearning for freedom, to feel the natural life. For this experiential marketing design, ecological design should be emphasized, so that consumers can be fully engaged in nature, relieve their tired physical and mental state, and further strengthen consumer experience through differentiated consumption space experience.

4.3 Culture. If there is no cultural feature in the space design, the space design will lack soul. For different nationalities and cities, they all have unique cultural characteristics. Integrating cultural elements into the complex space design is conducive to giving consumers a better experience. For the compound commercial space, the actual design should emphasize the combination of culture. Only in this way can we increase the freshness of consumers and let them form a sense of belonging. At the same time, it can also shape the market reputation with the help of cultural characteristics and further increase the consumption value. Building commercial brand culture is conducive to obtaining more economic benefits.

4.4 Timeliness. For different times, their products are also different. Based on commercial space design, it is

necessary to adhere to the principle of times, adapt to the needs of the development of The Times, follow the steps of The Times, and pay attention to the actual psychological demands of consumers. At present, information technology has gradually become the mainstream of society, which has greatly enhanced people's quality of life and stimulated consumption. Therefore, in the process of developing commercial space design, information technology should also be integrated into the design based on the characteristics of The Times, which will help to enhance the consumption experience of The Times. In the process of developing new technologies, consumers' consumption horizons can also be improved.

#### 5. CONCLUSION

With the increase of consumption power, the era of big consumption can be developed. For shopping malls, we should pay attention to the design of complex commercial space, to ensure that the design contains regional culture, and can highlight the national characteristics, so as to help catch people's consumer demand. When setting up commercial space, space should be scientifically laid out and effectively combined with artistic atmosphere on the premise of meeting consumer demand. Create a more ideal shopping environment for people, stimulate people's desire to consume, so as to achieve the purpose of experiential marketing. Make consumption more fashionable, make consumption more colorful.

#### ACKNOWLEDGEMENT

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# Thinking About the Application Consciousness of Mathematics into The Teaching of Higher Vocational Mathematics Education

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**Abstract:** Under the background of current quality education, the new curriculum reform is widely carried out in higher vocational colleges, which promotes the transformation of traditional teaching mode and way. As a basic course in higher vocational colleges, mathematics education teaching should focus on cultivating students' awareness of mathematics application and establishing a good concept of mathematics application, which is conducive to realizing the goal of cultivating high talents. Therefore, this paper mainly analyzes the importance of mathematics application consciousness into higher vocational mathematics education and teaching.

**Key Words:** Mathematical Application Consciousness; Higher Vocational Education; Mathematics Education And Teaching

## 1. INTRODUCTION

Mathematics is one of the important contents of higher vocational education teaching and is a compulsory basic course for students in school. Mathematics not only provides students with learning tools, but also has a positive influence on students' thinking level to deal with problems, among which the consciousness of mathematics application plays an important role. To judge whether students have the awareness of mathematics application, the main thing is to observe whether they treat problems from the perspective of mathematics and realize the importance of mathematics in the daily things around them. By cultivating the mathematics application consciousness of higher vocational students, it is beneficial to make them truly understand the mathematics knowledge from the practical level, and effectively use the mathematics knowledge in the study of professional courses. Mathematics application consciousness can not only reflect students' professional learning quality, but also reflect students' ability to solve practical problems by applying mathematics knowledge to some extent. Therefore, this paper mainly analyzes the importance of mathematics application consciousness into higher vocational mathematics education and teaching.

## 2.. THE CONSCIOUSNESS OF MATHEMATICS APPLICATION CAN BETTER REALIZE THE GOAL OF TEACHING PERSONNEL TRAINING IN HIGHER VOCATIONAL MATHEMATICS EDUCATION

The direction of running higher vocational colleges is affected by the actual needs of society, and it needs to send professional talents to the society in line with the requirements of economic development, which also indirectly determines the personnel training objectives of

higher vocational colleges [1]. China's education department clearly points out in the relevant opinions on personnel training in higher vocational colleges that, as an important part of China's higher education, higher vocational colleges need to cultivate professional and applied talents who support the party's basic line and principle, develop morality, intelligence, physique, beauty and labor comprehensively and adapt to the needs of social development. This has pointed out the content direction and the concrete target for the personnel training of higher vocational colleges. Higher vocational mathematics education is based on the basic courses of each major, because most of the professional teaching theory and practical operation in higher vocational colleges are based on mathematical knowledge, so in the process of solving professional problems, the essence is also the process of using various mathematical knowledge and methods. Higher vocational mathematics education should reflect the goal of talent training, which needs to be realized indirectly by serving professional education. Therefore, the basic requirements of higher vocational mathematics education are to train professional talents with necessary mathematical knowledge and methods, so that they can effectively use these knowledge and methods, solve the problems faced in professional learning from the perspective of mathematics, and help students to establish the awareness of mathematical application. Thus, in order to better achieve the vocational mathematics education teaching personnel training goals, it is necessary to cultivate students' awareness of mathematics application, in the teaching process to emphasize the application of mathematics in various industries, so that vocational mathematics education fully show its application side. At present, many students in higher vocational colleges have relatively weak mathematical foundation. In order to train technical applied talents to meet the requirements of design, it is necessary to strengthen students' awareness of mathematical application. Only by letting students establish a correct view of mathematics application, can they deeply recognize the importance of mathematics to professional learning, enhance the enthusiasm of learning mathematical knowledge and methods, and actively solve professional problems with mathematical knowledge, so as to help vocational mathematics education to achieve the goal of talent training.

## 3. THE CONSCIOUSNESS OF MATHEMATICS APPLICATION CAN ACCELERATE THE CHANGE OF THE CURRENT THINKING OF MATHEMATICS TEACHING IN HIGHER VOCATIONAL EDUCATION



Traditional higher vocational mathematics education teaching thinking is based on mathematics, the formation of mathematics teaching concepts pay more attention to how to teach mathematical knowledge, did not consider how to serve the professional needs of mathematics, which is very different from the current vocational talents training goal [2]. Although the current higher vocational mathematics education teaching combined with professional needs for some improvements, but because of the deep-rooted traditional thinking, many teachers still maintain the previous pure teaching of mathematics knowledge form, affecting the development of higher vocational mathematics education teaching. In order to adapt to the training goal of higher vocational talents, the current higher vocational mathematics education should focus on improving students' social and vocational competence, whose essence is that students can reasonably apply the mathematics knowledge they have learned in professional learning. Therefore, higher vocational mathematics teaching should form an educational concept with the characteristics of mathematics application awareness, in this concept, to help students master and professional learning related mathematical knowledge, establish the awareness of using these mathematical knowledge, and to have the ability to use these mathematical knowledge to solve professional related problems. This requires higher vocational mathematics teachers to change the previous teaching thinking based on mathematics knowledge, pay more attention to the importance of mathematics application, and show the role of mathematics knowledge to professional learning in the process of mathematics teaching. And in the mathematics teaching practice, based on the mathematics application level, as far as possible to select the mathematics knowledge related to students' vocational competence, promote the promotion of students' ability, innovate the teaching form of mathematics content, and integrate the cultivation of mathematics application consciousness in the process of implanting knowledge. By changing mathematics teaching behavior, cultivating students' mathematics application consciousness and improving students' vocational competence, the teaching of mathematics education in higher vocational colleges can adapt to the goal of talent training. It can be seen that the consciousness of mathematics application has promoted the change of the thinking of mathematics teaching in higher vocational education, which is conducive to the formation of a new educational concept in line with the training objectives of higher vocational education.

#### 4. THE CONSCIOUSNESS OF MATHEMATICS APPLICATION CAN PROMOTE THE CONSTRUCTION AND REALIZATION OF THE TEACHING OBJECTIVES OF HIGHER VOCATIONAL MATHEMATICS EDUCATION

The goal of mathematics education and teaching should be to provide students with a large amount of basic mathematical knowledge and improve the mathematical application ability that meets the needs of the major [3]. Different teaching objectives directly result in different

teaching effects, so in the construction process of teaching objectives of higher vocational mathematics education, it is necessary to adapt to the training objectives of higher vocational talents, and the expected mathematical ability of students should also be formulated in combination with the actual situation of students and professional needs. At present, the training target of higher vocational talents is mainly specialized and applied talents. Therefore, the teaching objective of higher vocational mathematics education should focus on application. In higher vocational mathematics teaching, application can be summarized into three levels, namely, practical, application and innovation. Among them, practical mainly means that students have the ability to use mathematical knowledge and methods to solve some basic and simple problems. Application refers to the ability of students to use basic mathematical conclusions and models to solve professional learning problems. Innovation mainly means to let students have creative spirit and practical ability, use the mathematics knowledge to solve practical problems creatively. From the above can be seen, vocational mathematics education education objective essence reflects the mathematics application consciousness, in the practical and application of two aspects of the basic characteristics of mathematics application consciousness, that is, through the mathematical perspective to look at the problem. And innovation is practical and application of the extension, for innovation to establish a good foundation. The three aspects are independent and related to each other, and the teaching goal of mathematics education is built on the basis of mathematics application consciousness, so that higher vocational mathematics education can keep up with the pace of talent training goal.

#### 5. CONCLUSION

To sum up, the current computer Internet technology has already entered the lives of thousands of families, and in all aspects of people's work and life have reflected the important role of mathematics. Higher vocational mathematics teaching undertakes the function of conveying mathematics knowledge to students. In the teaching process, it is necessary to realize the importance of cultivating mathematics application consciousness and enhance students' cognition of mathematics application consciousness, which is of great significance to realize the goal of talent training, change teaching thinking and accelerate the construction and realization of mathematics teaching intention.

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# Challenges and Countermeasures of College Students' Ideological and Political Education in The We-Media Era

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**Abstract:** Current is the era of media, from the large amount of information required by the media platform can better help students to establish correct outlook on life, world outlook, values, and as a result, those of students in colleges and universities since the media platforms shall be harmful information, with the help of powerful information to strengthen the ideological and political education of students, on the basis of this, Colleges and universities should also cooperate with the national level to conduct network monitoring of the massive information of we-media, so as to greatly improve the ability of college students to discard massive information, transfer more positive energy to the society, create a healthy and good learning atmosphere and a clean and healthy network environment for contemporary college students, and promote the development of students.

**Key Words:** We-Media Era; College Students' Ideological And Political Education; Challenges And Countermeasures

## 1. CHALLENGES FACED BY COLLEGE STUDENTS' IDEOLOGICAL AND POLITICAL EDUCATION IN THE WE-MEDIA ERA

1.1 The mass information in the we-media era brings challenges to teachers' ideological and political education. The traditional media era of information transmission speed is slow, the information contained is big also, in the process, most of the students learning resources are from teachers' teaching classroom, the teacher only rely on their rich teaching experience and knowledge reserve to teach classes, but this approach has won the trust and support from most of the students. Teachers have gradually become the symbol of knowledge and authority in the minds of students. In addition, in the ideological and political teaching of college students, under normal circumstances, teachers will take the right teaching methods to teach, so that students establish a correct outlook on life, world outlook and values, to promote their development. In addition, the current era of "we Media" has many advantages and features, among which there are a wide range of ways to supply teaching resources. More knowledge and information can be obtained not only in the classroom, but also on the Internet, so as to meet students' learning needs [1]. At the same time, the "we Media" platform can also explain problems to students, because ideology and politics is a comprehensive subject, students will inevitably encounter problems in learning, so it is necessary to explain the "we media" platform, which is very different from the traditional media era, and brings

great convenience to students. But according to the current situation, today's college students can learn the way to more and more access to knowledge is rich, eventually leading to challenged the authority of university teachers, the students no longer rely on teachers to study, make the ideological and political course teaching progress influenced by serious, hindered the students' learning and development.

1.2 The quality of ideological and political education teachers in some universities needs to be improved

In the teaching of ideological and political courses in the university, if you want to be an excellent political teacher, then it must regulate their behavior, because the teacher's words and deeds will bring serious impact on students. In addition, most of the ideological and political teachers in colleges and universities are relatively backward in terms of teaching concepts and still adopt the traditional teaching mode. When they encounter some wrong remarks or reactionary information, they cannot timely refute them. Not only that, in the classroom teaching, the teacher taught according to their own way to blindly, use the force-feeding teaching way, ignoring the students' subject status, without respect students' ideas, leading to the lack of the main communication between teachers and students, can't fully grasp the learning situation of students, make students' interest in learning efficiency and significantly reduce, not toward a better direction. At the same time, according to the current situation, most students play mobile phones in the classroom, do not pay attention to listen, ignore the existence of teachers, teachers put aside, over time, students' academic performance will be greatly reduced, hindering their own development path. Based on this, in the current era of "we Media", teachers can use the "we media" platform to teach, let students express their opinions and ideas on the platform, but also can build a communication bridge between people, establish a correct outlook on life, world outlook and values.

## 2. IMPROVEMENT MEASURES FOR COLLEGE STUDENTS' IDEOLOGICAL AND POLITICAL EDUCATION IN THE WE-MEDIA ERA

2.1 University teachers should strengthen communication and exchange with students

At present, the university ideological and political education by the influence of traditional education mode, in classroom teaching, students and teachers to communicate less and less, also don't want too much for the teacher to express their ideas, make the teachers are asking to do what you, eventually leading to students in

passive learning environment for a long time, over time, interest in learning will be greatly reduced. Therefore, teachers in colleges and universities must adopt the right teaching mode to better the ideological and political education for students, because the current is the media age, since there are many advantages in the media platform, its appearance has been widely used, so the teacher should use this platform to let the students to express their views and ideas, and to leave enough time for, In order to strengthen the exchange and communication between students, give the corresponding guidance, so as to help students to achieve good development. Not only that, the change of university ideological and political course teaching mode is the teacher must do one thing, in the process, will be the subject status of the classroom back to students, respect for each student's idea, and live in harmony, can stand in the perspective of students thinking, fully understand the actual situation of students themselves and the study situation, And give it the corresponding study guidance and psychological counseling, so that students can break the shackles of wrong ideas, develop good learning habits, toward a better direction of development.

## 2.2 Constantly improve the quality of college students' ideological and political teachers and set examples

At the university stage, students have fully developed their own ideas and can make decisions alone, forming their own thinking. In the teaching of ideological and political courses in universities, in order to better meet the challenge of ideological and political education of monthly college students in the era of we-media, ideological and political teachers in universities must constantly improve their own quality and teaching experience, do a good job in educating students, and help students grow [2]. Not only that, the teacher needs to be closely to the tide of times development, analysis from the pros and cons of media platform, on the basis of the original to strengthen their knowledge reserves, imparts knowledge to students, in this process, teachers can use the media era to create their own platform, and will be on the hot news spread by network and the ideological and

political education close together, as a result, It can not only transfer more positive energy to the society, but also guide students to establish the correct socialist core values, so that students can achieve good development.

## 3.CONCLUSION

To sum up, with the development of society, China's science and technology progress by leaps and bounds, quality-oriented education has been paid more and more attention, and new requirements have been put forward for the teaching field. In the context of the new era, China has stepped into the era of we-media, and the emergence of Internet technology has been gradually applied to various fields, occupying the life and study of today's college students. In addition, the era of "we media" is very different from the era of traditional paper media. It not only represents the progress of society, but also speeds up the reform of information, bringing great convenience to students. In ideological and political teaching in universities, students can learn by virtue of the power of "we media" and publish their suggestions and ideas through the "we media" platform to spread positive energy. The current platform, however, there is some wrong views and opinions, for college students to establish correct outlook on life and values brought serious influence, so it's need to increase the degree of attention to the ideological and political education in colleges and universities, dares to meet new opportunities and challenges, reflects the subject status of the ideological and political education, help students to achieve good development.

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# Application Analysis of Pdca Theory in Physical Education in Higher Vocational Colleges

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**Abstract:** Physical education quality management belongs to a key work content of higher vocational colleges, PDCA as an open and continuous management system, through planning, implementation, inspection and treatment of four stages to improve the quality of management. Applying it to PE teaching in higher vocational colleges can improve management efficiency, strengthen teaching level and promote PE teaching reform. Therefore, this paper will analyze the application of PDCA theory in physical education teaching in higher vocational colleges. **Key Words:** Pdca Theory; Higher Vocational Colleges; Sports Teaching

## 1. INTRODUCTION

With the continuous development of China's social economy, the requirements for talents are constantly improving. Physical education, as an important part of teaching work in higher vocational colleges, has attracted more and more attention on how to improve the teaching quality. PDCA cycle management was first proposed by Dr. Hugh Hart, an American quality management expert, and was also called Deming Ring after it was publicized by Deming. In essence, PDCA cycle management is the ideological basis and method basis of TQM, including four stages of quality management, namely Plan, Do, Check and Act [1]. The substance of physical education teaching in higher vocational colleges is also the process of quality management, and there are quality control management in teaching design, sports movement teaching and other teaching processes. Combining PDCA theory with physical education in higher vocational colleges is conducive to finding problems in the teaching process, giving continuous improvement, strengthening the quality management of teaching process, and promoting the continuous improvement of teaching quality. Therefore, this paper will analyze the application of PDCA theory in physical education teaching in higher vocational colleges.

## 2. THE EFFECT OF PDCA THEORY ON PHYSICAL EDUCATION IN HIGHER VOCATIONAL COLLEGES

### 2.1 Improve teaching structure and improve teaching management efficiency

Under the THEORY of PDCA, teachers optimize the teaching content and improve the teaching structure according to the existing problems and students' feedback. Meanwhile, in the PDCA cycle, teachers strictly manage the teaching process in accordance with the four stages, promote the continuous reform of teaching methods,

constantly analyze and summarize teaching experience, so as to make students understand the teaching purpose, improve their learning enthusiasm and actively participate in physical education learning [2]. PDCA finds the existing problems in teaching in time through the continuous cycle process, formulates improvement measures, and solves the problems in the next cycle to ensure the continuous physical education and improve the efficiency of physical education management. In addition, PDCA cycle is also conducive to teachers to change the traditional physical education inherent thinking, establish innovative and developing teaching ideas, in-depth understanding of PDCA theory, and better service for physical education in higher vocational colleges.

### 2.2 Improve the level of PHYSICAL education teaching and increase students' interest in learning

In the process of PDCA cycle, its essence is also the process of teachers' continuous promotion and development. At each stage, teaching plan formulation, teaching content design, teaching accident handling and teaching thinking summary need to be completed by teachers in combination with the actual situation, and optimization and adjustment should be made according to the actual situation [3]. This helps teachers to accumulate teaching experience, learn all kinds of new knowledge, and apply it to physical education to improve their teaching level. For students, there are great differences in their physical and mental states due to their different ages. Based on THE THEORY of PDCA, teachers can make more targeted teaching plans, take into account the characteristics of students, stimulate students' interest in learning, and cultivate their subjective initiative in learning.

### 2.3 Promote the reform of physical education

PDCA, as a whole and systematic process, integrates the advanced management methods in other fields into the teaching of higher vocational colleges, effectively combines with physical education teaching, and provides new ideas for the reform of physical education in higher vocational colleges, and increases the ways of teaching reform. In the PDCA cycle, each stage is a summary and reflection of the previous stage, and the next stage solves the existing problems. By constantly improving the quality of teaching management, the pace of teaching reform is greatly accelerated.

## 3. APPLICATION OF PDCA THEORY IN PHYSICAL EDUCATION IN HIGHER VOCATIONAL COLLEGES

### 3.1 Planning Stage (preparation before class)

In the PDCA planning stage, teachers need to complete pre-class preparations based on the teaching syllabus, such as mastering the basic information of students, understanding the actual teaching environment, preparing teaching plans, clarifying the teaching content, planning the use of on-site equipment, and formulating emergency handling plans. Physical education teachers are the guiders of physical education teaching in higher vocational colleges. Before class, they need to master the basic information of students, including gender, age, health, sports ability, physical condition and so on. On this basis, the teaching plan should be formulated, and the teaching objectives should be clear. The teaching design should clarify the key and difficult points of teaching, teaching methods and after-class exercises, etc. The teaching objectives should be clear about the goals of sports participation, physical health and motor skills, etc. The prepared teaching plan will be sent to the shared network platform, so that students can check and preview in advance before class, and make preparations before class.

### 3.2 Implementation Stage (actual teaching process)

The PDCA implementation phase is mainly the implementation process of the previous phase plan, real-time monitoring of the completion of the plan. In the physical education teaching of higher vocational colleges, teachers should strictly follow the teaching plan in the implementation stage, manage and organize students to participate in classroom teaching, guide students to study actively, and reduce the interference of bad factors to physical education. Although the teaching plan made by teachers takes all factors into full consideration, it is still impossible to avoid the occurrence of emergencies in the actual teaching process. Therefore, it is necessary for teachers to deal with teaching emergencies correctly to ensure the smooth progress of teaching. In this stage, teachers record students' learning in detail, summarize existing teaching problems, find solutions, and lay a foundation for the next step. At this stage, students should fully understand the teaching objectives, complete the teaching content according to the requirements of the teacher, actively cooperate with the teacher, and timely give feedback to the teacher about the difficult part of the teaching.

### 3.3 Examination Stage (after-class reflection)

The PDCA inspection phase includes a review and diagnosis of the implementation of the plan and the achievement of the goals. Reflection after class is an important link in physical education teaching in higher

vocational colleges. In this stage, teachers think about teaching design, teaching effect and emergency handling, analyze existing problems and make clear improvement measures. At the same time, the feedback of students and their educational objects plays an important role in improving teaching methods. Teachers should collect students' feedback on the teaching process and combine it with their own reflection to promote the continuous optimization of the teaching process.

### 3.4 Processing Stage (summary and improvement)

PDCA processing phase is mainly the process of standardizing the correct and effective measures, and at the same time, the remaining problems are included in the process of processing in the next phase. In physical education teaching in higher vocational colleges, teachers should constantly summarize the problems existing in the current teaching stage, formulate the treatment and improvement plan in the subsequent stage, and promote the improvement of teaching quality through continuous circulation.

## 4. CONCLUSION

To sum up, with the continuous advancement of curriculum reform, physical education teaching in higher vocational colleges is the trend of The Times to actively innovate physical education teaching methods in order to meet the social needs of the new era. Physical education teachers need to reasonably use the PDCA theory, the advanced management method, into the whole process of physical education, timely discovery of the remaining problems and formulate solutions, through repeated practice and improvement process, improve the effectiveness of physical education teaching, improve the quality of physical education teaching, training more talents in line with social needs.

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# The Effective Form and Long-Term Mechanism of The Integrated Development of University Campus Media in The New Period

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**Abstract:** In the new era, the university campus media convergence has become the trend of The Times. The university campus media convergence can determine the effect of the university propaganda work and the future development direction of the university to a certain extent. Therefore, university staff must recognize the importance of media convergence development, find out the problems in the process of convergence, and make targeted improvements, build a long-term mechanism, to provide guarantee for the development of university publicity. This article briefly introduces the campus media appeared in the process of integration, analyzes the advantages of the development of colleges and universities to carry out the campus media fusion, explores the new time college campus media form and long-term effective mechanism of the development of fusion, hope to be able to meet the needs of the college campus media integration development in the new period, and provide support for the sustainable development of colleges and universities.  
**Key Words:** New Period; Colleges and Universities; The Media; Integrated Development; Effective Form; a Long-Term Mechanism

## 1. INTRODUCTION

College campus media is the main way to spread ideology, and also an important means to inherit and develop culture and control public opinion. In the new era, with the wide application of Internet technology and the promotion of new media technology, the campus media ecological environment has undergone a great change. If the traditional campus media is still used, it can no longer meet the needs of teachers and students for information. Therefore, the relevant personnel must strengthen innovation and promote the integrated development of campus media in universities. From a certain perspective, it can drive the transformation and upgrading of campus media in universities in China.

## 2. THE ROLE OF UNIVERSITY CAMPUS MEDIA CONVERGENCE

Firstly, the improvement and wide application of Internet technology have hindered the further development of traditional media and campus media to some extent. In this context, the integration of traditional media and new media, and the promotion of campus media integration and development has become the inevitable development of The Times. Traditional campus media must be aware of their own deficiencies in the process of development, intensify innovation, integrate existing campus media resources, so as to show their own advantages, create an

appropriate atmosphere, provide support for the development of moral education in colleges and universities, and ensure the position of ideological dissemination in colleges and universities [1]. Second, the integration of campus media and new media can not only provide conditions for the innovation of publicity work in colleges and universities, but also promote the development of production, study and research work in colleges and universities, so as to provide better services for the people. This is mainly because with the diversification of communication channels, the fixed mode of communication of university campus media has been unable to meet the growing spiritual needs of people. Third, the integration of university campus media and new media can take the traditional media as a foothold, and use the Internet to maximize the role of campus media such as school newspaper, TV, radio and so on, interact with the masses and improve their appeal to the masses. In this process, we can also use the Internet to create characteristic brands, to provide guarantee for the characteristics and long-term development of campus media, and to achieve the purpose of the integrated development of campus media.

## 3. DEFICIENCIES IN THE PROCESS OF UNIVERSITY CAMPUS MEDIA INTEGRATION

From the analysis of the current situation, it can be found that relevant departments in China pay more attention to the development of university campus media integration, and have made some achievements, providing favorable conditions as support for the development of universities [2]. However, due to the influence of some factors, there are still some shortcomings in the process of campus media integration, which can be summarized as follows:

### 3.1 Still taking traditional media as the leading role

At present, most college campus media have realized the role of new media development on their own, but they still take traditional media as the leading role and choose to use traditional mode to carry out publicity, which is not conducive to the further development of college campus media. Media convergence to scientifically by means of modern propaganda way, the selection of the targeted application of a variety of different media, which requires the use of sufficient funds in colleges and universities are equipped with software and hardware, but due to the university's own factors, in the process of conducting media did not update equipment, there is a lack of real time this question, It cannot be combined with new media [3].

### 3.2 Not making maximum use of new media

Though universities have already applied to new media, work to carry out the campus media fusion, such as by using Internet technology to build website, and smart phones, as one of the propaganda way, but in the reality the analysis found that has some deficiency in for the development of new media, can not fully show the advantage of new media, such as by interactive less, The new media technology used is relatively backward, so relevant personnel need to formulate appropriate measures for improvement.

### 3.3 Different professional qualities of talents

The development of campus media integration needs sufficient human resources as a guarantee. However, according to the investigation and analysis of relevant data, it is found that most university campus media staff have not received professional training, the management does not pay attention to the development of this work, and has not yet organized personnel to join in the study. In addition, most of the participants in campus media are students. Due to the influence of several factors such as the years of studying, the personnel are not very fixed. Without the support of talents with strong comprehensive ability, a professional talent team needs to be built [4].

### 3.4 A perfect management mechanism has not been formed

From the current situation analysis, found that most of the colleges and universities, youth corps committee propaganda department, logistics department and secondary college has set up a campus media organizations, different campus media tissue is relatively complex, type varies, but there is no unified organization management, lead to the many problems in the process of work. In addition, it does not pay attention to the development of supervision and management, lacks a complete audit mechanism, and fails to find the deficiencies in the process of campus media integration in time, which is likely to expand the problems and hinder the follow-up work.

### 3.5 Lack of campus media convergence system

At present, the college campus media platform development is relatively backward, this is mainly because the campus media used equipment is relatively backward, not timely update for software, technology content is low, this leads to the campus media in the work is not reliable platform as a guarantee, the lack of communication in different media is unable to achieve resource sharing [5].

## 4. FAVORABLE CONDITIONS FOR THE INTEGRATED DEVELOPMENT OF UNIVERSITY CAMPUS MEDIA

### 4.1 The content of propagation is roughly the same

In colleges and universities, campus media not only need to deliver the news on campus, but also should show the excellent works of teachers and students and campus life, reflecting the actual situation of the school. The integration of university campus media can better create works that meet the preferences of college students in the new era and enrich the communication channels, so as to meet the spiritual and cultural needs of more college students and provide support for their further development.

### 4.2 The communication audience is relatively uniform

According to the investigation and analysis of relevant data, campus media mainly provides services for college teachers and students. Media, businesses, alumni, parents and leaders who have a close relationship with the university also pay close attention to the campus media. Therefore, campus media should take into account the needs of different people to provide high-quality information and build featured brands [6].

### 4.3 Different media can complement each other

Within universities, there is a partial interweaving of different levels of campus media staff. For example, university media staff are mostly selected from the college level. Moreover, the main tasks carried out by different media teams are also different. Campus newspapers focus on news collection and writing, while TV stations focus on video production. Network media pays more attention to time and should deliver benefits in the first time. Therefore, scientific and reasonable application of different media can achieve the purpose of complementation.

## 5. EFFECTIVE FORMS OF INTEGRATED DEVELOPMENT OF UNIVERSITY CAMPUS MEDIA IN THE NEW ERA

In the new era, there are still some problems in the development of campus media integration carried out by colleges and universities. In order to make it effective and play the maximum role, we must start from the following contents:

### 5.1 Establish a campus media integration development platform

First, build an appropriate platform to achieve the goal of resource sharing [7]. It is necessary to fully demonstrate the advantages of university media union, collect and summarize the resources of universities across the country, and cooperate with other enterprises to build a media platform with a higher degree of professionalism and coverage, so as to enhance the popularity and influence of campus media of our university and provide support for the follow-up work.

Second, build an information technology platform. Based on the actual needs of media convergence, data collection, writing, broadcasting, interaction and other processes should be combined to develop an appropriate information dissemination platform, which can enrich the sources of information, transmit information in a short time, and provide more advanced computing support for the development of interaction.

Third, cross-border cooperation should be carried out. We should cooperate with other enterprises to regularly update the hardware and software equipment of colleges and universities, collect the latest news materials, improve the utilization rate of human resources, so as to improve the accuracy and efficiency of information dissemination of colleges and universities and build brands.

### 5.2 Improve the effect of campus media integration development

First, management should be improved. On the premise of efficient collection and application of resources, the traditional organizational structure should be innovated, a

centralized news management platform should be built, and campus media related work should be carried out in a unified manner, which can effectively improve the effect of management work and provide support for the smooth progress of related work.

Second, strengthen the links between content. Different types of media should be analyzed to clarify their characteristics, and based on this, news content planning, production and attack should be carried out to communicate in the first time, so as to ensure the real-time information transmitted and improve the communication effect [8].

Third, to develop a sound reward system. Staff should list excellent articles as scientific research results, and correlate them with salary and remuneration, so as to increase the remuneration of media staff, which can effectively improve the enthusiasm of staff.

### 5.3 Build a strong media convergence team

First, focus on the construction of the main force. To intensify efforts to organize the training, youth corps committee propaganda department, logistics department and secondary college of media resources to carry on the summary, encourage professional talents and some of the more experienced journalists into the campus media convergence, for campus media integration and communication way, to ensure that the campus media work has plenty of talent as the support.

Second, do a good job of student team training. We should recognize the importance of college students' media literacy for their development and organize them to participate in learning, so as to cultivate modern talents who can integrate traditional media and new media in the new era. In addition, I also teach students about editing, shooting, editing and graphics to ensure that students' abilities in all aspects can be improved.

## 6. LONG-TERM MECHANISM FOR THE INTEGRATED DEVELOPMENT OF UNIVERSITY CAMPUS MEDIA IN THE NEW ERA

In the new era, the university campus media integration development, plays a very critical role, and is closely related to the future development of the university, so the relevant personnel must increase efforts to build a long-term mechanism, to ensure that the university campus media integration development can be carried out smoothly. Relevant personnel can start their work from the following points:

### 6.1 Build a sound integrated development system

In order to achieve the integrated development of university campus media, it is necessary to apply the new media platform scientifically and show the role of different media.

First, connect the platforms. A special organization should be set up to manage news, and the original campus media platform should be reformed to enrich its functions, so as to ensure that the campus news software and multimedia can be fully applied under centralized management.

Second, the content should be consolidated. At the end of news writing, different platforms will choose to use different ways to sort out news clues. In this process, the characteristics of different media should be taken into

account, so that the same news content can be efficiently transmitted through different channels. When the news is transmitted, appropriate time should be selected to ensure the timeliness of the news.

Third, we should make full use of human resources. It is necessary to summarize the existing news media staff and readjust their posts to make them more conscientious and responsible. It is necessary to ensure that the news media team has staff with high professional degree and strong overall strength, etc. In this process, the contact between different staff should be strengthened to achieve the purpose of information resource sharing [9].

Fourth, to improve the effectiveness of management work. Campus media management institutions should, from an overall perspective, make clear the contents that campus media need to spread and scientifically apply different types of resources. In addition, more experienced professionals should be hired as guidance workers, and the effect of media convergence should be regarded as one of the important indicators of assessment, and the salary and remuneration of staff should be combined.

### 6.2 Develop an appropriate evaluation system

First, the coverage and influence of campus media should be analyzed. Coverage and influence can reflect the effect of campus media fusion more directly. It is necessary to systematically and comprehensively analyze the channels of media transmission, the amount of reading and broadcasting of different contents, the number of fans and the situation of forwarding, etc., and the evaluation results are mainly presented by means of data.

Second, the quality of the content should be evaluated. The quality of content must be taken as the main basis of evaluation when the evaluation system is established. In the process of analyzing it, not only the forwarding situation and reading situation should be judged, but also the authenticity, logicism and rhythm of the content should be judged. Experts are generally responsible for this aspect of evaluation.

Third, to analyze whether it can obtain a high degree of satisfaction. Satisfaction is mainly analyzed by means of comments, likes and forwarding, which can show the advantages of the integrated development of campus media.

## 7. CONCLUSION

According to the above analysis, media convergence is an inevitable trend of the development of The Times, which can effectively show the advantages of media and provide support for the development of society. Therefore, in the new era, colleges and universities must do a good job in media integration, greatly analyze the deficiencies, improve the effect of media work, bring students and teachers more high-quality media information, and provide support for their development. This, in a way, can guarantee the long-term development of colleges and universities.

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# Practice Research on Innovative Talent Training Mechanism of Local Transforming Universities in Heilongjiang Province

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**Abstract:** With the further development of science and technology, the whole people have entered the Internet era. Computer information technology has gradually penetrated into various fields. College education is bound to be reformed based on this background. With the further adjustment of social environment, educational objectives and talent demand, colleges and universities should reform the current talent training mechanism and put the training of innovative applied talents in the first place. At the same time, we should also summarize the problems existing in the current education mode and make timely adjustments, so as to make the cultivated talents integrate with the society and further promote the sustainable development of the society.

**Key Words:** Local Transformation Universities; Innovative Talent Training Mechanism; The Teaching Reform

## 1. INTRODUCTION

Local colleges and universities are an important base to promote the development of local economy and provide important talent resources for the development of local areas. Heilongjiang Province is an important province in the cultivation of practical talents in China. The education mode of local colleges and universities not only affects the comprehensive development of college students, but also affects the sustainable development of local and national economy. With the continuous deepening of educational reform, the local colleges and universities in heilongjiang province should reconstruct the personnel training mechanism, constantly improve the professional dynamic adjustment, update the teaching concept, so as to continuously make the trained personnel adapt to the current new business form, new industry, new technology and new environment. Based on this, this paper mainly studies the innovative talent training mechanism of local transformation universities in Heilongjiang Province, and puts forward corresponding practical strategies.

## 2. MAIN PROBLEMS IN THE CULTIVATION OF INNOVATIVE TALENTS IN LOCAL COLLEGES AND UNIVERSITIES IN HEILONGJIANG PROVINCE

Influenced by the cultural and economic differences between the north and the South, colleges and universities in different places have different talent training mechanisms. Therefore, the transformation should proceed from the current actual situation and follow the principle of teaching students in accordance with their aptitude. The existing problems in local talent training in Heilongjiang Province can be analyzed from the aspects

of talent training orientation, education mode, education environment, teaching quality and teaching staff [1].

### 2.1 Derailment of talent training orientation and actual demand

At present, the social demand for talents is mainly concentrated on compound and innovative talents. "Innovation is the first driving force leading the development", so colleges and universities should focus on cultivating innovative and comprehensive application talents. However, in such an environment, some local universities in Heilongjiang Province still have some problems in the orientation of talent training. They have not analyzed the situation of the current national conditions, the world and the university, leading to the deviation of the orientation of talent training from the actual needs, which is not conducive to promoting the better development of students.

### 2.2 Education mode and teaching environment need to be further improved

First of all, the education mode will directly affect the teaching plan, and then affect the students' learning situation and overall development. In today's society where innovative talents are in urgent need, the education mode of some local universities in Heilongjiang Province only continues the traditional teaching method, without paying attention to cultivating students' practical skills and innovative thinking.

Secondly, the teaching environment is in urgent need of further improvement. The environment has a subtle influence on students, teachers and administrators. Some universities tend to ignore this aspect when cultivating innovative talents, and do not consider the actual situation of students.

### 2.3 The construction of college teachers needs to be further strengthened

The quality of the construction of college teachers directly affects the quality of teaching and further affects the innovation ability of students. First part of the lack of professional teachers, do not have qualified teaching conditions in the teaching, it remains to be further strengthened in terms of professional knowledge reserve, in the process of teaching is only the theoretical knowledge, does not pay attention to cultivate the students' practical skills and innovation, also can't do it according to their aptitude in the teaching process, which is unfavorable to the construction of innovative talent training mechanism. Secondly, some college teachers lack of moral quality, in the process of teaching can not correct their behavior, do not respect the main role of students,

just take teaching work as a task, do not put "education" in the first place.

### 3. PRACTICAL STRATEGIES OF INNOVATIVE TALENT TRAINING MECHANISM IN LOCAL TRANSFORMING UNIVERSITIES IN HEILONGJIANG PROVINCE

The local transformation universities in Heilongjiang province should recognize the existing problems in the current innovative talent training mechanism and actively solve and improve them. Local colleges and universities in Heilongjiang province should carry out innovation in teaching concept, teaching goal, teaching mode, teaching environment, teaching quality, teaching evaluation and feedback, teaching staff and other aspects. They should regard the training of innovative and applied talents as the primary task and do a good job in "educating people". At the same time, due to the particularity of geographical location, local universities in Heilongjiang province should also do a good job in ideological and political education to further strengthen students' patriotic feelings [2].

#### 3.1 Change the teaching concept and set up the educational thought of cultivating innovative talents

Local colleges and universities in Heilongjiang province should innovate the traditional ideas, further analyze the current social environment, technical environment, talent environment and campus environment, further establish the teaching concept in combination with the actual situation, and set up the educational thought of cultivating innovative talents.

For the current education work should not be the scores as the only standard to measure the quality of student, and students should be measured from multiple dimensions, to cultivate innovative talents as the main goal of the teaching, want more attention to student's practical skills training, only in the practice of middle school students' innovation ability to get further development.

3.2 Clear teaching objectives and reform teaching modes  
First of all, colleges and universities should take cultivating innovative professional talents as the main teaching goal, and realize the importance of cultivating innovative talents. Based on such a goal, colleges and universities should reform the current teaching mode, so as to further improve the teaching effect.

Secondly, colleges and universities in the reform of teaching mode should be combined with the current social environment, should be improved from teaching methods, teaching means, teaching resources, teaching platform, teaching steps and other aspects. It can actively use the current information technology to serve the current teaching, constantly integrate high-quality teaching resources, and realize the sharing of educational resources. Finally, local colleges and universities in heilongjiang province should have the student management, teaching management, students' management, improve the

scientific nature and effectiveness of the management, to further strengthen the system of binding, motivating people use pipe system, the system, at the same time also can purify the campus environment, improve the students' ability of self improvement and control.

#### 3.3 Strengthen school-enterprise cooperation and open up practice bases for students

The effective improvement of students' innovation ability is not only related to the teaching mode and students' own ideas, but also closely related to the university environment and the construction of practice base. Therefore, colleges and universities should pay attention to the construction of practice base, especially for some practical majors, and should further improve the proportion of practice in their teaching. On the other hand, colleges and universities should strengthen the cooperation with enterprises, so as to provide students with a more real and comprehensive practice environment. Students can not only enhance their practical skills in practice, but also cultivate their innovation ability.

It should be noted that the principles of safety, individualized teaching, objectivity and regularity should be followed in both the improvement of campus environment and the construction of practice bases, so as to ensure the scientific nature of innovative talent training.

### 4. CONCLUSION

In view of the transformation of local colleges and universities in heilongjiang province in terms of innovative talents training target, the need from the current practical problems and social environment is analyzed, the construction of innovative talents cultivation mechanism is a long-term project, cannot be achieved overnight, need to improve step, with emphasis, to follow step by step, take the student as the main body, the principle of practice oriented, Then can continuously excavate the innovation potential of students.

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# One Belt, One Road, The Training Mode of Business English Compound Talents in Universities

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**Abstract:** One belt, one road, as the economic development model advocated by our country, has been very fruitful after several years of construction. With the economic cooperation and exchanges with other countries, the demand for business English talents is constantly improving, and the compound talents have become the main development direction of business English training. As a compound talent, we should not only be proficient in professional knowledge, but also have a high level of practical ability, innovation ability and business communication ability, so as to meet the development needs of enterprises. On this basis, colleges and universities should innovate the training mode of business English compound talents. This paper puts forward some measures for the problems existing in college teaching.

**Key Words:** One Belt, One Road; Business English; Inter-Disciplinary Talent; Training Mode

## 1. INTRODUCTION

Since 2013, President Xi has proposed a major initiative to build the "Silk Road Economic Belt" and "the maritime Silk Road in twenty-first Century" during the visit to East Asian and Southeast Asian countries. Now, it has been actively responded and supported by more than 100 countries in the world, and has become an important development project of the country. In this context, global business trade has gradually become an important direction of economic development. As a means to provide strong support for trade development, business English Majors in Colleges and universities also have new requirements under the development of the new situation, and the compound talents of business English have gradually become the development trend.

## 2. "One Belt, One Road" And Talent Demand

The construction of "one belt, one road" is an initiative that complies with the world's multipolarization, economic globalization, cultural diversity and the trend of social information. It aims at promoting orderly and free flow of economic elements, efficient allocation of resources and deep market integration, and promoting the coordination of economic policies among all countries along the border, and promoting wider cooperation, regional cooperation with a higher level and deeper level, and creating an open and inclusive economy. A balanced and inclusive regional economic cooperation framework. The core connotation of one belt, one road initiative is to adhere to the principle of co-operation, co-construction and sharing, promote infrastructure construction and interconnection, strengthen economic policy coordination

and development strategy docking, promote coordinated and coordinated development, achieve common prosperity and jointly build [1] of human destiny.

Under such a situation, the business English compound talents cultivated by colleges and universities should have the following characteristics:

2.1 proficient in business. The so-called proficient in business refers to the mastery of business English. In the traditional business English teaching mode, more attention is paid to the cultivation of students' language ability, but the talents educated under this mode can no longer meet the current needs. Therefore, in the business English talent cultivation in Colleges and universities, it is necessary to start cultivating compound talents, which requires not only to learn how to deal with various businesses, At the same time one belt, one road, along the economic development characteristics of each country must know the best, so as to better serve the business development.

2.2 innovation ability. As one belt, one road project continues to push forward, new requirements will be put forward for the existing business models. In order to meet the needs of development and development, business English talents also require continuous improvement of their innovative thinking ability, and learn to cooperate with each other in a multi angle and multi way way, so as to form a good open field of vision. Constantly explore more possibilities of business English.

2.3 humanistic quality. One belt, one road, China, will carry out deep cooperation with many countries along the route. In the process of cooperation, business English staff represent the image of the country to a certain extent. Therefore, in order to show the good image of China, we must strengthen the cultivation of the humanistic quality of business English compound talents, so that it can be achieved in the cooperation process of other countries. Respect each other's differences and carry out friendly cooperation between the two sides.

## 3. ONE BELT, ONE ROAD, THE MODE OF CULTIVATING BUSINESS ENGLISH COMPOUND TALENTS IN UNIVERSITIES

3.1 develop talent training one after another according to one belt, one road.

One belt, one road, one belt, one road, is the most important factor for the business English talents to be improved. The universities should make an adaptive training plan according to the policy requirements of "one belt and one road", so that the trained talents can meet the

needs of social development. Therefore, colleges and universities should change the original teaching plan, no longer focus on the cultivation of theoretical knowledge and English language ability, but actively connect with the actual talent demand of International Business English, so as to master the current talent demand trend. Meanwhile, one belt, one road, and one belt, one road, is also needed to investigate the current demand for business talents, so as to improve the teaching mode, so that the business English compound talents trained by the university can rapidly develop the needs of enterprises after graduation, and promote the construction process of "one belt and one road" in China.

### 3.2 pay attention to practice in teaching mode

In the process of teaching, we should break the previous teacher centered teaching form, give full play to students' subjective initiative and promote the improvement of students' practical ability. Teachers can use one belt, one road, as a teaching material, to encourage students to practice application simulation, find out their shortcomings and correct them in the process of simulation, and constantly improve their professional ability [2]. One belt, one road, is also a good way to help students get involved in the internship. They can get in touch with the related projects in the "one area and one way", and have a deeper understanding of the cooperation form between the enterprises and other countries. Through enterprise practice, students can fully reflect on their current shortcomings, encourage students to continuously enhance their professional ability, expand their business vision, constantly test their knowledge in practice, and promote the continuous development of personal ability, so that compound people of business English can meet the needs of the current market.

### 3.3 strengthen the construction of Teachers

In the traditional business English teaching, most of the teachers are English majors. Although they can meet the teaching needs of students in English language teaching, they are lack of experience in business application ability, so it is difficult to promote students' application practice ability. Therefore, colleges and universities should

strengthen the construction of the existing team of business English teachers, introduce teachers with rich English teaching ability and practical business English work experience, and create a "double qualified" team of teachers. Secondly, we can also cultivate the business ability of existing teachers. By carrying out training or arranging teachers to enter enterprise practice, we can improve teachers' practical experience, so as to provide more support for teaching. In addition, through cooperation with enterprises, colleges and universities can regularly invite front-line employees or managers of excellent enterprises to share work experience and exchange experience, so as to realize the matching between students' theoretical knowledge and practical work, and solve the separation from reality in Business English teaching at present.

## 4. CONCLUSION

Business English one belt, one road, has set up new requirements for the discipline of adapting to the workplace language needs. In the process of cultivating business English compound talents, colleges and universities should pay attention to the combination of teaching objectives and practice, so that the trained students can meet the needs of current enterprises, continuously improve students' skills and professional level, promote the improvement of business English teaching ability in Colleges and universities, and cultivate excellent business English compound talents, Promote one belt, one road construction and development.

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# Research on Training Mode of Innovative Applied Talents for New Energy Materials and Devices Specialty Based on Practice

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**Abstract:** With energy transformation and industrial development, new energy has become the general trend of international energy development. In view of the current situation of talent demand and training in the field of new energy, combined with the specialty of New energy Materials and Devices of China University of Mining and Technology and the characteristics of local industry development, from the aspects of talent training orientation, innovation consciousness and practical ability training, etc., In order to cultivate high-quality talents to meet the development needs of the new energy industry, the new mode of training innovative applied talents in the field of new energy is constructed based on practice.

**Key Words:** New Energy Materials; Talent Training; Innovation Consciousness; Practice Ability

## 1. INTRODUCTION

At present, China's energy structure is accelerating to the transformation of new energy, and the corresponding demand for talents in the new energy industry is also growing, and the demand for senior talents who master the expertise of new energy materials and devices is more urgent. The reality is that China is still in the stage of industrialization and industrial transformation and upgrading, and there is a great demand for innovative application-oriented senior talents. The "academic talents" cultivated under the traditional mode of "elite education" do not match the employment requirements of enterprises, and it is difficult to meet the needs of enterprises, which leads to the dilemma that it is difficult for college students to find employment and enterprises to recruit suitable talents, and there is a structural contradiction between talent cultivation and talent demand [1].

The new Energy Materials and Devices major of School of Materials and Physics, China University of Mining and Technology (CUM) is a new engineering major approved by the Ministry of Education in 2020 to meet the development needs of national strategic emerging industries such as new energy materials and devices, energy conservation and environmental protection. The major focuses on cultivating interdisciplinary talents with solid foundation in materials, physics, chemistry, machinery and other disciplines, who systematically master the basic theories and skills of new energy materials, device design and manufacturing, test technology and quality evaluation, new energy system and engineering. Based on the characteristics of strong practicality and close combination with engineering practice, practical teaching is an important part of new

energy materials and devices major teaching, which helps students to apply book knowledge to production practice and practice, and cultivate college students' practical and innovative ability. In this context, how to take advantage of this opportunity to promote the construction of new energy materials and devices specialty, improve the quality of talent training of new energy materials and devices specialty, has become a problem that colleges and universities must consider. In this regard, as a new engineering construction specialty, the construction and practice of new energy materials and devices specialty are considered as follows.

## 2. POSITIONING OF TALENT CULTIVATION IN LINE WITH THE DEVELOPMENT OF THE INDUSTRY AND THE SCHOOL

The construction of new engineering specialty should accurately grasp the specialty orientation and development direction, consciously assume the responsibility of serving local economic development and modern industrial system construction, and realize the effective connection between specialty running and local industry. Under the guidance of the national new energy development strategy and based on the unique regional advantages of Huaihai Economic Zone, Xuzhou has formed high-tech industrial clusters featuring four fields: photovoltaic industry, new energy vehicles and core components, solid oxide fuel cells, and smart power grid. China university of mining university new energy material and devices with GCL solar advantage industry era and the era of Shanghai, jiangsu and other international cutting-edge new energy industry as the backing, in materials science and engineering practice education demonstration center of jiangsu province, efficient energy storage technology and equipment engineering laboratory of jiangsu province, "polysilicon material preparation" engineering technology center of jiangsu province (build) as the support, Combination of materials and physics institute in this professional scientific research base and discipline superiority, determine the professional talent training goal: to develop to meet the needs of national new energy strategy, grasp the new energy material and devices of professional knowledge, to analyze solve complex engineering problems in this field, and the preliminary research and development ability of thick foundation, high quality innovative talents. Therefore in the professional curriculum system covers the solar batteries, fuel cells, the four major fields of lithium ion battery, super capacitor, ranged from material preparation and characterization of composition structure analysis, the

device assembly, electrochemical performance test analysis and practical application and so on each link, especially to strengthen the concrete engineering practice and the cultivation of the innovation ability of scientific research, etc.

### 3. THE CULTIVATION OF INNOVATIVE CONSCIOUSNESS NEEDED BY THE NEW ENERGY INDUSTRY

The cultivation of innovation consciousness is not only related to individual growth, but also to the common destiny of the country and mankind. Specifically, how to organically combine theoretical knowledge with production practice in the teaching process, stimulate students' interest in learning, and cultivate students' innovative practice is an issue that teachers must consider [2]. In order to further improve the innovative practice ability of students majoring in new energy materials and devices, we encourage students to actively participate in teachers' research on related topics in their spare time according to their own interests, and analyze a specific practical problem based on electrochemical knowledge, so as to deepen their understanding and application of knowledge. In order to achieve this goal, the college has set up the "tutor system" system and innovative projects for college students. Through similar projects, students can participate in practical scientific research training based on their own scientific research interests and aspirations, and get familiar with the latest scientific research and industrial production results of their major while forming a systematic knowledge structure. This mode of integrating practical teaching and scientific research can inspire students' innovative thinking, enhance their innovative consciousness, and improve their practical practical ability and innovative ability. In recent years, under the guidance of teachers of this major, through extra-curricular scientific research practice and discipline competitions, many students have won the approval of national, provincial and university-level innovation projects for college students. Quite a number of students have also published research papers as the first author in *Advanced Materials*, *Materials Today Energy*, etc.

### 4. NEW ENERGY PRACTICE ABILITY TRAINING

The new energy industry is a comprehensive frontier cross high-tech industry with high technological content. Therefore, the new energy industry requires the comprehensive quality of employees to have a good sense of innovation and practical ability [3]. The specialty of New Energy Materials and Devices of China University of Mining and Technology (CUM) sets up a practical teaching system consisting of basic experiment, professional experiment and practical innovation in order to improve students' abilities in all aspects from basic experiment skill training, academic science and technology skill training to innovation and entrepreneurship skill training.

4.1 Basic experiment. According to the training target of new energy materials and devices major in School of Materials and Physics of China University of Mining and Technology, basic experiments are set up in college

physics experiment, college chemistry experiment, electrical and electronic experiment and mechanical engineering experiment. Through this basic and multi-disciplinary experimental training, students are familiar with basic experimental methods and master basic experimental skills, which lays a good foundation for students to carry out interdisciplinary combination, communication and cooperative research. In addition, strive to let the students establish the project's initial concept, through cognitive practice course, organize students to off-campus practice base for enterprise to visit and face to face communication with technicians, let the students know some life related products (mobile phone batteries, power battery, household solar water heater, etc.) the technology of manufacturing process, so as to stimulate students curiosity and interest in professional.

4.2 Professional experiments. It aims to train students how to correctly conduct relevant experiments in accordance with professional laboratory operation procedures and safety specifications [3]. Specifically, it involves basic functional material synthesis, material composition and structure characterization, functional device assembly and performance testing. At present, we have established general professional basic experiments such as electrochemical cycle voltammetry, AC impedance, battery charge and discharge, Hall effect test and other test technologies. Liquid phase method material preparation, solid phase method material preparation, electrodeposition method material preparation and other professional experimental technology; Solar cell device assembly and characterization, lithium ion battery device assembly and characterization, supercapacitor assembly and characterization, fuel cell device assembly and characterization and other professional experimental technologies. Aims to cultivate students comprehensively and systematically grasp a variety of new energy materials preparation methods and the principle and method of test for characterizing the structure, composition, etc, make the student to the existing quality of new energy materials, property evaluation and testing, to understand the relationship between the structure and performance of new energy materials, root tree practice and how to need to design and synthesis of a specific function of new energy devices. Through production practice, curriculum design, graduation practice and other links to gradually promote systematic training, so as to consolidate the students in the field of new energy basic professional ability.

4.3 Practice and innovation. It aims to strengthen students' practical ability, innovation and creation ability, and guide students to improve the performance of new energy devices through scientific optimization of material properties or assembly process; With the help of production practice, enterprise on-site teaching, graduation practice, graduation design and other ways to participate in the actual production of enterprises, familiar with the basic process of enterprise production, management and operation, systematically train students' practical engineering ability [4]. Due to the high technology intensity of the industry in the new energy

field and the relatively large investment scale, there are few enterprises for students to carry out on-site internship, and the equipment value of enterprises is high, so students are not willing to carry out operation practice. In this context, we are still with some highly social responsibility of the new energy enterprises (e.g., GCL solar, Long Heng era of new energy, new energy, such as saic, Switzerland) industry-university-institute cooperation agreement, in the production practice and graduation practice link, lets the student directly to participate in the enterprise in the process of actual production or management, Combining the professional theoretical knowledge they have learned in school with the production practice in the factory, cultivating their ability to skillfully apply the theoretical knowledge they have learned to solve practical complex engineering and technical problems will play an irreplaceable role in enhancing students' practical and innovative ability.

#### 5.CONCLUSION

In accelerating transformation of energy structure, all in all, under the big background, our professional new energy material and devices combined with professional features, the school-running orientation and the goal of talent training and the combination of national and regional economic development needs, the positioning of talent training, the innovation consciousness and practice ability, etc., through reasonable optimization of teaching method and teaching mode, explore the effective teaching approaches, In order to improve the quality of teaching,

cultivate students' independent innovation and practical ability, in order to cultivate new energy talents to adapt to socialist modernization. The above views hope to play a role in promoting the cultivation of innovative application talents to provide valuable reference.

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# Research on The Cultivation of Rule Consciousness in College Football Teaching Under the Background of Curriculum Ideology and Politics

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**Abstract:** With the development and progress of society, colleges and universities not only cultivate professional talents, but also pay more and more attention to improving students' physical quality. Football course is the key content of physical education in Colleges and universities. It is conducive to students' physical and mental health, and can cultivate students' rule consciousness, fighting spirit and team cooperation concept. At the same time, football teaching contains rich ideological and political elements of the curriculum, and undertakes the important task of cultivating high-quality football talents. Therefore, this paper mainly analyzes the value of college football teaching under the background of curriculum ideology and politics, and discusses the training path of rule consciousness of college football teaching under the background of curriculum ideology and politics.

**Key Words:** Curriculum Ideological And Political Background; Football Teaching In Colleges And Universities; Cultivation Of Rule Consciousness

## 1. INTRODUCTION

Ideological and political education is the top priority of college education. College Ideological and political work has always been valued by the party and the state. Curriculum ideological and political work is a new form of Ideological and political education in the new era [1]. In the process of teaching in Colleges and universities, we need to take professional courses as the basis, adhere to the educational goal of Building Morality and cultivating people, deeply explore the ideological and political elements contained in professional disciplines, effectively integrate professional courses and ideological and political courses, infiltrate ideological and political thoughts in all links of educational work, and improve the comprehensive quality of students. Sports discipline is of great help to spread socialist core values, which is the advantage of sports discipline. At the same time, the ideological and political role contained in sports discipline can not be replaced by other disciplines. As a key project of physical education in Colleges and universities, football can not only achieve the purpose of students' physical exercise and enhance their physical quality, but also cultivate students' rule consciousness, fighting spirit, teamwork and collectivism in the form of football team competition. These functions are consistent with the curriculum ideology and politics. Therefore, this paper mainly analyzes the value of college football teaching

under the background of curriculum ideology and politics, and discusses the training path of rule consciousness of college football teaching under the background of curriculum ideology and politics.

## 2. THE VALUE OF FOOTBALL TEACHING IN COLLEGES AND UNIVERSITIES UNDER THE BACKGROUND OF IDEOLOGICAL AND POLITICAL EDUCATION

2.1 it is conducive to the formation of rule awareness

Whether all sports can be successfully completed is based on relevant rules. For football, the audience in the football field will focus on the players, and any subtle action will be magnified. There are a large number of competition rules in football, which directly affect the quality and results of the competition, and also standardize the players' technical movements [2]. In case of back tackle, high foot lift and other vulnerable actions, the referee will give corresponding punishment. Therefore, the competition rules promote the fairness and justice of football, make the athletes' actions more reasonable, and promote the good development of football. In college football teaching, through football training, students understand football rules, form the habit of abiding by rules, and form rule consciousness over time.

2.2 it is conducive to the formation of fighting spirit and tenacious will

Football has high requirements for physical quality, which requires good anaerobic and aerobic endurance. Relevant studies have found that during the football competition, professional athletes need to consume huge physical strength during the rapid attack and defense conversion. The running example of the whole game is about 10km, which requires high aerobic endurance [3]. In the game, taking the ball, shooting and other actions need good anaerobic endurance as the basis. It can be seen that football players need to have corresponding sports ability to complete the whole game, which is inseparable from daily hard training and needs strong spiritual will to support. Therefore, football is conducive to cultivating individual fighting spirit and forming tenacious will, which is consistent with the goal of Ideological and political teaching.

2.3 conducive to the establishment of team spirit

Football is a representative collective project. Although individual ability is indispensable, it also needs team cooperation and division of labor and cooperation. It is often the team's efforts that determine the final victory.

Through football teaching, students can understand the significance of team cooperation, form team consciousness and establish the spirit of sacrifice and self dedication for the team.

### 3. Training path of rule consciousness in college football teaching under the background of curriculum ideology and Politics

Higher education is an important way to transport professional talents for society and cultivate reliable successors for socialist construction. How to cultivate new people who can take on the task of national rejuvenation requires college educators to improve college students' professional ability and comprehensive quality in various ways. Football has a good educational function. On the one hand, it enhances students' physique, on the other hand, it is conducive to cultivating students' noble character. Under the background of curriculum ideological and political education, college football teaching needs to change the previous teaching methods, innovate teaching design and adopt diversified teaching methods, so as to achieve the goal of improving students' football level and moral quality.

#### 3.1 Integrating Ideological and political elements into football teaching

In football teaching, classroom teaching is the breakthrough to realize the ideological and political education of the course. Teachers should enrich and improve the football teaching content to the greatest extent, tell the story of football players surpassing themselves and climbing the peak, explain the national policies such as "sports power dream" and "healthy China", and stimulate students' patriotism. Integrate ideological and political elements into football teaching materials, actively explore and extend teaching design, and cultivate students' comprehensive quality through football classroom teaching. Rule awareness is an important content of Ideological and political education in football teaching course. Football is based on respecting rules and fair competition. Football has high requirements for Discipline and organization and contains a large number of competition rules, so football teaching is an effective way to cultivate students' awareness of rules. In football teaching, it is necessary to permeate compliance education everywhere. For example, teachers explain the rules related to football to students in class. If there are fouls in the learning process, they will be warned, punished or even punished. In this process, students will feel the importance of abiding by the rules, so as to help students establish their awareness of the rules.

#### 3.2 integrate ideological and political elements into football competition activities

Fighting bravely and teamwork spirit is one of the educational objectives of Ideological and political

education in football teaching course. In football competitions, colleges and universities need to infiltrate ideological and political elements, reflect moral education in the whole process of football teaching, guide students to form correct values, fully reflect the educational role of football teaching, and cultivate students' indomitable, tenacious struggle, team cooperation and other spirit. In the process of football teaching, teachers should play a guiding role, help students form a correct competitive attitude, be fearless in the face of strong enemies, and dare to fight and fight; In the face of weak teams, we can't take it lightly and pay attention to our opponents. Use the fighting stories of football players to motivate and inspire students, feel the sense of achievement and satisfaction brought by football through personal experience and learning, and cultivate the fighting spirit. At the same time, in the teaching process, we teach students cooperation skills and methods, cultivate mutual tacit understanding, and gradually form collectivism and team spirit.

### 4. CONCLUSION

To sum up, under the ideological and political background of the current curriculum, college football teaching has a good ideological and political function, which is conducive to cultivating students' rule awareness, discipline concept, team spirit, etc. Therefore, colleges and universities need to effectively integrate football teaching with curriculum ideological and political education, run through ideological and political elements in football teaching activities, let students feel ideological and political culture and improve comprehensive literacy through various ways, so as to promote students' all-round development.

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# Coordination to Synergy: A New Realm of Re-Optimization of Regional Development Strategic Relations: Historical Enlightenment Based on The Road Network System of The Eastern Extension of The Ancient Silk Road

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**Abstract:** The ancient Silk Road and its eastern extension road network system supported the coordinated relationship of economic and cultural exchanges between various regions in China in the historical period, which inspired the re-optimization of the relationship between economic and cultural exchanges and development strategies of various regions in China today. This paper analyzes the regional development strategy concept of the central leaders of the past dynasties, and experiences three optimization processes of four forms: "regional balanced development -- regional competitive development -- regional coordinated development -- regional coordinated development". Recently, under the framework of community consciousness of common destiny, each regional development subject in the new era is bound to move towards a new realm of collaborative development concept in the common relationship of destiny.

**Key Words:** Silk Road; Regional Development Strategy; Coordinated Development; Collaborative Development

## 1. INTRODUCTION

In the general sense of imagery, "road" is generally understood as a linear spatial channel. The ancient Silk Road (overland) was habituated to the "stereotype" of a linear road by the media, but it was not. According to the needs of natural environment and economic interests, historical geography proves that the ancient Silk Road has abundant branches and trunk lines in addition to the main trunk lines, which constitute a network structure of eastern and Western civilization communication network, but generally presents an east-west trend. And the silk Road in the east and west of the two main end of the city around the formation of a radial extension of the road network.

## 2. WEAK INTERREGIONAL COORDINATION OF THE ANCIENT SILK ROAD AND ITS EXTENDED NETWORK IN THE HISTORICAL PATTERN

Rome, the terminal city of Europe, is located at the western end of the ancient Silk Road, and it is surrounded by a radial "Consul road". Have built east Mr Wagner of the avenue, the south building of defended Ann avenue, west building of Persian mia avenue, north building of flamine the avenue, Valerie, the road, for crossing the Alps of darfur avenue, famous wave lining the coastal avenue -

Pennsylvania avenue, etc., is the so-called "all roads lead to Rome". This is especially true around ancient Chang'an in the East. As the political, economic and cultural center in East Asia before the 10th century, its roads radiated to the whole "king land" under the inevitable appeal of the unified political model of "home, state and world", regardless of the high mountains and long roads. The Qinling Mountains near Chang'an were called by Sima Qian as "the great obstacle in the world", which never stopped the intensive construction of the Qinling ancient road. According to the investigation, there are qinchu, Qinba, Qinshu three directions of the channel cut through the Qinling Mountains, and there are dense intermountain secondary roads and trails in the middle, forming a regional road network system. Roads in other directions are more dense, thus forming the entire network connecting East Asia. These road networks were connected with the Silk Road in Chang'an and became the eastern extension of the Silk Road, showing the dense and systematic form of road networks.

History, the ancient silk road of the road itself appears as road network structure, even in the sea, land silk road there are multiple connections between road, as the grasslands of the silk road and tea ma gu, southwest silk road, west Asia and eastern Europe the passage between the sea and land make the silk road to form a "silk road" of the wide-area space system, Rather than the stereotypical single linear pore shape. So, in the silk road in the east and the west on the endpoint extension of the dense road network respectively in the east and the west two civilized main body internal and make their way of systemic relationship, is the main internal development and relations between the regional civilization with the collaborative, in the history of this collaborative looks weak, but with history view its historical status, This is enough to enlighten the development of regional relations in Today's China.

With the support of archaeology and literature research, this paper takes the history of regional transportation in tang Dynasty as the reference object to understand the economic and cultural relations between different regions in ancient times. With Chang'an as the terminal point, the eastern extension of the Silk Road formed a developed road network radiating in all directions. They

communicated with each other and played a fundamental role in the high prosperity of civilization and the spread of culture in East Asia. The main trunk roads of the Eastern extension of the Silk Road are:

Chang 'an - Luoyang Road. This road passes Luoyang to the south along the canal and the land south huaiyang, Qiantang and the maritime Silk Road ports, forming a dense network; In Luoyang to the north through the canal and Hebei road to Youzhou, and then from the northeast of Youzhou into the road into the grassland in the west, east into Liaodong can reach overseas and overseas Korean Peninsula, Japan and other places. This extension connects the Grand Canal, maritime Silk Road and grassland silk into a road network transportation system by water, land and sea routes, which covers the whole East Asia, Northeast Asia and Southeast Asia.

Qin Shu Ancient Road. Connecting Chang 'an and Chengdu, second only to Chang 'an - Luoyang Road. Chengdu was one of the five capitals of the Tang Dynasty, and after the middle Tang Dynasty, it was known as the world metropolis of "benefiting one and benefiting two". Its prosperity and risk altogether. In terms of engineering, The Shu Road is the third largest ancient Chinese project, next only to the Great Wall and the Grand Canal. It consists of several main roads, including Ziwu Road, Tangluo Road, Bao Ramp road and Chencang Road in the north. South section of Lai Chi Road, Rice Pond Road, Taurus Road. There are secondary trunk roads interconnecting with each other to form a dense road network. As an extension of The Silk Road, the ancient road after arriving in Chengdu connects the ancient Tea Horse Road and southwest Silk Road via Qionglai Qingxi Road and Rongzhou Shimen Road, radiating Yelang, Tubo, Nanzhao and South And Southeast Asia.

In addition, there are the qinchu Ancient Road, qinba Ancient Road, Changan-Taiyuan Road, Changan-Lingzhou Road, Xiashou road, Shengzhou Road, Tang-Tibetan ancient Road and other main roads. The Qinchu Ancient Road is the Shangjin Road from Chang 'an to the southeast, along the danjiang and Hanjiang waterways at the southern foot of the Qinling Mountains Xiangyang and Hankou reach Guangzhou through the Yangtze River and Dongting Lake, connecting the Maritime Silk Road. Qinba ancient road is located between Shu Road and Qinchu Road. Its southern section is reached bayu by a network consisting of Yangwanfu Road, Yangkou Road and Lichi Road, so it is also called Yangba road traditionally directly linked to Huguang and Yunnan-Guizhou via three Gorges, Bayan ancient road, zangke road. Chang 'an - Taiyuan Road. Along the Fenwei Valley through the Yellow River through the crossing of Longmen, Pujin and other ferry through the Qin and Jin dynasties, is one of the tang people's favorite travel routes. Through Taiyuan to the north saitong Tujue, Huihe connected grassland Silk Road; To the taihang east longitude all engage in east out of the deep state, therefore is called "deep and remote and". Chang 'an - Lingzhou, Xiashou, shengzhou road is chang 'an to the north out of the three main roads. Lingzhou Road is not only a branch line of the Silk Road, but also a key node connecting the

grassland Silk Road. After the fall of Hexi, the Silk Road actually went through Lailingzhou Road. Lingzhou over helan Mountain or through Fengzhou and Ouigour traffic, you can also take the grassland Silk Road. Xiashou Road, Shengzhou Road are north to the grassland silk Road. Finally, there was the famous Tang And Tibetan Road, which connected Chang 'an to Luoji (today's Lhasa). Princess Wencheng and Princess Jincheng followed this road when they entered Tibet. It was an important branch line and extension of the Silk Road, which reached Luoji via Gan and Qing, and then extended to ancient Nepal and India.

Under the background of the ancient Silk Road, the history of regional transportation in the Tang Dynasty fully reflects the density of the road network of interconnectivity between different regions in history in the framework of the "kinship" political relations. Although the center is in the ancient Chang 'an and Luoyang, they have formed their own basic regional relations due to the needs of geography, military, economy, tributary, diplomacy, culture and other aspects, and presented a synergistic inter-connected relationship driven by Confucian ethics and culture. This is a weak manifestation of the synergy of regional relations in the historical period, but it is still identifiable to a certain extent, which provides an important historical basis for finding new connections between regional development strategies and reconstructing and optimizing regional development space.

### 3. ENLIGHTENMENT FROM THE ANCIENT SILK ROAD AND HISTORICAL TRADITION: THE HISTORICAL ORIGIN OF THE "SYNERGY" RELATIONSHIP BETWEEN REGIONAL DEVELOPMENT STRATEGIES

The eastern extension of the ancient Silk Road formed a dense road network, showing a certain system. And its inferior to the main road as the support, and has a relatively full interconnection. This economic and cultural communication mode, led by the political power of "the unity of the state and the world", shaped the relationship between the development of various ancient regions supported by the road network system of the Eastern extension of the Silk Road. It can be seen that, even under the underdeveloped ancient transportation conditions, there was still a weak coordination relationship between various regions. There is also a strong pressure from political ethics and a "colleague" moral support. It brings us an inevitable enlightenment from the history of regional economic development strategy, that is, we must reshape the synergistic effect between regional development strategy relations and make them contemporary. This is a realizable, promotable inevitability from history itself. This is a new realm of regional development concept from "coordinated development" to "coordinated development", is the concept upgrade of regional development strategy, is the re-optimization of regional development strategy relationship.

The concept of synergy is not the connotation of equal, synchronous, homogeneous and same, but the high-level linkage relationship with difference, difference, mutual

cooperation and complementarity and gradient effect. In the traditional concept of Chinese culture, the distribution of interests from the center of power to the periphery of the gradient has always been emphasized, this gradient is naturally opposed to equal distribution, is based on the relationship of blood and marriage on the model of regional coordination of human relations. According to the principle of synergetics, the Chinese ancient political governance paradigm is based on the derivation of "zhouyi" phenomenological philosophy "nature humanization" ethics structure, which, as a system of each subsystem not only has high and low head, and with a difference, "soil" wang from the unity of the whole space, inevitably exist in the double dimension differences between various regions. In The Book of History, Yu Gong divides the world into nine prefectures. According to the order of political ethics, the three prefectures of Ji, Yu and Yong are located in the center, which are the zhengyuan of China. In records of the Grand Historian, Sima Qian defined the land fertility of Jiuzhou as nine equal relationships according to natural endowments, among which Yongzhou and Yuzhou were still "shang shang". The earliest regional relationship is an early structure unconsciously established with political power and natural conditions as order parameters. With the expansion of the territory of the world to all sides, the pattern of jiuzhou gradually increased the areas of distant low-level relations, such as ethnic minority areas, border areas and even overseas vassal states. In kyushu form as the main body of the world, again provided a regional differences, the differences in synergetics is by the relaxation effect caused by the volume change, it's not decided the ethical relations between the area of political domination of a stationary state structure, but it is in as a system of relationships provide "fluctuation force" in each region of China, It provides a quantitative dynamic factor with fast and slow validity for the dynamic operation of the system in time dimension. Due to the limitations of technology, resources and population relaxation, the dominant relationship between political power and economic interaction could not show strong coordination of fast validity in regional development relations. The regional relations within East Asia supported by road network system were weakly interconnected under the action of order parameters. In other words, according to their natural endowments and geographical relations, they do not have regional competition, but regional complementarity and mutual benefit of the world as "brothers at sea" moral coordination. Although wars between regions often occur on both sides of the Great Wall, the two regions are not regional competition in productivity or economy or culture, but extreme changes are adopted when their complementarity is blocked, with the purpose of restoring the complementarity and synergism between regions. Military violence in other regions is also understood in the same way.

In particular, it needs to be clearly defined that synergy and coordination are ideologically inconsistent. The premise of synergy is the synergy in "a system" and it is a relational property verified by the action parameters.

Regions in Chinese history relying on the silk road between the east extension network constitute a giant system of civilization is not controversial, China's unified and centralized politics as the core of the order parameter to become powerful system function ontology, make each region in different layer consists of a powerful centralized camp in a self-organizing system. Coordination, on the other hand, is not necessarily a relational property within the same system. It is an intersystematic, unorganized coordination, and a loose, competitive interdispositional environment. Coordinated development means the compromise of non-common value orientation between multiple systems with different categories, the balance of profit and loss between subjects based on different interests, and the balance is not stable, and it is a temporary mutual adaptation in a certain period of time. Once the equilibrium state appears disturbance, it is not necessary to compromise again, and the coordination mechanism is broken. This loose relationship attribute is the concept between two or more relationship subjects who are not of common interest. The relationship between different regions of China supported by the road network system of the Eastern extension of the Silk Road is the "same" Chinese civilization community under the common destiny. They are a historical and traditional cooperative relationship derived from the common destiny. This enlightening us from coordinated development to coordinated development is a new realm that must be upgraded for all regional development strategies. It is also the re-optimization of General Secretary's thought on regional coordinated development, which is oriented by the five development concepts, in the new era. It has extremely important theoretical guiding significance for promoting the coordination of China's regional economic and social development, enhancing inter-regional equity, and even for the construction of a global community with a shared future for mankind [2].

#### 4. INTERNAL CONSISTENCY BETWEEN "SYNERGY" IN THE FRAMEWORK OF COMMON DESTINY AND "SYNERGY" IN THE TRADITIONAL SENSE

It is a new realm of regional development strategy idea in the new era to optimize from coordinated development to coordinated development. This new realm is constructed in the frame consciousness of common relationship between destiny. As is known to all, community thought in Marx had generated and become confidence to construct the future human blueprint of marxism philosophy, general secretary in the communist party of China (19 big report formally put forward the concept of human destiny community, the community of ideas and discuss all kinds of fundamentally improve to the height of one of the most essential meaning, community how to sustain a "common", What is the root of it? Most of the current academic discussions have reached the level of meaning of common interests and common value pursuit, so as to examine why community is the chassis of "common", but they still have not reached the depth of interpretation that can be thoroughly convincing. The general Secretary of the General Secretary took the

commonality of "destiny" as the ultimate cornerstone of the establishment of the community, and persuaded all kinds of noises from the overall dimension of philosophy. In the framework of the identity of the common relationship of fate, there is a high degree of self-consciousness and mutual adaptability between the subjects of the relationship. Therefore, the "synergy" in regional development, as a relational attribute, is really the "synergy" in the sense of synergistics in the framework of common destiny. 19 report put forward the implication of the construction of human destiny community has a multilayered, on all mankind a peak overlooking the various countries and regions, looked down to the regional and even more microscopic community as long as in the consciousness of a "common destiny" relationship framework, all complex relationship combination can bridge into a new community relations, Regional economic development is the most prominent part of the contradiction in regional development relations. Therefore, the development of regional economy is to reconstruct and straighten out the development relations between each other, on the basis of the five development concepts as the first concept, and then optimize into a new concept of "collaborative" development. Here can see such a relationship between regional development constantly optimize the shape of the chain, also is the first in the zero-sum thinking "regional competition" of extensive development adjustment for the regional harmonious development relations, and in the new era of building concept of global governance and the development of human destiny community, then this relationship for "regional coordinated development of the relationship. It can be simplified as:

① "regional competition" development -- ② "regional coordination" development -- ③ "Regional coordination" development

These three levels of development.

The concept of regional synergistic development in the common relationship of destiny not only has the ideological background of Marxism, but also has the inheritance of the cooperative ethical relationship stipulated by the Chinese historical and cultural model. Chinese culture takes consanguinity and kinship by marriage as the basic model of interpersonal communication and extends it to the whole category of social relations. That is to say, to construct the basic structure of the whole "country" and "world" with the structural relationship of "family". Therefore, each region on the vast land of China is bound to be placed in the frame of consciousness of "one home". "One home" is bound to be the combination of relations with the most "common destiny" of mankind in terms of consanguinity and marriage, and belongs to the "one" community. Therefore, although different regions in China have different positions and equivalents in history, their destiny is regarded as a relationship of the same destiny. Just as Han Yu of the Tang Dynasty said in His book *Original Man*, "It is because of this that sages treat each other equally. It expresses the Confucian ethic's emphasis on the synergy between the relationship subjects in the hierarchy

differences, certainly on the premise of the "family" relationship with a common destiny in the eyes of the sage. "The Analects of Confucius · Yan Yuan" has the ethical imagination of "all brothers within the four seas". In Mencius · Wholehearted Shang, "Kindred, benevolence also", Mencius · Lilou Shang says: "The truth of benevolence is also, and the truth of righteousness is also from brother." "Mencius · Liang Hui King shang" is a straightforward expression of "old and old, young and young and young" the ideal of the world. These orthodox mainstream ideas are traditional interpretations of the "synergy" of regional relations throughout history. It is precisely because of the concept of "homomorphism between countries" in ancient China that the regional relations of China naturally possess the attribute of common destiny. This kind of concept and inter-regional communication mode have been penetrating the historical fog, overcoming the century-long crisis of confidence of cultural subjects since modern times. At the new historical starting point of the new era, it is also from a higher position of the destiny of all mankind, continuing this enduring ideological legacy and recast its contemporary form. More because it is about human beings "contradiction unity" discussed repeatedly by the fundamental paradox of an original solution, only is limited by the long-term low level of productivity of narrow eyes obscured, in today's highly developed information society, the close relationship make common destiny, high-frequency apparently have a strong experience of human individual, Not to mention large-scale contacts and exchanges between countries and regions. Any regional exchanges and contact between shows beyond any historical period of tightness and surroundings is lack of sex, the relationship between regional development must be from the perspective of history and new era fate again to optimize the mutual relationship between point of view, from the common destiny consciousness of "coordination" relationship become the "coordinated development" of relationship based on common destiny. The relationship between the new era and the traditional "synergy" development has inherent consistent concept attribute.

## 5.CONCLUSION

The ancient silk road, the east extension support the network system in the history of the regional collaborative relationships, it is not only the result of the "home country" political model of the unified, and driving the regional integration of fully economy, culture, presents a history of coordinated development relations, it is revealed the new era of China's regional development strategic concept of "coordination" to the "synergy" optimization. From "three support with" leading to the strategy of "four plates" platform construction, and the secondary regional development relationship between high and low and the difference between a layer with a differentiation, require the regional economy under the new normal network, the different network nodes can make through competition and cooperation resources recombination and redistribution, produce synergies, Straighten out the effects of competition, cooperation and

complementarity in the concept of regional collaborative development. These three dimensions correspond to the level and gradient of "competitive development -- coordinated development -- coordinated development". In the new era, we should set up a combination of common destiny relations between multiple layers of regions under the consciousness of building a community with a shared future for mankind, and truly realize the double optimization of regional development strategy concepts and practices and the promotion of a new realm. In practice, especially on the three brace, booster four plate tectonics, take the space of macroscopic intervention policy, fully release "vassal economy" block "administrative region economy" is full of activity of interregional linkage between the regional development of main body and collaborative complementary, in fate mutual relations, deepening regional cooperation mechanisms, refactoring interregional benefit mechanism of liquidity, Break down the barriers of beggar-thy-neighbor competition, and ease the circulation blockage caused by the benefit segmentation of material market and cultural field caused by inter-subject administrative region. Also only in common destiny relationship, to realize the collaborative relationship between the regional development main body, build reasonable collaborative behavior game model and supporting system, make the regional development mode from "individual" more to the "whole", from "area" more to "regional", from "differentiation" more to "integration" in collaborative development framework. The arrival of the new era also makes people describe the intergenerational succession process of the strategic idea of regional economic development in contemporary China from a deeper historical perspective, such as the balanced development strategy of the first generation of central leaders, the

unbalanced development strategy of the second generation of central leaders, and the coordinated development strategy of the third and fourth generation of central leaders. The fifth generation of central leaders with the general secretary as the core optimized the strategic concept of regional economic development into a new realm of coordinated development.

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# Research on Mental Health Education Model of Engineering Postgraduates Based On "Sandwich" Model

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**Abstract:** Graduate students are high-level talents in China's current higher education training system. At the same time, they play a key role in China's economic, social and cultural development. In recent years, China has continuously expanded the number of graduate students, so it is more necessary to do a good job in graduate education. This paper expounds in detail the working mode that can be carried out based on the "sandwich" education model from the perspective of the current mental health education of engineering graduate students. **Key Words:** Sandwich Model; Graduate Student In Engineering; Mental Health Education

## 1. INTRODUCTION

In the current learning process of graduate students, there are often a lot of psychological problems, resulting in suspension and deterioration of the relationship with tutors and students. Therefore, in the current process of graduate education, we need to not only pay attention to academic education, but also strengthen the good guidance of students' psychology, so as to help the healthy development of graduate students.

## 2. MODEL CHARACTERISTICS OF SANDWICH EDUCATION

### 2.1 strengthen cooperation between government, education and enterprises

In the sandwich education system, it originated in the UK and has been influenced by the government in the long-term development, so that the local government has played a direct role in promoting the development of the UK and assumed the identity of guide and manager. In carrying out such education work, we need to play our own functions and avoid cross-border problems. At the same time, we need to design the sandwich education system. We need to adhere to the principle of leading along the trend and pushing against the time, and use different means to ensure that sandwich education can implement financial funds on the basis of law.

### 2.2 pay attention to the cultivation of core competence

At present, in the process of applying the sandwich education model, we pay special attention to the cultivation of core competence, especially students' abilities in reading and writing, calculation, drawing, problem processing and so on. Therefore, in the process of adopting such sandwich education, we can make good use of various forms and educational angles to guide the current engineering graduate students, so as to avoid psychological problems.

### 2.3 integration with national vocational qualification

standards

After the sandwich education model was launched in the UK, the national vocational qualification standards were used. Therefore, for the trained students, all the qualification certificates will be incorporated into the national qualification framework and accept similar quality control similar to other vocational qualifications. In the current sandwich education system, it is an audit based on ability, skills, attitude and value, and carries out targeted teaching guidance by using a complete set of training plan and student learning log, so as to help students form strong comprehensive ability.

### 2.4 diversification of cooperation

In the sandwich teaching mode system, there are diversified teaching forms. At present, sandwich teaching mode can be divided into two forms: thin and thick. Among them, in the teaching of thick sandwich, the academic year is generally long, so internship is required in one year, so that students can master a certain level of practical ability after mastering the basic theoretical ability [1].

## 3. MENTAL HEALTH EDUCATION MODEL FOR ENGINEERING POSTGRADUATES

### 3.1 data collection using centralized self filling scale

At present, when freshmen enter the school, they need to immediately conduct a questionnaire survey on all students' basic personal information [2]. For example, you can use the family situation questionnaire to have a detailed understanding of the students' gender, native place, age, students and family situation in the form, so that you can have a good understanding of the growth experience of postgraduates and the background of native families. Secondly, it is also necessary to carry out a unified mental health self-assessment on the school psychological center. For the school assistance work, it is necessary to realize an all-round understanding of students' mental health from the different levels of feeling, emotion, thinking and consciousness.

In the second semester, we need to use unified guidelines to carry out sampling questionnaire survey. The current questionnaire can basically be divided into two different parts [3]. The first is to conduct a questionnaire survey on the psychological pressure of postgraduates, and realize the pressure understanding of Postgraduates' own future development from the perspectives of current paper requirements, professional prospects, future concerns and appearance economy. Secondly, in the second part, we need to design a targeted subscale based on the characteristics of the basic population of Chinese students,



corresponding to the positive and negative emotions respectively. In the scale, when the coping tendency is greater than or equal to 0, it is considered to be in a state of stress, so it is necessary to adopt a targeted way. When the imagination is less than 0, it means that the current subject is always in a state of stress, which will aggravate the possibility of negative coping.

In the process of analysis, application software can be used to carry out targeted statistical processing on its data, so as to clarify the differences of development for the current graduate students' psychological stressors and targeted processing methods according to different user characteristics. In the process of future development, we need to comprehensively tap the psychological stressors of graduate students and adopt targeted coping methods to achieve good difference processing.

### 3.2 adhere to problem orientation

In the current psychological stress faced by graduate students, they basically choose negative coping styles, but this will lead to more obvious individual perception of stress. In the process of analyzing its problems, it is basically affected by two factors. First of all, the current science and engineering graduate students in Colleges and universities are under great pressure in daily scientific research and learning tasks. Therefore, in the process of personal emotion, emotional release and interpersonal communication, once they encounter certain problems, they will be unable to get family support. For this reason, it is the key to deal with the negative problems of science and Engineering Postgraduates in Colleges and universities. The treatment of interpersonal relationship is basically based on the spiritual and material communication, which is the important place for the occurrence, development and establishment of interpersonal relationship. Therefore, in the current education process, we need to be able to clarify the actual psychological tendency of students, make targeted adjustment, and pay comprehensive attention to the cultivation of students' core competence. Only in an environment that can effectively guide students' inner development can students gradually form a positive inner development motivation and meet the current healthy development needs of graduate students to the greatest extent.

### 3.3 innovation guidance methods

From the development of sandwich education system in Britain, we can find that the functionality of government

institutions has high value. Therefore, for China, it is necessary to further formulate a clearer and clear education plan for the graduate education system of colleges and universities, so as to create a good learning environment for students. Only by avoiding the influence of some adverse factors can we play a good guiding role in future education.

## 4. CONCLUSION

To sum up, for postgraduates, it is not only necessary to comprehensively improve the professional and technical training of students, but also to comprehensively realize good psychological guidance under the current development background, so as to give full play to the best educational effect and improve the comprehensive quality of postgraduates.

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# Research on The Cultivation Path of Team Spirit in University Table Tennis Teaching from The Ideological and Political Perspective

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**Abstract:** Ideological and political education is one of the important contents of college education. With the progress of The Times and social development, the ideological and political ideas of the course are put forward. Under the strategic background of building China into a strong sports country, how to integrate university physical education curriculum with ideological and political elements of curriculum, deeply explore the ideological and political elements of curriculum covered by physical education curriculum, and realize the goal of cultivating talents with noble spiritual quality, are the key issues that educators pay attention to. Table tennis, as the "national ball" in China, is the key item of physical education teaching in colleges and universities, which is conducive to cultivating students' team spirit. Therefore, this paper will analyze the course ideological and political vision of university table tennis teaching team spirit cultivation path. **Key Words:** Ideological And Political Courses; Table Tennis Teaching; Team Spirit

## 1. INTRODUCTION

At present, ideological and political courses have become the main guiding ideology of ideological and political education in colleges and universities. The essence of ideological and political education is to integrate ideological and political education deeply in the course teaching of professional subjects, and to run ideological and political education through the teaching links of all disciplines. Physical education occupies an important position in the teaching work of colleges and universities, so it is necessary to integrate ideological and political ideas into the course teaching. Table tennis has a huge mass base in Our country and has a great influence. It is an important sport to cultivate students' consciousness of rules and team cooperation. Therefore, this paper will analyze the course ideological and political vision of university table tennis teaching team spirit cultivation path.

## 2. THE TEACHING OBJECTIVES OF UNIVERSITY TABLE TENNIS FROM THE IDEOLOGICAL AND POLITICAL PERSPECTIVE

### 2.1 Cultivate students' team spirit and collectivism

In table tennis, there are not only individual competitions, but also many team events. Integrating ideological and political ideas into the teaching of college table tennis can effectively combine team competition with ideological and political education, help students understand the impact of team cooperation on the competition, understand the necessity of team cooperation, and help students to form a sense of team cooperation [1]. At the

same time, in the students participate in the table tennis team competition, the need for a reasonable arrangement of troops, in this process can train students to obey the organization consciousness, the body sense of honor, more profound understanding of the concept of team cooperation, cooperation ability, enhance the collective consciousness of society, so as to improve the students to the social adaptability.

### 2.2 Cultivate students' awareness of fair competition and rules

In the process of table tennis teaching in colleges and universities, the implementation of teaching links is also a process to make students respect the rules, which directly reflects the role of organizational discipline education in ideological and political courses [2]. In any sports competition, there is no way to leave the rules, which is also an important basis to ensure the smooth, fair and just sports competition. In table tennis teaching, whether it is the public opinion or the referee's call to the game, it can be good to restrain and regulate the students' speech and behavior, which is conducive to the students forming the consciousness of rules, and consciously abide by the relevant rules in the game. At the same time, table tennis belongs to the antagonistic competition, in the course of table tennis teaching, it is necessary for students to carry on the antagonistic training, through this teaching method can improve students' competitive consciousness, cultivate the idea of winning bravely. In addition, the university table tennis teaching needs to create a reasonable competition organization, fair rules and fair environment for students to provide an atmosphere of equal competition, is conducive to cultivating students' awareness of legitimate competition.

## 3. THE CULTIVATION PATH OF TEAM SPIRIT IN UNIVERSITY TABLE TENNIS TEACHING FROM THE IDEOLOGICAL AND POLITICAL PERSPECTIVE

### 3.1 Deeply explore the ideological and political elements of table tennis teaching course

In order to effectively integrate table tennis teaching with ideological and political ideas in courses, teachers need to continuously explore ideological and political resources in courses before teaching, which is an important basis for implementing ideological and political ideas in courses [3]. Based on the technical characteristics of table tennis, table tennis covers a variety of features such as competition, leisure and fitness, which plays an important role in cultivating students' reaction ability and enhancing their physical quality. In the process of table tennis, human eyes

and cervical spine are fully exercised, which is conducive to modern college students away from the Internet world and electronic products. Table tennis has relatively delicate technical requirements. The use of the racket, footstep movement and wrist control will affect the flight path of the ball and the landing point of the table. At the same time, the subtle changes when the wrist and fingers grasp the racket will cause the rotation trajectory of the ball to change. Therefore, if students want to truly master the essence of table tennis, it requires students to have unremitting will and strive for perfection of the craftsman spirit, study hard, learn the return of serve, rotation control and other skills in table tennis. In the course of teaching, teachers should pay attention to cultivating students' spirit of striving. Table tennis has special cultural significance in Our country. To some extent, it represents the soft power of our country, and also undertakes the important task of creating and enriching Chinese culture. In the long-term table tennis competition, formed a lot of national spirit, such as winning glory for the country, mind the motherland and so on. Therefore, in table tennis teaching, the positive spirit contained in table tennis can produce correct guidance for students, and the integration with the ideological and political courses can not only help students learn table tennis sports technology, but also help to cultivate students' correct ideological and political ideas, and promote the development of ideological and political consciousness.

### 3.2 Innovative teaching contents and links

In order to implement the teaching of table tennis in colleges and universities under the background of ideological and political courses, teachers should further innovate the educational content based on the teaching syllabus and effectively combine ideological and political courses with teaching links [4]. For example, in the teaching process of introducing table tennis, teachers should guide students to establish correct values according to the development history of table tennis and the patriotic feelings contained in it. At the same time, the story of typical characters of table tennis is told to students, helping students to have a deep understanding of table tennis players, understand their experience of fighting for the country, and produce a role model effect, which has a positive influence on students' thoughts in a subtle way. In the course of table tennis technique and tactics teaching, teachers emphasize the tenacious will and craftsman spirit, guide students to practice table tennis skills and improve the level of table tennis. The specific rules of table tennis are introduced to students, and they are divided into several groups for mutual learning. Students in each group are asked to collect videos related to table tennis before

class. Different video materials contain different ideological and political elements. For example, the video of multi-round battle in table tennis matches reflects the spirit of hard work; The video shows the spirit of never giving up when falling behind. Teammates encourage each other to video, reflecting the spirit of teamwork. Through these videos, students can understand the spirit of table tennis, cultivate the team spirit of students and develop the consciousness of rules. In addition, the rational use of modern technology means to assist teaching, so that students feel the impact of modern technology on learning and training, stimulate students' awareness of innovation.

### 4. CONCLUSION

To sum up, the integration of ideological and political courses and university table tennis teaching is the inevitable trend of university physical education under the background of quality education. The implementation of ideological and political ideas in table tennis teaching is conducive to cultivating students' team spirit, forming the awareness of legitimate competition and rules. This requires teachers to deeply explore the ideological and political elements contained in table tennis teaching, reasonable adjustment and innovation of teaching content, so that students can feel the ideological and political culture in the teaching process, promote the level of table tennis and ideological and moral quality of students to achieve the teaching goal.

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# Take Commercial Pedestrian Street as An Example to Explore the Ecological Logo Design in Landscape Design

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**Abstract:** Under the new situation, the commercial pedestrian street is an important embodiment of the cultural value of a city, and the corresponding pedestrian street landscape environment design has become the focus of modern urban design. The comprehensive landscape form of commercial pedestrian street has become an important factor affecting the urban landscape environment. The key to a good design is to build the overall form. Form construction shows the dynamic spatial relationship, which can enrich the overall design form, meet the needs of integrated development, and achieve the harmonious effect of practical, beautiful and economic. Therefore, this paper first puts forward the key content that needs to be analyzed, integrates the foundation, bases on the reality, and establishes the reasonable design method pertinently.

**Key Words:** Commercial Pedestrian Street; Landscape Design; Eco-Logo Design

## 1. PROBLEM RAISING

Commercial pedestrian street originated in Europe, advocating the dominant position of people in urban space. Commercial street is not only a place for public comprehensive shopping, but also a place for integrated development of leisure and entertainment. For example, Wangfujing in Beijing is a commercial street, and Jinjie in Tianjin and Nanjing Road in Shanghai are both commercial pedestrian streets. Commercial pedestrian street itself is an important part of the city, which can provide more high-quality human space for citizens, improve the interaction between people, and achieve a win-win state of economic, social and ecological benefits [1]. At this time, each region has its own unique characteristics, and it needs to establish a cultural and ecological identification system based on the use of plant planting methods. Not only do ecological functions need to be demonstrated, but also functional development needs need to be met for beautification. In view of this, how to understand the regional culture under the premise of creating a pleasant pedestrian street landscape environment?

## 2. COMMERCIAL PEDESTRIAN STREET LANDSCAPE DESIGN ECOLOGICAL LOGO DESIGN

### 2.1 Basic situation of plant configuration in Chang 'an Commercial Pedestrian Street

The landscape design of commercial pedestrian street needs to emphasize the overall visual image of the landscape, highlight the theme of wealth gathering, create

elegant consumption places, reflect the humanistic care for the public, shape the local humanities, and realize the rational construction of economy. In the course of ecological logo design, certain principles should be maintained. Ecological logo design belongs to a systematic engineering project, which needs to show the comprehensive characteristics of ecology, economy, society and other directions, so as to achieve the mutual unification of local history and culture. In other words, in the implementation of ecological logo design, the principles of integrity, sustainability, appreciation and culture should be maintained. A commercial pedestrian street, 730 meters in length and 30 meters in width, belongs to an area integrating commerce, education and entertainment [2]. Here is mainly the use of ecological planting, reasonable collocation, focus on the "theme".

### 2.2 Analysis of plant configuration of commercial pedestrian streets in Chang 'an District

First, from the analysis of ecological laws, commercial pedestrian streets need to maintain the construction of ecological functions, to provide good basic conditions for ecological logo design. Not only need a reasonable sense of space layout, but also need to optimize the landscape ecological structure, maintain a scientific development path. For example: here is mainly Chinese toon, Chinese locust, black locust, round cypress, white bark pine, pomegranate and other plants, will also involve palm, magnolia, banana and other plants. The ecological function construction of green space requires a certain amount of green space. No matter it is Joe, irrigation, grass, or ground cover structure, it is necessary to try to choose some plants with high view and efficiency, which can not only reduce the temperature of the building in summer, but also achieve the effect of heat preservation in winter. Finally, it is necessary to combine people and plants to achieve the harmonious coexistence between man and nature [3]. French sycamore, magnolia magnolia can meet the needs of local development, and achieve the main role of air purification. But that alone is not enough. You need to expand the variety of plants and mix them with other suitable plants.

Secondly, from the analysis of species diversity, that is to say, ecological logo design cannot be separated from the support of species diversity, and at the same time, it is also the key to play the ecological function of green space. The construction of zonal plant ecotype needs to undergo a series of selection and domestication before it can be obtained. It is not only necessary to present the

characteristics of the region, but also the personalized expression of the city. Improve the applicability of green space, expand the species in it, draw lessons from the composition of community, optimize the structure, and realize natural alternation. A total of 52 plants are used here, which can be subdivided into 9 different types, and it is developing in the direction of diversification.

Third, from the analysis of ecological adaptability, commercial pedestrian street needs to organically combine plants and buildings, and maintain the coordination of both sides on the basis of adjusting measures to local conditions. In addition to the need to meet the fundamental tree species, but also need to integrate some artificial landscape, to be decorated and coordinated to meet the construction needs of the space.

Fourth, from the analysis of the interspecific relationship, it is necessary to reasonably influence the community evolution, and also need to reasonably explore the competition and adaptation between each plant, to maintain a certain sense of hierarchy. According to the composition of species or the preference of plants, it can meet the requirements of natural laws and maintain the stability of the community.

Fifth, from the perspective of community stability, it is necessary to improve the process of functional construction, maintain the structure and achieve the main purpose of stability in a gradual view. During plant maintenance, it is necessary to make full use of the value of soil to form a benign cycle and reduce the construction of renewable resources, so as to achieve the mutual value and restriction mechanism of the surrounding environment and form an ecological mechanism [4].

Sixth, from the perspective of ecological identity, it not only carries the local culture, but also shapes the characteristic city, displays the foundation, organically combines the history and tradition, and provides good basic conditions for sustainable development. Many plants here also have a great relationship with the local cultural information. In the layout, based on history, religion, folk culture, etc., we take the essence and discard the dross, find the law of nature, perceive the humanistic tradition, maintain the development needs of aesthetics and ecology, enhance the regional taste, meet the development needs of citizens for recreation, and show different spiritual connotations. In addition, the vivid sculptures add to the cultural color of the region, show the historical memory and reflect the local life. Commercial

street is a delicious culture, its charm lies not in its aesthetic feeling, but in the current development of artistic conception. And the rational use of water, give effective life, show the cultural cradle of the city. The path is made of yuhua stone, which adds to the city's poetic quality. At night, neon lights shine brightly and there is a colorful fountain, which not only shapes a city that never sleeps, but also Outlines a romantic scene.

### 3.CONCLUSION

With the progress of society, the ecological logo design of commercial pedestrian street landscape design needs to take ecological benefit design as the starting point, maintain the diversity and hierarchy of plant configuration, match each other, restrict each other, and maintain the personalized development path. Highlight the harmony between landscape elements, enrich the application types of green plants, collocation should have rich meaning and symbol, improve the connotation and function of plant landscape, improve ecological identification, improve the vitality of the city with landscape design, enrich details, and establish a beautiful landscape line.

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# On the Changing of College English Teachers' Role Under Blended Teaching Model

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**Abstract:** With the rapid development of modern information society, online teaching is more and more applied to education, which doesn't mean offline teaching is discarded. Actually, the two modes are combined, which is called blended teaching. And it will gradually occupy the main position in the field of education. With the change of the English teaching model, the change of teachers' role is very important. In this paper, the author focuses on the current situation of blended teaching model, using literature method to explore the orientation of the change of college English teachers' role and its impact to the college English education.

**Key Words:** Teachers' Role; Blended Teaching; Traditional English Teaching

## 1. INTRODUCTION

With the rapid development of network technology, especially the mobile network technology, the educator all over the world are facing unprecedented opportunities and challenges. On one hand, network provides rich resources for education, so that education is no longer limited to the space and time. On the other hand, educators are definitely required to update the teaching content and change teaching models with the emergence of network in order to adapt to the new social development. Flipped class, Mooc and Microlecture are all the product of the combination of network and education. These courses are also widely applied in the college English teaching. Therefore, the blended teaching model which combines online and offline teaching rises in response.

## 2. LITERATURE REVIEW

### 2.1 The Theoretic Basis of Blended Teaching Model

Blended teaching model not only focuses on the students' dominant position, but also teachers' guiding function, which happens to coincide the main theories of Constructivist theory and Humanism.

The constructivist theory believes that learning is a process in which the learner constructs meaning based on his/her own experiences and what he/she already knows. It is believed that education is used to develop the mind, not just to rote recall what is learned. John Dewey provided a foundation for constructivism. He believed that teaching should be built based on what learners already knew and engage learners in learning activities. Teachers need to design environments and interact with learners to foster inventive, creative, and critical learners. (Wang Qiang, 2006)

Humanism is an enormous term encompassing various movements in the arts, philosophical stances, and broad applications to disciplines like psychology and education. Each human is gifted with the ability to think (rationality) and to make rational determinations, like differentiating

bad from good, so that each person may become a more moral self. In particular Plato's Socrates advocates the unfolding of the human to a better self, and does so through the Socratic method, questioning people intensively to help them understand how they think and to promote greater capacity for wisdom and rationality.

### 2.2 The Definition of Blended Teaching Model

Professor He Kehang(2004) pointed out that blended teaching aims to combine the advantages of traditional teaching and online learning. During the teaching and learning process, teachers should play a leading, enlightening and monitoring role, students should show their initiative, enthusiasm and creativity as well. He emphasized the combination of different learning models, and the role of teachers and students in the teaching activities.(Zhang Meiling, 2020)

Li Jiahou(2005) thought blended learning means to optimize, select and combine all the teaching elements to achieve the teaching objectives. Teachers and students skillfully use various teaching methods, teaching strategies, media and technology based on the needs of teaching. He focused on the integration and application of different learning elements.

To sum up, blended teaching, also called blended learning, not merely blends the network online learning and traditional classroom learning but unites the advantages of traditional teaching and modern information technology, which presents indeed the teaching concept of student-centered and the teacher as a guide, and realizes the new relationship between the teachers and the students.

## 3. TEACHERS' ROLES IN TRADITIONAL ENGLISH TEACHING AND THEIR LIMITS

### 3.1 The Concept of Teacher's Role in EFL Teaching

Ellis and Mcclintock defines "role" as the part taken by a participant in any act of communication (Huang Shuyun, 2004). Jack Croft Richards states that when roles are compared, they have the following characteristics:

- a. They involve different kinds of work and different levels of responsibility,
- b. They involve different kinds of relationships and different patterns of interaction and communication,
- c. They involve different power relationships (Huang Shuyun, 2004).

In education, according to Nunan (1993), teachers' role refers to the social and interpersonal responsibility assumed by teachers and learners as class participants and the part teachers and learners play in fulfilling learning tasks. The role of teacher is primarily an occupational role, predetermined by the nature of schools and of teaching. Teachers interpret their roles in various ways depending on the kinds of schools in which they work. With the different teaching methods they employ, their individual

personalities, and different cultural background, teachers also perform different roles. Classroom teaching is the teaching behavior happens in the classroom. Teachers can use a variety of classroom activities to achieve the teaching objectives and many of their roles can be seen directly in classroom teaching.

The concept of "role" in English teaching denotes the function that teacher and learners perform during the course of a lesson, therefore, English teacher's role means the function that teacher performs during an English lesson. As students' needs and lesson objectives are different, and teacher takes different approaches, there are different roles teacher played in English teaching.

Based on the functions the teacher performs in different activities, Harmer has identified English teachers' roles in his work: as controller in eliciting nationality words; as assessor of accuracy as students try to pronounce the words; as corrector of pronunciation; as organizer in giving instructions for the pair work, initiating it, monitoring it, and organizing feedback; as prompter while students are working together; and as resource providers if students need help with words and structures during the pair work (Xu Enmei, 2002).

### 3.2 Teachers' Roles in Traditional English Classroom

#### 3.2.1 Controller

An appropriate degree of control of the teacher over the class is vital in formal language teaching. The teacher controls the pace so that activities run smoothly and efficiently. For instance, when students do skimming and scanning tasks, it is very important for the teacher to control time. When doing lockstep activities, the teacher controls the whole class so that everyone has equal chance. When students do reproduction activities, the teacher's control can make sure the students use certain target language items and their reproduction has a degree of accuracy (Wang Qiang, 2006).

When talking about the advantages of teacher control, researchers stick to appropriate degree of control. Over-control will do no less harm to students than no control at all. What's more, different activities need a different degree of control. Some teachers use terms like controlled practice, half-controlled practice, and free practice to indicate where control is needed and where control should be relaxed. We believe that the more communicative an activity is, the less control it needs.

#### 3.2.2 Assessor

It is generally believed it is a major part of a teacher's job to assess the students' work. According to Harmer, as an assessor, the teacher does two things, that is, correcting mistakes and organizing feedback (Harmer, 1983). Harmer insists that correcting should be gentle. Gentle correcting involves showing that incorrectness has occurred, but not making a big fuss about. Organizing feedback is an effective way to assess students' performance so that they see the extent of their success or failure. When organizing feedback, it is very discouraging for the teacher to be critical. Rather, it is believed teachers should focus on students' success or progress so that a success-oriented learning atmosphere can be created.

#### 3.2.3 Organizer

The most important and difficult role that the teacher has to play is to be an organizer. Nowadays many approaches and methods advocate task-based activities. So one of the teacher's major tasks is to design and organize tasks that students can perform in the class. It is in doing this that teachers have the most freedom and most challenge, and it is where the teacher can exert creativeness in an unlimited way (Wang Qiang, 2006).

Before organizing an activity in the class, the teacher should envisage what the activity is going to be like. He should also anticipate problems that may arise when the activity is being carried out. Before students start the activity, the teacher should give instructions clearly and concisely so that students know how to do what. Sometimes a teacher demonstration can help. And if necessary, use students' native language to clarify.

While students are doing the activity, the teacher should walk around the classroom and overhear what the students are saying. If some students are not doing the right task, the teacher should rectify. Taking notes in mind will help the teacher to provide accurate feedback later.

#### 3.2.4 Prompter

When students are not sure how to start an activity, or what to do next, or what to say next, the teacher should give appropriate prompts. For instance, if students find it difficult to start talking in a task where they have to choose one of five places to go for an outing, the teacher may tell them to consider distance, means of transport, time available, safety, etc. When a student doesn't seem to be ready for an answer, the teacher can give hints; when a student finishes with a very answer, the teacher should elicit more by saying 'and...' 'Anything else' 'Yes, but why...'

#### 3.2.5 Participant

Task-based teaching methods encourage the teacher to participate in students' activities. Once the teacher has finished giving instructions, and the activity has started, there is no point for the teacher to stand in front of the classroom doing nothing. Besides monitoring the class, the teacher can also join one or two groups as an ordinary participant. However, the teacher should change his role once he joins the students. He should not dominate or appear to be authoritative, though students regard it a good chance to practice English with someone who speaks it better than themselves.

#### 3.2.6 Resource-provider

Although the jug-and-mud method has been widely criticized, the teacher is still considered a good and convenient resource for the students. In this sense, the teacher's role is the same as the role of instruction materials. However, when students are supposed to work on their own, the teacher should withhold his readiness to provide resources (Wang Qiang, 2006).

### 3.3 The Limits of the Traditional English Teachers' Role

Under the traditional class, the teacher plays a leading role, and decides what to teach and how to teach. He carefully analyzes the teaching materials, designs teaching content, while the student passively accepts the knowledge without any choices. Therefore, the student doesn't have interest in the leaning content, and have little participation.

Teachers pay more attention to the broadcast of knowledge and the monitoring of class, concern less about the design of the teaching steps and the assessment, not mention to put emphasis on the students' autonomous learning.

To sum up, the traditional teaching model is teacher-centered, in which the teacher control the class and the teaching activities, neglecting students' intuitive. The teaching model is teacher-teaching materials-students.

#### 4. ENGLISH TEACHERS' ROLE IN BLENDED TEACHING MODEL

The change of the teaching model brought huge impact and challenge on college English teachers. Teacher-centered pattern should be changed into student-centered. Teaching is no more a way to purely teach student language knowledge and language skills, but an opportunity to cultivate students' language capacity and autonomous learning ability. With the wide application of blended teaching in college, teachers' role are required to make changes. In blended teaching, teachers need to adjust their own roles to be the constructor, designer, resources-provider, listener, facilitator and assessor.

##### 4.1 Constructor

Online courses are new things, universities set up different kinds of courses resources on various net platform. Teachers can upload courseware, teaching plans, assessment and exercises on these net platforms, and the students can share all of these resources with ease and convenience after registration. It's easy to know students' learning process. As for English teaching, lots of universities teachers construct network learning resources, which is fruitful. The problem is how to lead students to construct suitable learning materials. Firstly, some materials and videos clips are just additional information, the teachers can simply upload them on the WeChat, which is convenient and speedy. Secondly, if the students need to learn systematically, it is better for the teachers to select or even make Mooc and Microlecture by themselves. Finally, the teachers can also design some testing items to check the learning results. No matter what kinds forms the teachers take, the selection and construction of the network resources should be completed by the teachers. Therefore, being the constructors are the most important thing for the teachers.

##### 4.2 Designer

Just as in the traditional teaching activities, the teachers should choose the teaching content, teaching strategies to guide the students to do autonomous learning and cooperative learning, they are also designers in blended teaching. There are three stages for blended English teaching. Before the class, according to the teaching content, the teachers can push related materials and assign tasks on the net platform, which provides time and resources for the students to do effective preview. And the teachers can check and analyze students learning situations by calculating out their leaning time, the complement of tasks. During the class, targeted guidance can be carried out based on these statistics. Group presentation individual presentation and other forms are often uses during the class. The students have

opportunities to fully present their preview results and realize the student-centered class. After class, the students can do extended exercises online, and the teachers can keep real-time tracking and evaluation.

##### 4.3 Resource-provider

In traditional classroom, textbooks and the teachers are the major resources-provider, while under this learning model, students also have rich digital resources, for example, PPT, videos, websites, Mooc, Microlecture, multi-media reading books and other network resources. The diversified learning models and resources greatly improve students' interests in English, and cultivate students' creativity and autonomous learning. Students are able to select the learning materials according to their interest anytime and anywhere. At the same time, students can also be resources-providers themselves. For example, they can upload their own video on the learning platform, so that others can comment and learn from them.

##### 4.4 Listener

Net technology helps education have extensive interaction, so that teachers and students should set up new cooperative relationship. Teachers should treat students with an attitude of equality, democracy, respect, understanding, care and appreciation. By BBS, email and other interaction, teachers can take part in students' discussion and other activities to set up harmonious relationship, and to organize the communication between students and the teacher-student communication. Listening to students, teachers can analyze their feedback, improve teaching methods and finally increase the learning effect.

##### 4.5 Facilitator

The new teaching model stipulates that the teacher should function as a facilitator to students' learning rather than simply transmitting knowledge. Students are not passive receivers, while they are the main body of information process and the constructors of meaning. So student-centered doesn't mean that teachers needn't guide them. In fact, online learning needs better self-control and good autonomous learning. Teachers need to create a positive learning environment, use various strategies to motivate learners, observe and monitor students learning process and results, use tasks and tests to help them learn more efficiently.

##### 4.6 Assessor

In blended teaching model, students have different learning styles. They can not only learn language skills based on teachers' lecturing, but also acquire knowledge by integrating online learning resources. Assessment is an indispensable section which can assist teachers to analyze the teaching effect and the achievements. Diversified learning needs diversified assessment. Blended teaching model includes online and offline assessment. On one hand, teachers should take down students' class performance, attendance, test results and other activity performance. On the other hand, teachers should know students online learning process by net platform statistics. Formative assessment and summative assessment should be combined. Teachers can invite students to be assessors together.



#### 4.7 Qualities needs

In order to successfully handle the new roles in blended teaching, teachers should prepare themselves from the following aspects.

Firstly, teachers need to have a good command of knowledge about network, for example, how to use online platforms, how to record Mooc themselves, how to test online and so on. Secondly, the change of the roles means the change of the psychology. Teachers are not always the controllers, sometimes just an observer, so teachers need to adapt to the new change from the bottom of their heart. Thirdly, not all the things online can be used as teaching materials, teachers should be alert. Any materials with wrong political attitudes should be banned.

#### 5. CONCLUSION

By taking advantage of modern methods, blended teaching model presents the advantage of online teaching, provides various teaching ways and diversified learning resources, which promotes students' intuitive. Teachers should change their thoughts, guiding students to learn actively to play major roles. Meanwhile, teachers should enlarge their own knowledge and improve their teaching ability to adapt the development of the era and the technology. Teachers' role as "constructor", "designer", "resource-provider", "facilitator" and "assessor", should be given full pay to the teaching process. Students should

effectively participate in the teaching activity. The two parties should promote the learning activity and improve the teaching reform of college English.

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