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An Analysis of English Learning in Chinese Higher Education from the Perspective of Linguistic Imperialism

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Abstract: Linguistic imperialism has gradually become a phenomenon or topic concerned deeply by many linguists, such as Robert Phillipson, along with the process of globalisation. This paper aims at figuring out whether the English learning and teaching in Chinese higher education can be a typical example of Linguistic Imperialism proposed by Robert Phillipson. This paper analyses the relationship between Linguistic Imperialism and English learning in Chinese higher education from the four major perspectives: characteristics of the context, past language learning plan and policy, current language learning plan and policy and the English varieties in Chinese higher education.

Keywords: Linguistic Imperialism; Chinese higher education; Robert Phillipson; English Learning

1. Introduction

According to the national survey conducted by the Chinese government, just in the year 2018, there are more than nineteen million students studying in universities for their bachelor's, master's or doctor's degree in China (Ministry of Education of the People's Republic of China, 2019). A large amount of students at universities in China are not only required a good mark in the university entrance English examination to enter universities but also at least a pass in the College English Test 4 (CET-4) to graduate (Bolton and Graddol, 2012). Due to this situation, Guo and Beckett (2007) claim that the language English is devaluing the language Mandarin in higher education and gradually obtaining the hegemony in Chinese higher education; however, Pan and Seargeant (2012) suggest that English will not displace or threaten Asian local language or culture, and countries such as China force students to learn English is mainly because of the demand of nation development (Tsui and Tollefson, 2015, pp: 18 – 19). Linguistic imperialism, in this paper, refers to a phenomenon that English becomes the dominant language in culture, education or media of a country whose first language is not English due to the military, economic, cultural or political power (Phillipson, 2012, pp: 203 – 225). This paper will argue that English in higher education of the Chinese mainland is not a typical case of Phillipson's linguistic imperialism; nevertheless, in some respects, such as the population of students learning English, this context can still reflect English's hegemony in some degrees. In order to demonstrate this argument, this paper will firstly introduce the key characteristics of the context and analyse the past and current language learning plan and policy of higher education about English in China and the English varieties existing in this context respectively.

2. Characteristics of the context

The paper will focus on the context – English in higher education which contains all the students studying in universities regardless of their English level on the mainland of the People's Republic of China (PRC). Unlike Hongkong which had been under British colonial rule for more than 155 years (Lai, 2019), China's mainland had experienced semi-colonial rule for seventy-nine years but has never been completely or formally colonised by any country (Osterhammel, 1986, pp: 291). Semi-colonial history left a limited influence on the spread of English in the mainland of China (ibid.). Therefore, when analysing the spread of English and linguistic imperialism in mainland China, considering the historical factors is necessary; taking other factors, such as economic power and cultural power, into account is more important, as Phillipson (2017, pp: 318, 320-321) points out that globalisation and British council's activities, as well as EU's policies in education, promote the spread of English. Moreover, English is a compulsory course in Chinese higher education. Every student in Chinese universities, except English majors who will have more professional courses in English, have to attend the course named University English at least 6 hours a week and use the coursebook designed by some key universities in China, such as Shanghai International Studies University (Bolton and Botha, 2015). However, according to the statistics from the EF English Proficiency Index (2019), Chinese students are overall regarded that have a moderate proficiency of English, ranked 40 out of 100 countries and regions. Compared with the effort the Chinese government has made to encourage people to study English, this is not the desired rank. In addition, English in Chinese universities, typically, is examination-oriented, in other words, passing the semester final exams and the CET – 4 or 6 is the primary purpose for many non-English majors (Bolton, and Botha, 2015).

3. Past language learning plan and policy

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English can occupy a prominent position in Chinese higher education that can be primarily regarded as a historical choice, and from this point of view, English learning and teaching in current higher education in China cannot reflect Phillipson's linguistic imperialism very well. Language learning plan and policy refers to the official statements, policies and rules about the language learning purposes, functions, methods and acquisition (Spolsky, 2012, pp: 3). Phillipson (2017) suggests that economic power and political power are also some of the powers that can force English to become dominated in one country, and becoming dominant in education, media and politics is one of the defining features of linguistic imperialism. At the beginning of the establishment of the People's Republic of China, problems like whether or not to learn a foreign language and which language to learn were all decided by the Chinese government (Liu, 2015). For example, Russian was highly regarded as a required second foreign language in Chinese higher education during the first seven years after China was founded in that only Russia was willing to help China improve science and technology (Mao and Min, 2004). At that time, it seems that the Chinese government had no choice except asking university students to learn Russian, which can be seen as a step of Russian's linguistic imperialism. The boom of learning Russian did not last for a long time, from the year 1978, due to the economic reform policy of Chinese government, English teaching and learning as a foreign language has appeared in higher education in Mainland China (Feng, 2009). Advocating English over other foreign languages can be viewed as the Chinese government responded to the trend of economic globalization and the current situation of Europe and the United States dominating the lifeline of the world economy. When considering the reason why the Chinese government let English replace Russian in higher education, this paper deems that this action can somehow reflect Phillipson's linguistic imperialism. An adverse argument to the one above is that developing nations promote English because of their needs of development, and this action will not endanger their local language and culture (Quirk and Widdowson, 1985). In addition, no matter Russian or English, none of them endangered or displaced the status of Chinese or became dominant in higher education. In conclusion, from the perspective of past language learning plan and policy in higher education, including its reasons and results, mainland China is not a typical example which can reflect Phillipson's linguistic imperialism.

4. Current language learning plan and policy

Economic and political power typically can be regarded as the essential reason of Chinese current proactive English language plan and policy in higher education; however, due to many factors, such as the rising population of speaking Chinese all over the world and government's policies of promoting Chinese in universities, English does not become the dominant language in Chinese university education. Because of the economic globalisation and China's reform and open-up policy issued in 1978, English is regarded as the bridge and a method to connect China with the world by the Chinese government (Gil, 2016). In this situation, there was a high demand of people who master English; hence, the Ministry of Education of China issued several English learning plans and policies to strengthen the English status in the Chinese mainland (ibid). In terms of higher education, Guidelines for Improving the Quality of Undergraduate Teaching (the Ministry of Education of China, 2001 cited in Feng, 2009) requires all universities in China to teach in English, as a medium of instruction, for at least 5 per cent to 10 per cent courses. The government calls this practice 'bilingual education'. What is more, passing the CET-4 exam to obtain an undergraduate graduation certificate and passing the CET-6 exam to get the permission of attending the postgraduate entrance examination are two important rules that still apply nowadays; nonetheless, Wuhan University of Technology, China University of Geosciences and Zhongnan University of Economics and Law has cancelled the rule that students can get their bachelor's degree only if they pass the CET – 4 (Cheng, 2016). This action may be a signal that the importance of English in universities is somehow decreasing. One opposite argument to the one above is that the Chinese government worries about the integrity of the Chinese nation and system (Adamson and Morris, 1997) and intends to expand the influence of Mandarin, so the Chinese government has issued many policies to encourage students to learn more Chinese in universities, such as 'Implementation plan of Chinese classic recitation project' issued in 2019 (Ministry of Education of the People's Republic of China). In addition, since globalisation connects the world, languages such as Japanese, French and Spanish are also popular among students in universities. As a matter of fact, English is not the only language students can learn to pass the university entrance examination; languages like Japanese and French are also on the choice list (Zheng, 2010). Another noteworthy point is that even though English now occupies a large proportion in universities' foreign language teaching and learning, student's English ability has not achieved the desired effect (Li, et al., 2016). According to the study of Bolton and Botha (2015), more than 50 per cent university students held the view that they can use English fluently and only 22 per cent of students who participated in this survey had the habit of reading in English outside the classroom. Mandarin is still the core language in higher education (Bolton and Botha, 2015). A large number of university students said that they were learning English purely because they had to attend English examinations that their teachers and universities forced them to; and they would not use this language in their daily life (Zhao and Campbell, 1995). This report was published in 1995, which means China's English higher education revealed this shortcoming 25 years ago. As exam-oriented English learning has intensified in China education system during these years, it is worth considering how much English in universities can benefit the students and the universities themselves in both long turn and short turn. To conclude, although current language plan and policy still stress the importance of English in higher education, English fails to become the dominant language and the importance of English is in danger of decreasing due to the factors mentioned above.

5. English varieties: Standard English and China English

Since attending the university entrance English examination, which is mainly aimed at checking students' ability in grammar and vocabularies of the 'standard English' (Davey et al., 2010), is necessary for every student in China, 'standard English' is the most common one of English varieties in China's higher education. 'Standard English', in this paper, refers to the British English or American English showed on the textbooks which have a complete grammar system. It could be said that university students have no choice – they have to learn the 'standard English' to support their learning, such as academic writing. In this case, the content of the textbook used in mainland China's universities is more about western countries and cultures, and the focus of these textbooks is

grammar in writing, listening and reading instead of speaking skill which the students may need more in the future (He and McKay, cited in Conteh and Meier, 2014, pp: 61 – 72). For example, Appendix 1 is part of the reading from the textbook ‘College English – Extensive Reading’ used by university students except for English majors. The topic is the four seasons of England recorded in Mr. Walton’s diary. Here comes a problem that this reading contains some knowledge that Chinese students may be confused, such as the sowing date which is different with it in China and traditions in preparing for Christmas; and the textbook does not require teachers to tell students about these details. Furthermore, the textbooks paying attention to western traditions and cultures probably will lead students into ‘Chinese Breakfast Paradox’ which means students will find that there are differences between what they learn and what they need particularly in the examination, such as most students may think it is easier for them to describe western breakfast than Chinese breakfast in English (Xu et al., 2017). In this situation, scholars proposed the conception – China English (ibid.) which will be analysed in the next part. There are many reasons forced the government and the university to advocate standard English instead of other English varieties. From the perspective of the whole country, on the one hand, the Chinese government wants more talents to cope with the globalisation in the economy and develop international trade. Therefore, the government issues policies to ask students to learn the ‘standard English’ in universities and take part in relative English examinations. From the perspective of universities in China, for one thing, all the universities should follow the laws and policies issued by the government; for another thing, it is because of the western countries’ academic power. There is no denying that English is almost the universal language in science, as there is approximately 80 per cent of academic papers from 239 countries in SCOPUS are written entirely in English (Huttner-koros, 2015). It is hard to define whether academic power is one of the sources that can cause linguistic imperialism in that Phillipson does not use this term in his books; however, the strength of military, political and economy of western countries contributes the English becoming dominant in academic paper and publications. Therefore, in this paper, academic power is one of the reasons that promote English to become dominant in other cultures. Moreover, American English and British English are highly used worldwide and can be regarded as the power of these two countries, and western countries are also willing to accelerate the spread of English globally (Phillipson, 2017). For example, the British Council labelled the language as ‘the world’s common language’ (British Council in Phillipson, 2017, pp: 321). America and Britain promote the language English to poor nations through their military power in the past. Now, these two countries make English everywhere with their economic power and political power. Considering the reason why the mainland of China advocates standard English (British or American English), this phenomenon can be seen as a case of Phillipson’s linguistic imperialism; nevertheless, the appearance of China English makes the question complex.

China English refers to a localised English which combines the core of standard English and features of Chinese, such as pronunciation and syntax; it is also increasingly suitable to express Chinese culture and ideology (He and Li, 2009). The emergence of China English itself can be seen as a resistance to English’s linguistic imperialism. Since China English is colored with Chinese ideology, culture, language characteristics (He and Li, 2009), using China English can be helpful to avoid or reduce English becoming the dominant language in the area of ideology, culture and education. In CET-4/6 test, even the assessor wants the test-takers to show their perfect standard English grammar, students often ‘create’ their own China English which can be easily understood by Chinese native speakers. For example, in the past years CET – 4/6 tests, some students translate the ‘mobile payment’ into ‘Alipay’ which is an app supporting mobile payment in China, ‘increase investment’ into ‘give more money’ and ‘company’ into ‘unit’. ‘Alipay’, ‘give more money’ as well as ‘unit’, strictly speaking, are not the proper translation of the Chinese meaning; however, almost every test marker can understand the meaning. On the hand, these creative ‘China English’ in the tests shows that the difficulties for Chinese students to express their ideas via English; on the other hand, this phenomenon shows that English does not change students’ thinking patterns – they tend to translate word by word directly. Outside the examination, Chinese university students also use plenty of China English. Xu (2017, pp: 93–95) analyses some university graduations’ daily emails and finds that Chinese students tend to add more lexical modifiers than native speakers and the email styles are also influenced by cultural differences. For instance, as China is a country with large power distance, students tend to use formal sentences in email or even WeChat; while in the countries with lower power distance such as Britain and America, students are more likely to choose fewer formal alternatives (ibid.). Xu (2010, pp: 282–298) suggests that teaching and learning China English is a good way to narrow the difference between English and Chinese culture and ideology. Xu (2010, pp: 282–298) views China English as a future power which can influence the standard English and the English-speaking community. Even though Xu’s idea ignores factors such as the difficulties of recognising China English worldwide, his arguments somehow show that China English can reduce the influence of English on local Chinese culture and avoid linguistic imperialism.

In conclusion, this context cannot be seen as a typical case of Phillipson’s linguistic imperialism in that China English prevents standard English which represents the western countries’ power becoming dominant in higher education in China’s mainland.

6. Conclusion

To conclude, even though the spread of English in higher education in the mainland of PRC contains some features of Phillipson’s linguistic imperialism, such as the reason of designing the past and current language learning plan and policy, the reason of promoting standard English and the semi-colonial influence, universities of the Chinese mainland can just reflect the linguistic imperialism to a limited degree. Since English never become the dominant language over Chinese in universities. What is more, English leaves a limited influence on university students; a large proportion of them are forced to learn English due to the examination and hardly use English in their daily life. Moreover, the development of China English reduces the influence of English on Chinese education and to some degrees, prevent the hegemony of English in higher education. According to the prediction of Xu (2017), there exist possibilities that standard English will be replaced by China English in the mainland of PRC in the future. Questions, such as whether China English will affect the status of Chinese in higher education, how to balance the development of standard English and China English, and whether there are possibilities that China English will hegemony other languages or cultures, might be worth thinking

and discussing.

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Research on the Construction and Service Mode Innovation of Open Mobile Knowledge Base in Higher Vocational Colleges

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Abstract: This article focuses on the construction of open mobile knowledge base (OMKB) in higher vocational colleges (HVCs), and adopts the methodologies of documental analysis, questionnaires, surveys and case studies to analyze OMKB in HVCs in China. Then, through the analysis of domestic and foreign data, it can be seen that the current storage volume of knowledge base of scientific research results in Chinese universities is far below the level of western developed countries. Conducting the construction of OMKB in HVCs can better comply with the trend of social development, meet the knowledge needs of the public, and form the complementarity between different institutions. However, in reality, there are still some problems and deficiencies in the OMKB service mode of HVCs, which emphasize information collection rather than knowledge application, paper literature rather than electronic data, on-campus service rather than social service, and existing knowledge rather than creative consciousness. Therefore, on the basis of full investigation and analysis, this paper proposes that the optimization path of the OMKB service mode in China's HVCs is: exploring the joint mode of cooperation between universities and society, and operation and management, improving the system platform and funding sources, and making good storage and sharing of resources. The innovation of the OMKB service mode of HVCs in China can achieve the following: carrying out innovation and improvement, laying social foundation, promoting innovation of resource evaluation system, protecting the innovation of intellectual property mode, co-construction of the HVCs' alliance knowledge base system innovation, technological innovation, - applying the advanced technology of CRIS, helping China's HVCs' knowledge base construction transformation and upgrading.

Keywords: Higher vocational colleges (HVCs); Open mobile knowledge base (OMKB); Service mode innovation

Introduction:

Presently in China, in the wide-ranging regions but especially in the less developed remote areas of the Inner Mongolia Autonomous Region, there is an urgent need to improve problems in distance education at higher education institutions, and at higher vocational colleges. These issues include how to reform, upgrade and improve the old knowledge system, information database management and services using new technologies. This paper takes the construction of open mobile knowledge base (OMKB) and service mode innovation at higher vocational colleges as the study and analyses the current situation of the construction of OMKB in China's higher vocational colleges, i.e. the knowledge system is relatively old, the utilisation rate is low, the service scope is narrow and there are gaps with practical uses. After more than fifteen years of continuous observation and cooperation exchanges with Chinese higher vocational schools, and the recent six months of direct visits, remote audio and video communications, online and offline questionnaires, etc., using a large number of data analysis, case studies and other necessary research methods, this paper summarises and analyses the construction, management, and service mode innovation of the open mobile knowledge base in Chinese modern higher vocational colleges, and proposes specific implementation measures, and a methodology for optimising the roadmap and service mode innovation.

1. Introduction to the Current Situation of OMKB Construction in HVCs

An open mobile knowledge base (OMKB) is a new type of database that adapts to the current level of desire for knowledge. Mobile means that it is not restricted by geographic location and regional scope and can be accessed through knowledge data access platforms; open also means that it is openly accessible, free of charge on public networks, and allows the operations of reading, downloading, copying, transferring and collection of information. In Japan, the Japan Consortium of Open Access Knowledge Base (JPCOAR) was established in 2016 to emphasize the development of paths for universities to undertake scientific research work, promote the exchange and integration of educational resources and research information in universities, and promote scientific research knowledge information.¹ In the United States, institutional knowledge bases of universities have also been established, and the scope of acceptable and usable knowledge bases of each university varies, mostly involving dissertations, conference papers, publications, research reports, etc., and the digital format of the contents is supplied and opened.² Compared with western countries, the research

¹ Sun Haiyan, Xie Dengfeng. The Open Access Strategy and Enlightenment of JPCOAR of Japan Association of Institutional Knowledge Base [J]. Digital Library Forum, 2019 (06)

² Yang Mingxi. Survey on Open Access Policy of Knowledge Base of American University Institutions [J]. Library Construction, 2018 (08)

on OMKBs in higher vocational colleges in China started relatively late, and the theoretical research is still in the exploration and development stage. Although China has established the China University Institutional Knowledge Base Alliance, on the whole, there are only 46 member institutions. As seen in Table 1-1, there is still a big gap between the number of knowledge bases stored in China compared to that of developed countries in the West.^[1]

Table 1-1: Statistics on the storage volume of knowledge base of scientific research results in some national open access universities³

Country	IR No./Unit ¹	IR N<1K	IR 1≤N<5K	IR 5≤N<10K	IR 10≤N<100K	IR≥100K	Total/10K
US	373	191	89	31	52	10	275
UK	192	108	44	15	22	3	47.5
Japan	135	61	38	14	20	2	28.5
China	13	10	1	1	1	0	0.65

From the perspective of research direction, most of the relevant researches on the service mode of OMKB in domestic HVCs are basic at present. The focus of the research is on the collection and retrieval of resources, as well as the innovation of the service mode and the provision of personalized services. From the research results as of April 4, 2021, I searched the keyword “open access” in China National Knowledge Infrastructure (CNKI). There were 24,300 results, among which there were 21,100 foreign related articles versus only 3,326 from China. The early research on open knowledge bases in China was Qiao Dongmei’s The Development of the Open Access Movement in Scholarly Communication and Li Wu and Liu Zheng’s A New Scholarly Publishing Model: Open Access Publishing Model. The keyword “knowledge base” was searched on CNKI, and 39,000 results were obtained, among which 31,400 were domestic Chinese documents. Among them, Parallel Database and Knowledge Base System, written and researched by Renmin University of China in 2001, is the earliest research paper on knowledge base construction in China. Thus, it can be seen that the current status of domestic research on “open access” is in line with the rhythm of digital technology development on the Internet in China, and there is a sufficient practical need and value to carry out this research.^[2]

2. The Realistic Need for The Construction of OMKB in HVCs

2.1 Satisfying the Knowledge Needs of The Public

Today we are all in an information explosion society. In front of the vast amount of data, the public plays the role of a recipient of knowledge and information, but this can no longer meet the public’s multi-dimensional needs for knowledge and information. The construction of a MOKB has its advantages over traditional libraries and information bases and can better serve the public. The mobile knowledge base can better provide information services according to the public’s knowledge and information needs, and can improve the efficiency of the use of knowledge. At this stage, the mobile knowledge base is highly integrated with the Internet, so it can combine the needs of each audience and carry out realistic analysis, so as to achieve the target. It can, on one hand, better meet the public’s knowledge needs; and on the other hand, maximise the benefits of knowledge resources.

2.2 Forming Complementarity Among Different Institutions

For knowledge bases, the traditional literature resource construction is no more than literature acquiring and cataloging, which is limited by book suppliers, funds, and the size of the library and so forth. Thus there are certain limitations. It is very certain that no single knowledge base can include all published books and documentary items. In addition, due to the characteristics of public libraries themselves, their local literature collections have very obvious regional characteristics. The open knowledge base sharing mode allows public libraries in different regions to share their knowledge and make up for their disadvantages by taking what others have. It can also effectively avoid the duplication of literature resources, which is a win-win mode. For other industries, the open sharing mode of knowledge base literature resource construction gives each other an opportunity to exchange and cooperate, and the integration of different disciplines has become the development trend of scientific research.^[3]

2.3 In Line with The Trend of Social Development

The Public Library Law of the People’s Republic of China, which was implemented on January 1, 2018, clearly puts forward that the state supports public libraries in the common construction and sharing of documentary information. Public libraries are required to “carry out joint procurement, joint cataloguing and joint services to achieve joint construction and sharing of documentary information, and to promote the effective use of documentary information”. At the same time, it is also proposed that “public libraries should provide documentary information and related consulting services for state agencies according to their own conditions”, to find out the needs of the public and provide information services. This regulation has clearly reflected the trend of social development and the need for knowledge base in the process of social development. The construction of mobile knowledge base is precisely bred in such an environment. The mobile knowledge base is a response to the expectation and demand that “knowledge resources are a public resource”, and it is an initiative to promote sustainable global knowledge sharing.

3. The Current Situation of The OMKB Service Mode in HVCs

3.1 Emphasis on Information Collection Rather Than Knowledge Application

According to the author’s own investigation, the construction of OMKB in domestic HVCs is mainly in some basic functions, focusing on the collection function of literature and library materials, and the service function is lacking. For example, the service functions of Xilin Library are mainly achievement collection and personal scientific research assistance. The construction of OMKB in domestic HVCs is still in the exploration stage or the initial stage, so its service functions and service items are still relatively few. Facing the rapidly developing society, the traditional library’s characteristic of emphasizing collection and neglecting application is no longer applicable to the needs of social development at this stage.^[4]

3 Zeng Huaming. Research on the Construction of Knowledge Base of Scientific Research Achievements Based on Open ccess [J]. Information Exploration, 2021 (01)

3.2 Emphasis on Paper Documents Rather Than Electronic Data

The construction and insufficient storage of data resources is one of the main problems in the construction of OMKB in HVCs at present. The traditional printed materials and academic journals have a long history and have been generally accepted by people. However, new academic resources such as network data resources, conference video resources, course audio resources and other data resources lack timely collection and arrangement. The public is not familiar with such data resources, coupled with the lack of public access to such resources, that resulted in the public's low acceptance. Based on factors such as insufficient public understanding, single use method and low recognition, the utilization rate of electronic data resources in the mobile knowledge base is generally low, and not yet generally recognized and accepted by the public.

3.3 Emphasis on On-Campus Services Rather Than Social Services

At present, most of the OMKB services in China's HVCs are aimed at on-campus personnel or on-campus students, while off-campus users cannot fully utilize the data resources of the bases. For instance, many HVCs' knowledge bases are only used within the schools, or within the faculty and students, and the data resources are not accessible to people outside the campus. This limits the role of knowledge base resources to a certain extent, and also causes a certain degree of waste of data resources. According to the author's survey in eight typical colleges and universities in Beijing, most of the existing knowledge bases in some undergraduate institutions as well as in China's HVCs are not fully constructed with an open system for internet users and social users, and are mostly dominated by on-campus students and staff in terms of openness and access to resources.

3.4 Emphasis on Existing Knowledge Rather Than Creation Awareness

A knowledge base with rich data resources is a key factor for data exchange and academic communication. However, in reality, most of the data in the knowledge bases of HVCs are collections of existing knowledge and certain compensation for the collected knowledge. But for the selection and collection of innovative knowledge, some HVCs do not do enough in a timely manner, especially some new academic and scientific research results are not included timely. Therefore, the mobile knowledge base of HVCs needs sufficient data resources to enrich the contents. If the participants do not actively innovate or submit relevant data material contents, it will affect the overall quality of the knowledge base, and also affect the continuous development of it.

4. Optimization Path of the OMKB Service Mode in China's HVCs

4.1 Explore the Joint Mode and Operational Management of University-Society Cooperation

The knowledge base of colleges and universities involves the knowledge sharing of multiple schools and requires strong social technical power. It is possible to collaborate on a subject in the process of strengthening the knowledge base of universities and society, with universities in the region first building their own knowledge base on this subject; The same applies to public libraries, which build their own knowledge bases in a particular discipline. After each university and public library has built its own knowledge base, the data of each member institution will be stored and managed centrally, and a unified data retrieval platform will be built. Once the unified search platform is completed, the data will be integrated to achieve a joint supply of data from universities and public libraries. Universities and public libraries can set up teams including technical staff, and consultants, etc. to take responsibility for data management and post-maintenance.^[5]

4.2 System Platform and Funding Sources

Parties in knowledge base construction can build their own search platforms using software such as Dspace in a unified manner to ensure compatibility between platforms. It is also necessary to embed citation management software Zotero, writing aid Authorea and supplementary storage software Google Drive on the unified retrieval platform. In addition to building the corresponding system platform, adequate funding must be prepared. Policy funding support from the competent authorities is the main source of funding. Funding and support from universities and various third-party organisations are also required. In addition, a certain amount of fees and funding from the corresponding data users is also an option.

4.3 Storage and Sharing of Resources

The copyright of data resources is an important element in the construction of a knowledge base. Members of knowledge base must use unified standards in data extraction, index creation, resource classification and citation. Information such as subject, person in charge, institution, abstract and time are set in a particular subject area. Data resources should be stored with uniform regulations such as content, format and copyright. When the knowledge base collects resources for storage, it must require the resource provider to provide the copyright attribution of the resources, and later when the copyright of the resource occurs the copyright transferor is required to provide the new copyright attribution of the resource. In the sharing policy, the federated platform can set a "First OA Policy", i.e. the OA policy with a higher degree of sharing is applied to the general resources, and the OA policy adapted to the specific resources is then selected. Consideration should also be given to deprivation or confidentiality of private or confidential content when developing specific OA policies.^[6]

5. Innovative Research on the Service Mode of OMKB In China's HVCs

5.1 Carrying Out Innovation and Improvement and Laying the Social Foundation

To do well in the innovation of exploring the OMKB mode in HVCs, a certain social environment foundation must be available. Firstly, it is necessary to promote the formation of more high-tech talents who understand the opening and acquisition of knowledge bases, and to set up working groups or expert groups to train the staff of OMKBs and enhance core working skills; Secondly, to carry out training, studies and lectures on mobile knowledge base service modes, to enhance the awareness and efficiency of the use of OMKBs by social personnel, and to enhance the ability to apply knowledge bases. Specific ways of publicity can include: promoting the functions and services of mobile knowledge bases through lectures, exhibitions and websites, so that more researchers and social personnel can understand the operation mode and unique advantages of mobile knowledge bases, increasing the influence

and visibility of mobile knowledge bases, encouraging them to deposit better data resources into mobile knowledge bases, and also supporting them to obtain the resources they need in the mobile knowledge bases resources for their own work and learning. For those who upload quality data resources, they should be given certain rewards and compensation, so as to encourage more scholars or experts to transfer quality data resources into the mobile knowledge base, and improve the overall data resource quality of the mobile knowledge base.

5.2 Innovation of Resource Evaluation System

Establishing unified standard attributes and format requirements. The classification and data of each university after the knowledge base is shared will affect the access to knowledge and the exchange of information if there is a lack of unified format requirements and different levels of detail in the description. While encouraging experts and scholars to upload quality data resources, it is firstly necessary to establish a complete set of applicable evaluation criteria and format requirements for use. Secondly, the relevant data content uploaded to the knowledge base should be evaluated and reviewed. Documentation of lower quality and misdirected data resources should be promptly rejected accordingly. Guidance is to be provided for resources that can be uploaded to the knowledge base after revision. Data resources and documentation with errors in orientation are prohibited from being uploaded and blocked. A professional knowledge base data maintenance team should be set up, who will gatekeep and review the vertical and horizontal knowledge base resources. At the same time, appropriate experts are regularly engaged to conduct sample checks on some resources within the knowledge base, and data resources that fail to meet the standards will be taken down and removed. Modifications are proposed to data resources with quality problems, and timely feedback is given to data resource uploaders to facilitate data updates, self-improvement and modifications.

5.3 Innovation in The Mode of Intellectual Property Rights Protection

Intellectual achievements must be protected in the process of construction and service of knowledge bases, so in the process of building OMKBs in HVCs, strict property rights protection systems and policies should be formulated, covering a range of issues such as reproduction rights, online distribution rights and privacy rights. Failure to protect intellectual property rights is an infringement on the owners of intellectual property rights, and is also detrimental to the innovation of knowledge and the development of science and technology in society as a whole. Therefore, intellectual property protection is a very important part of the process of building an OMKB in HVCs. During this process, the relationship between the rights and obligations of HVCs, resource providers and resource users should be clarified. The data resources submitted by the resource provider shall not infringe upon the intellectual property rights of others, and the resource users shall not impersonate or infringe upon the rights of the resource provider in the process of use. In the process of providing knowledge base resources, HVCs shall reasonably coordinate the rights and obligations of both parties and ensure the ownership and use rights of data resources of both parties.

5.4 Innovation of The Knowledge Base System of The Alliance Of Hvc

In the process of building an OMKB in HVCs, a certain university alone may be insufficient in terms of data types and data quantities. However, if it can unite with other knowledge fields, or various universities in this field for cooperation, it will greatly enrich the data types and data quantities in the mobile knowledge base. China's HVCs can take the form of an alliance of central knowledge bases, such as continuing to strengthen communication with the Chinese Universities Institutional Knowledge Base Alliance, encouraging more HVCs to join in, placing different subject classification areas under the responsibility of different universities to take the lead, encouraging multiple styles of sharing and analysis, and taking responsibility for the data quality of the entire university alliance mobile base. At the same time, it also promotes the integration of existing on-campus library resources and mobile knowledge base resources, carries out integration work from the perspective of traditional bibliographies and knowledge base bibliographies, integrates a unified search platform, and centralises the integration of in-library data and knowledge bases. As such, diverse modes of collaboration can be coordinated to enhance the integration and operation of data resources.

5.5 Technological Innovation - Using CRIS Technology to Help China's University Institutions Transform and Upgrade Their Knowledge Base Construction

CRIS meaning the Command Resource Information System. It combines a powerful spatial information system with a powerful point source subject database system to manage and process not only resource data with two-dimensional spatial distribution characteristics, but also multi-source, multi-class, multi-volume, multi-dimensional and multi-topic resource attribute data. It is a kind of integrated technical system with multi-database association and multi-S integration. At present, the development and application of CRIS technology has certain inspirational effects on the construction of institutional knowledge bases in Chinese universities. As a new trend in the development of institutional knowledge bases, HVCs should introduce CRIS through research in order to strengthen the internationalization attributes, interoperability specifications, semantic association characteristics and open access influence in the construction of institutional knowledge bases in universities.

6. Conclusion

The OMKB in HVCs provides a new mode for academic research and resource application, and is a trend and an important area for the development of traditional libraries. Although the construction of OMKBs in HVCs in China is still at the exploration stage, a mature mode has not yet been formed, and there are certain shortcomings and problems, and the service mode still needs to be improved and optimised. However, with the development of the big data era and the universal application of the network, the application of OMKB in HVCs will certainly have a broad market future and will be recognised and supported by more teachers, students, experts and social workers. In the process of building an OMKB for HVCs, the constructors should fully draw on the advanced experience of foreign countries, combine the specific reality of self and the unique advantages of various database resources, and explore a data service mode that meets the national conditions and realistic needs, so as to contribute to the development of science and technology and the development of culture in and beyond the country.

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- Proceedings of the 34th Annual Conference of Asian Association of Open Universities (AAOU2020) held from 21-23 October 2020 at Cinnamon Grand Hotel, Colombo, Sri Lanka.

Footnotes:

- 1. IR No./Unit: The Institutional Repository (IR) indicates how many open university repositories are. $IR0.1 \leq N < 5,000$ indicates the number of open storage databases from 1,000 to 5000.
- 2. Proceedings of the 34th Annual Conference of Asian Association of Open Universities (AAOU2020) held from 21-23 October 2020 at Cinnamon Grand Hotel, Colombo, Sri Lanka.

Strengthen the Ideological Position of Higher Education Through Telling the Story of the Chinese Communist Party

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Abstract: The centuries-old story of the Chinese Communist Party(CCP) contains a prosperous educational value which is a treasure for college ideological and political lecturers to educate college students and it is also a piece of essential equipment to build a solid ideological position among the higher education system in China. Telling the CCP's struggle story positively can cultivate college students' sense of historical responsibility for building socialism with Chinese characteristics. Telling the story of the CCP's spiritual genes would help enhance college students' cultural confidence in socialism with Chinese characteristics. Tell the CCP's story about serving the people could encourage college students to establish a mass historical outlook and pay attention to people's feelings. The in-depth study and application of the Marxist view of history, culture and party theory could guide the teaching of the CCP story in ideological and political classes. It also contributes to avoid the influence of various ideological trends in China. Building a firm ideological position in colleges is undoubtedly an essential and critical link in the extremely important work. In order to establish a strong position, it is necessary to clear the correct thinking. As ideological and political teachers in colleges and universities, we must attach importance to politics, respond from a theoretical perspective, and overcome the practical problems. Tell the party's story well, consolidate the ideological position of colleges and universities, and clarify the ideology of college students.

Keywords: The story of the Communist Party of China; Marxism, ideology; Position

At the celebration of the 100th anniversary of the founding of the Communist Party of China(CCP), General Secretary of the CCP Xi Jinping(2021) gave a speech with the glory of Marxist truth. The address reviewed the historical merits of the CCP for the great cause of Chinese national rejuvenation. In the speech, for the relay struggle of the second 100 years of the new journey, Xi made clear 'nine must', with issued a call to all the communists, placed high hopes on the young people. The speech pointed out the direction for our party to lead hundreds of millions of people and sternly responded to major theoretical and practical problems in the field of ideology. It played a decisive role in clarifying erroneous social thoughts, consolidating the consensus of the entire people, and continuing to struggle in unison. Ideological and political teachers in colleges put effort to tell the stories of the CCP to college students could inspire the spirit of striving for the future builders of socialism with Chinese characteristics, strengthen theoretical research and education in the field of ideology, and assist in building the ideological position of higher education part and maintain the future of socialism with Chinese characteristics. Staying political sobriety of the successor is a glorious mission.^[1]

1. Tell the story of the Communist Party of China and continue the spirit of struggle

The 100-year history of the CCP is magnificent, which contains inexhaustible educational resources. It is an essential part in telling the story of the CCP in the cultivation practice of forging college and university students into socialist builders and successors with Chinese characteristics. General Secretary Xi Jinping asked ideological and political teachers to improve the capability about tell stories well, and clarify the methods of ideological and political education. The teachers must make great efforts to research, detect, organize, and disseminate the 100-year story of the CCP. Significantly, as the primary channel of the higher education area, the ideological and political teaching inspires college students always maintain the attitude about following the party's high emotional identity, internal thought sublimation, and active action consciously. Therefore, attaching importance to ideological and political education, and telling the party's story well in ideological and political education is a section that cannot be ignored and it is an important way to lead college students to the right path.

1.1 Tell the story of the party's struggle and cultivate the historical responsibility of college students to build socialism with Chinese characteristics

The centuries-old history of the party is an epic of struggle with the communists' courage to sacrifice. Many martyrs sacrificed for the national flag flying in 28 years revolutionary work. They had courage to struggle and brought Chinese people a new world. During the rearrange epic, the 'iron man' jumped into the oil field to help Daqing produce oil. The Red Flag Canal was successfully constructed, and the struggle for socialist exploration and construction. In the story of spring, some farmers had the dare totally take the responsible for their work in Xiaogang village, and there were youths in the particular zone who believe "time is the money, efficiency

is the life". And there are Zhejiang merchants who travelled thousands of miles to sell goods. The Chinese women's volleyball team contributed to revitalizing Chinese sports and won glory for the country. In these scenarios, people could say the struggle of China's Reform and Opening-up Policy lead to earth-shaking changes. In the new era and new journey, particularly on the road of poverty alleviation, communists leave their homes to the village for reducing the region poverty rate. Under the Covid-19 pandemic, communists resolutely willing to sacrifice their lives to retrograde and isolated the stubborn virus. Therefore, in the contemporary practice of carrying out the struggle in the new era, college students should maintain the CCP's spirit of struggle and remember the truth that all good lives are the result of struggle.

1.2 Tell the story of the party's spiritual genes could enhance the cultural confidence of college students in socialism with Chinese characteristics

From the day it was founded, CCP has set up a great aspiration to fight for the great rejuvenation of the Chinese nation. Based on combining Marxism with the reality of China, a tremendous party-building spirit has been formed, and a party that sticks to its original aspirations and experiences hundred years of seeking happiness for the Chinese people, that is, always upholds the truth, upholds the ideals, and always fulfils the original aspirations and assumes the mission. CCP has always maintain the belief that not be afraid of sacrifices, fight bravely, always be loyal to the people and live up to the great spirit of the people. As a star-up party which only had around 50 people at the time of its establishment, CCP has firm ambitions to overthrow the three big mountains that were pressing down on the modern Chinese people, and to remove institutional obstacles for the rejuvenation of the Chinese nation, this is the arduous beginning of the communist party's spirit. Under the no economic foundation, CCP leads the people to self-reliance, broke the blockade from all sides, established a complete industrial system, and lay the material foundation for socialism with Chinese characteristics. These are the inevitable pursuits of the party-building spirit. Grasping the historical opportunity of China's development, making the historic decision of reform and opening up policy helped to find the path of socialism with Chinese characteristics, created miracles like sustained economic development and sustained social stability. These are brand-new explorations of the party-building spirit. Entering the new era comprehensively strengthened CCP's leadership and achieved historical changes, especially achieved the decisive victory in the fight against poverty and the epidemic. China's influence has become higher globally, and the people have become more prosperous. China is becoming stronger and stronger, allowing the Chinese people to look at the world. This is the continuation of the party-building spirit. The revolutionary culture formed by the CCP over the past century with the revival of Chinese traditional culture radiated by the party are the spiritual foundation for establishing and consolidating the national pride of college students in the new era and the source of enhancing college students' cultural confidence.

1.3 Tell the story of the Communist Party of China for the people could help college and university students to establish a mass historical outlook and people's feelings

The original intention of the CCP to establish a party for the public and govern for the people is fulfilled by its mission. In the war years, even if in some situation like the CCP had only one quilt, it had to divide it in half and give it to its people. Under the party's command, the people's army practised three significant disciplines and eight points of attention to carry out the mass production movement. Through carrying out the War of Resistance Against Japan and the War of Liberation and launching a large-scale production movement, the CCP liberated and enriched the people in China. During the construction period, the Three Gorges Dam Project and Qinghai-Tibet Railroad building successfully improved people's lives. During the period of reform, CCP leads China to the expansion of the opening up project, which just like the coming of the Oriental wind stimulate people's creative and innovative potential which is also for the Chinese people. In the new era, protecting the environment, regarding the green waters and green mountains as the gold and silver mountains which had improved the life standards of people as well. The CCP believes that the country belongs to the people, and the people equal to the country, fighting for the country and guarding the country is the same thing about protecting the people's hearts. The communists always have the same mindset as their people and are willing to work with the people. They believe this is the source of the party's strength, and the only correct direction to guide the future of college students in the new era as well.

The centuries-old story of the CCP converged into the most straightforward truth. A good life only could be achieved through hard work! In this case, the education and dissemination of the stories about the CCP is a powerful weapon and effective method for countering wrong thoughts in the ideological field.

2 Tell the story of the Chinese Communist Party by strengthening theoretical research and education in the field of ideology

The content of the story of the CCP is perceptual, which shows the moral strength of the party with a strong appeal. However, there lies the power of rational truth behind the story, and all embodying the Marxist theory which includes the driving force of creating history and the theory of creating advanced culture. As long as the theory is thorough, its correct treatment and handling of the relationship between the masses and political parties can persuade people. Once the Young is willing to learn the Marxist and believe Marxist, it will become a powerful material force for CCP. Strengthening the research and education of the theories mentioned above can better enhance the educational persuasiveness of the story of the CCP. The new youth is the backbone of Chinese future, and making the new youth a member of a strong party group is conducive to achieving the great rejuvenation of the Chinese nation.

2.1 Research and education of Marxist historical view

Learning and reviewing history is not for nostalgia but is useful to find the right way of the future. When summarizing the history, we must uphold a correct view of history. And this can only be the historical materialism of Marxism. As one of the two great discoveries of Marx, historical materialism view correctly revealed the mystery behind the history of human creation for the first time (Zhou, Wei, 2013)^[2]. To apply the principles of historical materialism to historical events and historical figures, we must completely abandon and resolutely oppose historical nihilism and historical idealism. In the meantime, we are fighting historical metaphysics

and other erroneous trends of incorrect thought. We must reveal both historical facts and historical truth through objectively treat the historical times, historical events, and historical figures. Not only does it focus on revealing historical facts and realities but also explains it with the materialistic, historical, and dialectical point of view and conducts a comprehensive, objective, and fair historical evaluation. Only a historical review which combines and surpasses the evaluation of the times can withstand the test of history. When we treat the history of the CCP, we must also observe the Marxist view of history, point out the great glory and correctness of the party's history, and systematically summarize its experience. It is also necessary to objectively acknowledge the mistakes made in a specific historical period, scientifically summarize the lessons, and sum up outstanding achievements and summing up errors and lessons. We must have the capability about distinguishing between mainstream and tributaries. At the same time, we must also see the leading role and hard work of the CCP itself in correcting mistakes. Only in this way can we make a comprehensive and accurate judgment on the party's history, which is a crucial part of the education of party history among college and university students.

2.2 Research and education of Marxist cultural view.

The Marxist view of culture believes that culture is the most profound power, culture is the blood of a nation, it is the spiritual home of a nation. It has been proved by history that culture gives vital contribution to both country and the nation. Culture has characters such as historical, diverse, practical and open. The formation and development of different ethnic cultures are historic and diverse as they have influenced by different historical conditions, geographical environment, production and lifestyles and some other related factors. Without specific historical conditions and production and lifestyles, cultural patterns will migrate, determined by the law of social existence that determines social consciousness. Only progressive and advanced cultures will be selected by history and thus be inherited and developed. That is to say, a part of social consciousness will form a unique cultural memory and will be passed on beyond history and combined with new social existence. Culture cannot be immutable but is in a dynamic process of development. The openness of the Chinese excellent traditional culture determines the possibility and feasibility of its integration with Marxism and defines its relationship with modern revolutionary culture and contemporary reformed culture. It can be interoperable, inclusive, and able to achieve harmonious symbiosis. The CCP has always represented the forward direction of my country's advanced culture. It is the one responsible for the mission of combining Marxism with Chinese excellent traditional culture. This can combine the ideological essence of Chinese traditional culture with necessary enlightenment and guiding significance for the development of reality with modernization. Selectively absorb and learn from the unique culture conducive to the cause of socialism and could transform it into the social, spiritual wealth that our country needs to realize modernization.

2.3 Research and education of Marxist party theory

The masses are the main body of history makers. In most periods of human history, self-contribution is a prominent feature of the masses' historical activities. Once the masses are organized, their actions to create the account will become conscious actions. In modern society, political parties are a new organization that contains the masses to make history and are the protagonists in the modern political arena. The method to distinguish advanced and backward parties is whether a political party can correctly grasp the laws of historical development, represent the interests of the overwhelming majority of the people, and be willing to dedicate, not afraid of sacrifices, and the persistent struggle. Since its birth, CCP has taken the great rejuvenation of the Chinese nation as its mission. It is a party that strives for the fundamental and long-term interests of the Chinese people. As a result, the relationship between the CCP and the people has formed inseparable ties of flesh and blood from the very beginning. All the victory of the party cannot be separated from the support of the people, and the acquisition of all the interests of the people cannot be separated from the correct leadership of the party. In the momentous speech on July 1st, General Secretary Xi Jinping made it clear that the CCP always represents the fundamental interests of the overwhelming majority of the people, which means it has no special interests of its own, and never represents the interests of any interest group or any privileged class. This has been recognized by the awakened Chinese people and contemporary college and university students.

3 Against the influence of incorrect thoughts by building a solid ideological position in colleges

Building a firm ideological position in colleges and universities is undoubtedly an essential and critical link in the extremely important work. In order to build a strong position, it is necessary to clarify the direction of the opponent's attack and the target which could be attacked easily. As ideological and political teachers in colleges and universities, we must attach importance to politics, respond from a theoretical point of view, and overcome it practically. For instance, teachers could use the spirit of General Secretary Xi Jinping's important speech at the July 1 Meeting as an ideological weapon on the basis of strengthening ideological, theoretical research and education. We will fight head-on by telling the story of the CCP, build a solid ideological position in colleges and universities, and achieve clarification in the ideology of college students. One essential way to know or predict our future is taking history as a mirror. The ideological and political teachers in colleges and universities must use history to mirror reality and see the future from a long-term perspective. From the centuries of struggle of the CCP, we must see why we succeeded in the past and how we can continue to succeed in the future(XI, 2021)^[3].

3.1 The first is to revise the 'historical opposition' trend of thought that has tried to divide the party's history into different periods

The evaluation of the history of the CCP is related to the legitimacy and legitimacy of the ruling position of the Chinese Communist Party (Wu, Zhang, 2013)^[3]. The evaluation of the history of the CCP is related to the legitimacy and legitimacy of the ruling position of the CCP .

For college and university students, it is necessary to strengthen history education. Especially about different policies before and after reform and opening up, we should realize that different policies that suit different historical periods are appropriate and normal. Acknowledging the correctness of the previous historical period does not mean denying the latter one is essential in understanding

the current situation of China. In the early stage of reform and opening up, the “Resolution on Several Historical Issues of the Party Since the Founding of the People’s Republic” passed at the Sixth Plenary Session of the 11th Central Committee of the Party affirmed that the party’s achievements in leading the people to explore and build socialism are the mainstream and have a significant impact on the history before reform and opening up. To give correct historical conclusions during this period, college ideological and political teachers should pay attention and guide college and university students to recognize this historical conclusion politically and conduct revision education for avoiding the thoughts about separated the party’s history in different periods.

3.2 The second is to strengthen the correction of the trend of “cultural opposition” by linking Marxism with the excellent traditional Chinese culture

Socialism with Chinese characteristics is derived from Marxism and rooted in Chinese excellent traditional culture (Li, 2016)^[4]. China has experienced 5,000 years of Chinese civilization, 500 years of the socialist movement, and more than 170 years of scientific socialist practice. It has also experienced a century of struggle by the CCP, thus it finally formed the path, theory, system, and culture of socialism with Chinese characteristics through all of these. This is the result of the CCP combining Marxism with the practice of the Chinese revolution, construction, and reform. It is also the result of integrating with the excellent traditional Chinese culture. General Secretary Xi Jinping’s important speech on July 1 emphasized the combination of these two. It is necessary to attach importance to the excellent Chinese traditional culture and firmly follow the Marxist road of Chinese socialism. Combine these two to promote the creative transformation and development of traditional Chinese culture. Educating college and university students to recognize and pay attention to the relationship between these two is the crucial and challenging point of the ideological and political course.

3.3 The third is to strengthen the revision of ideological trends aimed at ‘opposition between the party and the masses’ by linking the Communist Party of China with the Chinese people

Historical and realistic confirms that China’s outstanding achievements in socialist construction, the significant changes in reform and opening up, and the remarkable breakthroughs in socialism with Chinese characteristics in the new era are the result of the joint efforts of the CCP and the Chinese people. We must recognize that the leadership, struggle and dedication of the CCP will lead the Chinese people to the great rejuvenation of the Chinese nation step by step. Ideological and political courses teachers in colleges and universities should strengthen the revision of ideological trends aimed at “party-mass antagonism” by linking the CCP with the Chinese people, studying the methodology of world outlook that runs through dialectical materialism and historical materialism in General Secretary Xi’s speech on July 1 and helping college students distinguish political right from wrong (Sun, 2016)^[5]. Really and correctly understand the close connection between the party and the people, and educate college and university students to strengthen the connection between the party and the masses by learning history.

A century of CCP history is the history of a party leading the Chinese people to transform the objective world and the subjective world. People could read the party-building spirit and original mission are integrated into the story of the CCP. Ideological and political teachers in colleges and universities should work in the same direction with the party, concentrate on telling the story of the CCP, build a strong ideological position, and make new achievements in the new era and new journey.

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Project:

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- 2. This article is the phased result of the critical project of the school-level humanities and social sciences research of Chuzhou Polytechnic in 2019, “Research on the Integration of Traditional Chinese Culture of Integrity and Socialist Core Values”, project number: yjz-2019-038, host: Dong Wang.
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Contemporary Dream Aesthetic of the Taihang Dream

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Abstract: The creation of contemporary ink and landscape painting is not only a kind of artistic creation, but also represents the "unity of man and nature". The "rhythm of life" expressed in the combination of water and ink implies the unique way of Chinese painting, and finally presents a pattern of.

Keywords: Dream landscape; Idea free; Ink contingency

Introduction

Will study the subject of the writing of "dreams" appear in the image, texture, structure, ink composition of this series of ambiguity creation factors, the interpretation of dreams by Freud and surreal analysis "dream" theme is how to through the frame of mountain, through dreams, imagination and some chance to achieve mental free release^[1].

1. Dream Inspired Creative Inspiration

Taihang Mountain is the most representative mountain range in Chinese landform. In the early stage of "dream making", I have been exploring Taihang Mountain, which exists in my dreams for many years. At the present stage of exploration, I put the Taihang Mountain into my "dream", prompting me to have more strange dreams. Given by the enlightenment of Freud's interpretation, originally the dream is not clear. It is a little bit strange. The dream is about the scene of my childhood. Freud also mentioned that dream, which is completely around the initial impressions of childhood, will replay the details, and recall you small things during wakefulness. "The Interpretation of Dreams" leads me to restore human nature. In reality, people are kindness because of the constraints of morality, fear and so on. But in dreams, we can find a more authentic version of ourselves. Just like this, it is the scene that the heart yearns for but the reality cannot reach, so I record it in my work. Therefore, more people can see the dream landscape^[2].

Different periods and fields have brought different influences on my work. While pursuing classical traditional culture, we also need to be able to present the value of contemporary life. Tradition and contemporary are mentioned here. But in my "dream landscape", I did not lose the traditional painting skills, and added modern thinking. In the process of giving and inspiring me all kinds of bold and innovative ideas, the teacher has always emphasized "losing the tradition", "the painting expression form of depicting the urban landscape appeared in the field of contemporary Chinese landscape painting I studied". It has a great influence on his creation. There are not many themes created without losing tradition and following the changes of The Times. The dream landscape in my later creation has given hints and help. The starting point of Chinese painting is different from western painting on the one hand, the former is more emphasis on tradition, we fight, is to learn how to construct a complete set of painting, words and grammar, as well as how the black and white ink and wash each other mutual penetration, in building the relationship, the images of the vitality, the change of the rock, character to express, not out of thin air, make the white space in the picture has a sense of rhythm. As Huang Binhong said, "White is like the sky", the distribution of black and white, hidden and visible are all creating a rhythm, that is, the movement of breath is transformed, that is, the "coexistence of existence and existence" of Tao emphasized in traditional Chinese culture. How to construct knowledge system is based on the traditional Tao. Contemplation "all things are complacent", this sentence with my study landscape painting in recent years, this is as a landscape painter should reflect the spirit of the height, in painting and creation, the feelings and the beauty of nature changes into the ink, the exquisite and abound change and real performance on rice paper, so as to build character and style of painting, make works under the condition of the inevitable occasional, raise his existence value^[3].

2. Analysis of dream creation examples

Landscape painting has been drawing in accordance with their own ideas over the years, trying not to be affected by the outside world, do not forget the original intention. I express my inner world. I am sincere and natural. The self-personality pursued by art forms and naturally flowing from inside to outside will be reflected in my creation. To create some "surprises", I put some impressive things such as hot air balloon, cable car into my art work. Of course, many of them are in the dream, such as work "like a dream to dream" in the world of pink in the air floating big red balloons, this was often play helium balloons at an early age, with the progress of the society, now the children play of the balloon has become all kinds of novel appearance, childhood memory has disappeared in the present society, this kind of feeling, a variety of miss make it into a dream, in the dream as the balloon slowly floating in the clouds, Thus "Like a Dream to a Dream" was born^[4].

3. The comprehension brought by early sketches of creation

In sketching, the ink spilled out, the ink drawn out on the pen, the texture is very important. Stone to depict rich, pen, line feeling to be more rich, reflect the center line, draw the shape will be solid, to avoid thin, be seen the content will be rich. Practice this correspondence with nature, and make the habit of using the pen and hand in accordance with the laws of nature, and of course with the heart, which changes with the change of the inner mood. Nature tells me how to use the pen, and the brushstrokes we draw are in line with nature. This is what the ancients referred to as "Why tao, why nature, why one's own feelings". How dry brush and wet ink infiltrate and transform each other, how to integrate them, how to achieve the "unity of nature and man", only through the feeling of sketching, permeate the true feeling, can this emotion be put into the creation, the creation of works only to move yourself, can move others. Of course, to create an aura in the picture, so that the environment of the protagonist's existence is more clear, so that the content represented by the protagonist is more prominent, with the help of some things outside the picture, it is the supporting role. For example, when actors perform, the position of lighting is very important, lighting props to create the atmosphere and scene, the performance of the leading role will be vivid^[5].

4. The beautiful dream of Taihang Mountain

"Ego", for my mind, means to look back at my own inner activities and try to figure out "what I really want to do". It is instinct, a "primitive" desire and an impulse of freedom. The ego, the reason, restrains itself from impulse for "realistic" considerations. The dream in the painting is a picture presented by the combination of my own dream and restrained some emotions under the impulse of emotion. I conclude that this is the presentation of "self and heart". So-called personalized thing, is to have a prompt people to feel the vitality of nature, inspired each other out with more content, summed up in the ancient Chinese in-depth nature "eye heart" knowledge, eyes to see in the nature, the heart want to remember, eyes contrast is the common nature, is the typical natural trade-offs^[6]. To refine the beauty of nature to make it more representative, broader, and able to represent the generalization of a certain region. I once had a dream. In the beginning, I could not find the way to the light in the overlapping barrier. I finally walked out after following the movement of various screens. I thought the motion of screen guided me. A layer of overlapping screen and the scenery outside the window are united in wedlock rise, it was very beautiful, going towards seaside along with sunshine^[7].

5. Peroration

Through the analysis of Freud's dream as a clue, this paper discusses the painting factors related to dreams and the creation process and perception of dreamland landscape, introduces his own creation logic and the enlightenment brought by Freud in creation.

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Research on Mobile-Assisted English Language Learning Among Primary School Students in China: Focusing on Students' Feedback of Learning English with Mobile Devices

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Abstract: Guided by the conceptual framework of mobile-assisted language learning (MALL) in informal settings, this study investigates how primary school students in China use mobile devices to learn English out of class, focusing on students' feedback of learning English through an app named "We Speak". The data was collected through quantitative data of completed responses to a designed online survey questionnaire and qualitative data from follow-up email interviews with parents and face-to-face interviews with teachers. This study demonstrates students' positive and effective learning feedback by using this app to practice English and suggests an approach for English as a foreign language (EFL) learning with mobile devices^[1]. The findings bear significant pedagogical implications for teachers to integrate MALL into their teaching curriculum objective to achieve specific teaching tasks of mobile pedagogy and provide parents with hints on how to better schedule and support their children's learning outside class.

Keywords: Mobile-assisted language learning (MALL); Primary school students; Mobile device; Feedback; English language teaching (ELT); Mobile pedagogy

1. Introduction

People's enthusiasm for learning English has been on a rise in China with the rapid development of economy and technology, learning languages online and via mobile devices are becoming more and more of a norm than of being peripheral with the ever increasing communication across the borders and the development of educational technologies, and the boundaries between formal and informal learning are becoming more blurred than ever before. English learners are no longer limited to the face-to-face learning environment, it is not surprising that language teachers have also adopted mobile technologies into their individual teaching and learning contexts (Stockwell & Hubbard, 2013). After the widely using of computer-assisted language learning (CALL) for teaching and learning (Stockwell, 2012), another booming learning English way is mobile-assisted language learning (MALL) through mobile devices (Kukulka-Hulme, 2012).

2. Background

In accordance with the teaching curriculum objectives, for primary school students, English teachers will choose some supplementary learning materials or learning through app by using mobile devices for extra practicing out of classroom in order to better achieve the teaching objectives and intentionally giving more English input for these young English learners. According to my six-year-old child's English learning curriculum in grade one in a private primary school, I have known that her English teacher will always arrange some assignment for them to learn or practice through the app named "We Speak" after class by downloading this app on the iPad or the mobile phone. However, it seems that we didn't know whether it is effective for the students to learn English from this app and students' feedback were unknown by learning through these mobile devices, so my this current research will focus on students' feedback such as attitudes, perceptions and factors that influenced students' acceptance of these mobile devices.

3. Literature Review

For this section, I have reviewed some relevant literature on MALL in general and introduce the research gap for my current paper to fill.

Stockwell & Hubbard (2013) propose that MALL has developed over the past decade as a sophisticated field within its own right, with an increasing number of articles that examine various mobile devices used in environments both inside and outside of formal language learning situations. MALL has been defined as the use of "mobile technologies in language learning, especially in situations where device portability offers specific advantages" (Kukulka-Hulme, 2013, p. 3701). MALL includes devices ranging from MP3/MP4 players, smart phones, iPads, e-book readers through laptop, etc.. There has been a surprisingly large amount of research published over the past two decades that has seen the field develop along with the enormous steps forward that have taken place in mobile technologies^[2].

Kukulska-Hulme, Norris & Donohue (2015) suggest that MALL learning needs guides of mobile pedagogy for English language teaching (ELT), mobile pedagogy for ELT is founded on the belief that while mobile devices can support self-directed learning and the role of teachers is equally important. Mobile-assisted language learning is not simply the transfer of current teaching and learning materials and practices to a mobile device, but a complete reconceptualisation of these. This guide aims to share knowledge and highlight some appropriate pedagogical strategies with teachers and support staff so that mobile devices can be used more effectively in teaching and learning English. The adoption of mobile devices has potentially far-reaching consequences for learners, learning design and how learning is supported by teachers and advisors. So for students to achieve the effectiveness of any mobile-assisted language learning, mobile pedagogy should be taken into consideration for teachers to support students' effective and careful use of mobile devices.

Qian & Tang (2018) demonstrate that students' main motivation for engaging in mobile-assisted English learning is to fill in the gaps in their daily schedule in order to maximize available time, and the majority use mobile devices to support formal course learning. This study also reveals that teachers play a very limited role as perceived by students, while students expect more support from teachers for their out-of-class mobile-assisted language learning. The authors have also introduced that there are a few studies on user's attitudes^[3], perceptions and factors influencing learners' acceptance of mobile devices for language learning. The majority of studies have focused on the feasibility of a specific application and its effectiveness of certain language skills such as speaking and vocabulary acquisition.

The above literature review suggest to me that mobile device are widely used for English learning and many researches have been published over the past two decades that has seen the field of MALL develop. And according to Kukulska-Hulme's mobile pedagogy project, student's out of class MALL learning need teacher's effective support^[4]. Moreover, in the research of Qian & Tang (2018), the study filled the gap in the field on how and why adult distance language learners of English in China use mobile devices; what apps and resources they use and why; and their attitudes towards the tutor's role in MALL. However, it seems that few research have been reported for the young primary school students to use a mobile device for English learning, since young learner always lack of self-discipline, so how they use mobile device to learn English out of class? Is learning effective and achieving some improvement? Do they get some feedback from these learning? What's their attitudes towards this extra learning at home by mobile learning and how teacher support their mobile-assisted language learning by using mobile devices through an app? Therefore, my current research will try to focus on young students' learning feedback, including students and their parents' attitudes or views, factors that influenced learners' acceptance of by using mobile device through an app "We Speak", and teacher's feedback and perceptions towards this app's learning^[5]. This current research is important for teachers to have a better understanding about how the young students using mobile devices to improve their language learning outside class, and for students' parents they can better know the process of this learning so as to better support and cooperate with the teachers to achieve an effective learning.

In the following section, I'll present my research question and methodology.

4. Research Proposal

4.1 Context and Research Questions

This study is undertaken in the Asia-Pacific Experimental School of Beijing Normal University. The course offered on the app "We Speak" which is a multimedia teaching materials app developed according to the compilation of curriculum standards and can be used both in the classroom and at home. This app designed by the developer aims to help students to improve the ability of listening comprehension and oral expression around the topic and is fit to primary school students with zero basic English ability from grade one to grade two students^[6].

The overall aim of this study is to investigate how mobile learning impact on the primary's school young students' learning and whether they get some effective improvement by this informal learning through the app "We Speak". I designed the below two specific questions:

RQ1: What are the students and their parents' attitudes or views of learning English from this app via mobile devices?

RQ2: What's the teachers' perception towards this app's learning outside class in terms of achieving their teaching curriculum objective and how?

4.2 Research Design

This study will be undertaken with grade one English learning course offered by the app "We Speak". The learning course shall be from Unit 1 to Unit 5 with 4 level courses: 1A, 1B, 2A and 2B according to the learning curriculum for one semester. Students are required to study about 4 level courses in one semester (each level course extended for 1 month about 4 weeks). The assessment of experimental learning will include the app's automatic evaluation of dynamic scores according to the learning index graph formed in the app based on students' monthly learning time, learning days, scores and the same classroom's ranking list. And the assessment also consists of formative assessment in the form of unit-based assessment and final assessment in the form of a final exam after one semester's learning^[7]. The design of the experimental learning will provide the results and give some implications to the teachers for their mobile pedagogy. The experimental learning will extend for one semester from the beginning of September 2019 to the end of January 2020.

4.3 Research Method

Kukulska-Hulme(2012) puts forward the seven questions for the analysis of MALL data or for interviewing participants for MALL research projects. The seven questions for MALL analysis include: "What is the interviewee trying to learn? How is the interviewee doing this learning? Who else is involved in the interviewee's learning? Which mobile devices support the learning? What is the interviewee's motivation or need? Where is the locations, the favorite places? And When: times of the day, patterns of use". The formulation of these seven questions in the questionnaire, the email interview questions and the analysis of data are guided by these

seven questions will help to answer the research questions of this study^[8].

Therefore, a mixed-methods research approach combining both quantitative and qualitative studies will be undertaken.

Quantitative Methodology:

A student questionnaire will be designed to cover the above seven questions, students' basic information, English learning history and pattern (scheduled or spontaneous), familiarity with the app and their feedback of learning from this app "We Speak" so as to diagnose their English language proficiency, their learning feeling and results by using mobile devices to learn or practice English.

Qualitative Methodology:

Face-to-face interviews will be conducted with the participating teachers focusing mainly on their feedback of experimental teaching with this supplementary learning from this app, particularly on their perceptions towards students' learning from the app to support and enhance their teaching objective. And the email interview questions covering the above research questions and seven questions proposed by Kukulska-Hulme will be sent to the students and their parents for questionnaire so as to better know the students' learning feedback by using of this app. These two ways of interviews will be the guide to better help answer the above research questions.

4.4 Research Participants

The participants of the study shall be approximately 105 students from 3 classes in grade one, and all the students are from a noted primary school: Asia-Pacific Experimental School of Beijing Normal University (I intend to design my research in this school since my child is also studying in this school). The students are all the new enrollment students in grade one aged 6 or 7 years old and all the students with nearly zero English basic level (maybe some students have already learnt some English outside the class, I'll try to avoid this kind of students to participate). And 10 parents whose children completed the online questionnaire volunteered to be interviewed through the email, each parent corresponding to each student.

The three participating teachers shall be from three classes, who all have MA degrees or above degree in either Applied Linguistics or English Language Education, having been teaching English for grade one students more than 5 years, and are keen on using technology in teaching and are familiar with the usage of the app "We Speak".

4.5 Data Collection and Analysis

Three different kinds of data collections shall be used: online survey questionnaire and follow-up interviews with parents and face-to-face interview with teachers.

The online survey questionnaire is prepared in Chinese and sent to approximately 105 students, questionnaire will be total 10 questions including above research questions and seven questions Kukulska-Hulme proposed: " 1.How often do you use this app for English learning? 2.What's your views of learning English from this app, is it effective? 3.Do your teacher assign homework for you to complete every day by learning through this app? 4.What are you trying to learn? 5.How are you using this app for learning ? 6.Who else is involved in your learning? 7.Which mobile devices support your learning?(iPad, mobile phone or computer) 8. What is your motivation or need by using this app? 9.Where is your favorite places for this mobile learning? And 10.When do you usually use this app for learning? ". Considering these young students, their parents can help them to complete this questionnaire to some extent^[9].

The 10 student parents whose kids completed the online questionnaire are volunteered to be interviewed so that we can get more insured and correct information from students' using of this app. The email interviews comprised five open-ended questions in Chinese intended to gain a deeper understanding of students' experiences in terms of the perceived benefits and drawbacks of mobile devices in their learning: " 1.Why do you prefer this apps to others? 2. Do you think your kids English is improved through this mobile learning? Is it effective? 3. How do you want the school teacher to support your kid's using of this mobile learning? 4. Do your kids like this kind of mobile learning? Is it interesting for them? 5. Do you think what else should be done or improved for this mobile learning? ". All these 10 parents replied to the questions by email with some degree of detailed information.

In addition, three teachers will be interviewed for the three targeted question: " 1. How do you use this app to support your teaching curriculum objectives ? 2. Do you think is it effective for students to use this app for extra time learning and how do they improve their English ? 3.What's the benefit and drawback from students' using of this app, what else do you think should be done for improvement ". And teachers response can give some implication for the mobile pedagogy and provide suggestions for the need of training about intergarting MALL into their teaching curriculum objective^[10].

Finally, quantitative descriptive analysis will be carried out for analyzing the objective questions in the questionnaire survey to provide us with an initial broad picture of the research questions we wanted to answer. Some descriptive statistics will be generated by the online survey tool itself. And qualitative data from the interviews both with parents' and teachers' responses to the questions in the survey will be analyzed manually. All this will be also integrated with the information of the participants for the focused research questions.

4.6 Anticipated Research Results and Progress

It is expected that this research will indicate the positive and effective learning feedback from this app's extra time learning. Students feel interesting by learning through this app and can improve their English speaking and listening if they insist to practicing and learning through this app via mobile devices. For parents, the biggest advantage of MALL is that it could help their kids to study whenever and wherever they would like to, then they can accompany their children for this learning to get a more effective learning achievement according to their own time. For teachers, they can arrange the learning tasks for the students' extra time learning through this app outside class and can support their teaching by intergarting MALL into their teaching curriculum objective to achieve specific teaching/learning tasks of mobile pedagogy, and simultaneously, students' English skill will be improved to some extent. The finding anticipates that for the primary school students participate in this study, mobile learning has become a very important part of their learning process, moreover the benefits and effective feedback they obtained by learning from this app via mobile devices indicate

that students have made great progress through this mobile-assisted language learning.

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A Study on the Factors Influencing the Performance of Teacher Teams in Colleges and Universities Under Deterministic Task Types

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Abstract: The purpose of this study was to investigate the effects of task goals, competition, and the way information is distributed on the performance of teacher teams in colleges and universities under deterministic task types. The results of the experiment conducted with 252 subjects showed that the completion of goals was quicker for goals at low levels with even distribution of information. In terms of contextual performance, members had a better understanding of perspectives when information was fully shared. In terms of contextual performance, members were more satisfied with their individual decisions when there was no competition. For goals at high levels, subjects completed goals more quickly without competition, and completed goals more quickly when information was fully shared. In terms of contextual performance, the presence or absence of competition and information distribution mode had no effect on any of the five dimensions.

Keywords: Team performance; Goals; Competition; Information distribution mode

Project of the subject: “Research on the influence mechanism of professional psychological capital on job performance of teachers in colleges and universities” (zdfz18018), a key project of Shenzhen Education Science Planning in 2018, Guangdong Province, China, Host: Wu Guoqing.

The increasingly complex external environment and the increasingly fierce competition in research and teaching faced by modern universities require universities to adopt more flexible, problem- and task-oriented organizational forms, and teams are an effective organizational form. Team performance is a description of the overall situation of team operation, which is affected by many factors inside and outside the team, and therefore there are various factors affecting team performance^[1].

Goal theory, first proposed by Locke and others, argues that goals are associated with improved performance because they encourage morale, sharpen employees' focus, urge them to work harder and encourage them to maintain their efforts. They can also encourage employees to actively propose strategies^[2]. However, there are few studies on whether there is any change in employees' performance for goals at different levels. So in this study, we selected three independent variables (team goals, intra-team competition, and information distribution modes) under deterministic task types to experimentally verify the effects on team performance of teachers in colleges and universities^[3].

I. Research Methodology

(1) Research methods and tools

Combining the research questions and objectives of this paper, a two-factor completely randomized experimental design of 2 (presence or absence of intra-team competition) × 2 (information distribution mode) was chosen to be used at three different target levels. Finally, SPSS statistical software was used for analysis.

(2) Study design and definitions of variable operations

This study used a two-factor completely randomized experimental design of 2 (presence or absence of intra-team competition) × 2 (information distribution mode). The operational definition of intra-team competition in this experiment was that subjects were told that the total score for this task was 480 and that their goal was to achieve a score of 140 (30% of the total score) for Experiment 1, 240 (50% of the total score) for Experiment 2, and 480 (total score) for Experiment 3. No competition within the team was defined as the subjects were told that the total score for this task was 480 and that their goal was to achieve the team score. As for the information distribution mode, it is divided into two ways: fully shared information and evenly distributed information. Level 1 fully shared information means that each member has all the task information. Level 2 evenly distributed information means that each member has only a part of the task information, but the sum of information is the same as the fully shared information.

Team performance is used as the dependent variable, and team performance is divided into task performance and contextual performance. For task performance in this experiment, we use the team's time to complete the goal (accurate to the second) as a measuring standard.

2. Findings

2.1 Effect of the presence or absence of competition and the information distribution mode within the team on team performance for goals at low levels

The purpose of the experiment was to investigate whether the presence or absence of competition and the information distribution mode within a team has a significant effect on team performance under a deterministic task type for goals at low levels (goal setting was the 30% of the total score). Analysis of variance of the effect of two factors on the time to complete the goals at low levels

(1) Analysis of variance for two-factor independent samples

It was found that there was a significant difference between the information distribution mode and the time to complete the goal at the 0.01 level. And the subjects completed the goal more quickly in the case of even information distribution ($M=519.000$) than in the case of fully shared information ($M=647.000$). Whereas there was no significant difference between the presence or absence of competition and the time to complete the goal, and there was an interaction between the presence or absence of competition and the information distribution mode.

(2) Interaction analysis between presence and absence of competition and the information distribution mode on the completion time of the goal

Since there was an interaction between the presence or absence of competition and the information distribution mode, a further simple effect analysis was performed. The results showed that with even distribution of information, there was a significant difference between the presence and absence of competition on the time to complete the goal at the 0.01 level, $F=17.051$, $p=0.003$, $p<0.01$. That indicated that when the information was evenly distributed to the subjects, the time to complete the goal was shorter in the case of no competition ($M=433.667$, $SD=29.396$) than in the case of competition ($M=605.333$, $SD=29.396$). With fully shared information, there was a significant difference between the presence and absence of competition on the time to complete the goal at the 0.01 level, $F=23.610$, $p=0.001$. That indicated that with fully shared information, subjects in competition ($M=546.000$, $SD=29.396$) completed the goal more quickly than without competition ($M=748.000$, $SD=29.396$).

With competition, there was no significant difference in the effect of information distribution mode on the time to complete the goal, $F=2.037$, $p=0.191$, $p>0.05$. In the condition without competition, there was a significant difference in the effect of information distribution mode on the time to complete the goal at the 0.001 level, $F=57.170$, $p=0.000$, $p<0.001$. That indicated that in the condition without subject competition, subjects with the evenly distributed information ($M=433.667$, $SD=29.396$) condition completed the goal much more quickly than subjects with the fully shared information ($M=748.000$, $SD=29.396$).

(3) Contextual performance

The analysis revealed that there was a significant difference ($p<0.05$) between the group with evenly distributed information and the group with fully shared information from the perspective of contextual performance. Thus, members' understanding of opinion is better under the condition of fully shared information than in the condition of evenly distributed information. While there is no significant difference between the two groups in the satisfaction with group decision making, team satisfaction, ease of expressing viewpoints, and satisfaction with individual decision making.

2.2 The influence of intra-team competition and information distribution mode on team performance for goals at middle levels.

To investigate whether the presence or absence of intra-team competition and information distribution mode has a significant effect on team performance in the deterministic task with a goal at the middle level (goal setting was the 50% of the total score).

(1) Analysis of variance results for two-factor independent samples

The results revealed that the presence or absence of competition had a significant influence on the time to complete the goal at the 0.05 level, and subjects completed the goal more quickly with competition ($M=639.333$) than without competition ($M=740.000$). There was a significant difference between the information distribution modes and the time to complete the goal at the 0.01 level, with subjects completing the goal more quickly with fully shared information ($M=599.000$) than with evenly distributed information ($M=780.333$). There was no interaction between the presence or absence of competition and the information distribution modes.

(2) Contextual performance

The analysis revealed that there was a significant difference between the group with competition and the group without competition in the contextual performance of individual decision satisfaction ($p<0.05$). Thus, members' satisfaction with individual decision making was higher in the condition of no competition than in the condition of competition. There were no significant differences between the group with evenly distributed information and the group with fully shared information on any of the five dimensions of the contextual performance. These five dimensions were satisfaction with group decision making, satisfaction with team, ease of expressing opinions, understanding of opinion, and satisfaction with individual decision making.

2.3 The effect of competition and information distribution on team performance for goals at high levels

To investigate whether the presence or absence of competition and the information distribution mode in the team had a significant effect on team performance under a deterministic task (as in Experiment 1) with a goal at a high level (goal setting was the total score).

(1) Analysis of variance results for two-factor independent samples

The results revealed that there was a significant difference between the presence or absence of competition and time to complete the goal at the 0.05 level, with subjects completing the goal more quickly without competition ($M=1035.833$) than with competition ($M=1176.500$). There was a significant difference between the information distribution mode and the time to complete the goal at the 0.001 level, with subjects completing the goal more quickly with fully shared information ($M=940.333$) than with evenly distributed information ($M=1272.000$). There was no interaction between the presence or absence of competition and the information distribution mode.

(2) Contextual performance

The analysis revealed that there were no significant differences between the groups with and without competition on any of the five dimensions of the contextual performance. These five dimensions were satisfaction with group decision making, satisfaction with team, ease of expressing opinions, understanding of opinions, and satisfaction with individual decision making. There were no significant differences between the group with evenly distributed information and the group with fully shared information on any of the five dimensions of the contextual performance. These five dimensions were satisfaction with group decision making, satisfaction with team, ease of expressing opinions, understanding of opinion, and satisfaction with individual decision making.

3. Conclusion

3.1 The influence of the presence or absence of competition in the team and the information distribution mode on team performance for goals at low levels.

The information distribution mode had a significant effect on the time to complete the goal, with subjects completing the goal more quickly when information was evenly distributed than when information was fully shared. The intellectual source limitation theory of attention suggests that attention is a very limited mental resource, and when more resources are allocated to perform one task, the assignment is improved. But other tasks are limited by the intellectual source, which affects the efficiency of completing the task. With fully shared information, the task was hindered by subjects paying too much attention to other people's information, resulting in a situation where with fully shared information the goal was not accomplished as quickly as with evenly distributed information^[4].

There was an interaction between the presence or absence of competition and the information distribution mode in terms of the time to complete the goal. A simple effect analysis of the interaction showed that when information was evenly distributed, subjects completed the goal more quickly in the condition of no competition than in the condition of competition. In that case, each subject had his or her own task information and could not see others', so that he or she could concentrate and complete his or her task without interference. And because the level of the goal was relatively low, he or she completed the task more quickly. With fully shared information, it took more time for subjects to complete the goal with competition than without competition. In that case, subjects had the pressure of competition and knew what other people's tasks were. At the same time, teachers in colleges and universities had active thinking and strong logical capability, so they could integrate various resources to complete the goal quickly by knowing both themselves and their adversaries. Without competition, subjects with the evenly distributed information completed the goal much more quickly than with completely shared information. In this case, there was no competition within the team, everyone had a common goal and could work together for the goal. At the same time, the information is evenly distributed so that everyone can spend less time processing the information and thus have more time to complete the task, improving the efficiency of accomplishing the goal.

3.2 The influence of the presence or absence of competition and the information distribution mode in the team on team performance for goals at middle levels

Statistical analysis of the experimental results showed that the presence or absence of competition had a significant effect on the time to complete the goal, and subjects completed the goal more quickly in the presence of competition than in the absence of competition. The information distribution mode also had a significant effect on the time to complete the goal, with subjects completing the goal more quickly with fully shared information than with evenly distributed information.

In this study, the goal setting was to complete fifty percent of the overall task, making the task relatively more difficult compared to the first experiment. In that case, it took more time to complete the goal, thus creating the competitive atmosphere. The atmosphere of competition puts pressure on everyone to complete the task, stimulates their potential to a certain extent, sharpens their attention on working and improves their efficiency in completing the task, because everyone is burdened with the possibility of being punished, and no one wants to perform a show in front of the crowd because of dereliction of duty.

The information distribution mode had a more significant effect on the time to complete the goal in this experiment. Unlike Experiment 1, the group with fully shared information completed the goal more quickly than the evenly distributed group. What's the reason behind that? In the condition of even distribution of information, each member has incomplete information. And they need to integrate the information before taking action, which increases the time to fulfill the goal. The subjects in the group with fully shared information have a comprehensive understanding of their own and others' tasks, and they will be more likely to enter the state than the subjects in the group with evenly distributed information. In the state of knowing both themselves and their adversaries, it is easier for people to cooperate and make a reasonable division of labor in order to accomplish the goal to the greatest extent possible, so as to complete the task effectively.

3.3 The influence of the presence or absence of competition and the information distribution mode in the team on team performance for goals at high levels

Statistical analysis of the experimental results showed that the presence or absence of competition had a significant effect on the time to complete the goal, and subjects completed the goal more quickly in the absence of competition than in the presence of competition. There was a significant difference at the 0.001 level between the information distribution mode and the time to complete the goal, with subjects completing the goal more quickly with fully shared information than with evenly distributed information.

The goal setting for this experiment was higher compared to the previous two experiments, and it was to accomplish all the tasks, which put a lot of pressure on the team. This pressure was invariably increased when combined with the presence of competition. The stress performance model showed that there was a relationship between stress and job performance that could be explained by the inverted U model. According to the theory of the inverted U model, when the sense of stress is below a moderate level, it helps to stimulate the organism and enhance the organism's reaction capacity. Then the individual will work better and more quickly and the individual will have more enthusiasm for work. If too much pressure is imposed on the individual and too many demands and restrictions are placed on the individual, the performance of the individual will be weakened.

The information distribution mode had a significant effect on the time to complete the goal at a high level, with the fully shared group completing the goal much more quickly than the evenly distributed group. In the information-sharing approach, subjects tend to take all information into account and make choices according to the same weighting, which in turn improves the quality of decision making. Therefore, in the case of a heavy information load, a fully shared distribution of information can improve the efficiency of the team in completing the task than the evenly shared distribution of information.

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A Homed-based PLC for Improving Parents' Leadership Under the "Double Reduction" in China

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Abstract : Recently, China government conducts a new education reform policy-Double Reduction policy, including the reduce the student homework burden and shadow education burden, which draw the heated discussion to the family education. Though recently researchers began to discuss the relationship between parent leadership and children study performance, they mainly considered the leadership as antecedents of parent involvement, while few considered parenting mode. This paper aims to find out a home-based PLC mode for improving multi-parents leadership under this policy.

Keywords: Professional Learning Community (PLC); Parents' leadership; Double Reduction policy

1. Introduction

At the 24th of July 2021, The Opinions on Further Reducing the burden of homework and off-campus training of Students in Compulsory Education, referred to as "Double Reduction", was issued by the General Office of the General Office of the State Council, the CPC Central Committee. Under the new policy circumstance, coach homework transfer from the shadow education to the parenting among the primary students after school. What strategies Parent Leaders used to engage families and how their leadership influenced families.

"Double reduction" policy, First, to reduce the homework burden of students in the compulsory education stage; Second, we will resolutely reduce shadow education (off-school training) in disciplines. The objectives of this policy is to reduce excessive homework burden of students, off-school training burden, family education expenditure and the corresponding energy burden of parents within one year, remarkable results will bring in three years, and aim to improve people's satisfaction with education significantly. To alleviate educational anxiety and promote students' all-round development and healthy growth. Three specific measures are including: Control homework; improve after-school service level; standardize off-campus training behavior.^[1]

2. Theory Related

2.1 Professional Learning Community (PLC)

Robert J. Marzano and Robert Eaker endorsed the concepts and practices that form the Professional Learning Community (PLC) at Work® process and the findings that form the High Reliability Schools™ (HRS) model as our best hope for significant improvement of students. Three big ideas are included in the PLC process. First is a relentless focus on student learning. The second is the creation of a collaborative culture through the use of high performing teams working interdependently to create common goals for which they hold one another mutually accountable, which included the community. The third big idea is a passionate and persistent focus on results-improved learning of each student. This is a pivotal point that in PLC theory teacher team is not "a PLC" rather than the thorough organization is the PLC. So, if a family is enforcing PLC practices, the entire family is a PLC. If a community commits to the process, the entire community is the PLC. This also means the entire PLC takes collective responsibility for each student's success. Every leaders in the PLC (including parents) should work cooperatively, apply esteemed thinking skills to their craft, display academic behaviors of motivation and volition, and model lifelong learning.^[2]

2.2 Shadow education

Mark Bray (1999) offers such complementary education that is closely related to the school's formal curriculum education calls it "shadow education".

2.3 Parent cultivation style theory by D. Baumrind

American psychologist Diana Baumrind believes that parenting can be summarized into two dimensions: one is the emotional attitude towards children, the acceptance-rejection dimension; the other is the parents' requirements and control over children, the control-tolerance dimension. In the acceptance of emotional dimension, parents treat children with a positive, positive and patient attitude to meet their requirements as much as possible; in the rejection of emotional dimension, parents often treat children with rejection and are indifferent to them. At the control of the requirements and control dimension, parents have set high standards for their

children, and require them to strive to meet these requirements. At the tolerance of the requirements and control dimension, parents are tolerant and lack of discipline for their children. Depending on the combination of these two dimensions, four ways of cultivation can be formed: authority + control, arbitrary + control, indulgence + tolerance and neglect + tolerance. Different ways of cultivation will undoubtedly have a significant impact on the social development and personality formation of children.

2.4 Multiple Intelligences by Howard Gardner

Howard Gardner put forward the Theory of Multiple Intelligences in 1983, which have subverted the traditional intelligence theory and the methods of IQ tests. The Theory of Multiple Intelligences is just one small part in Gardner's system of educational thoughts which also include art theory, art education ideas, creativity theory, leadership theory, good work theory, moral theory and other diverse and interconnected ideas. The book *Frames of Mind: The Theory of Multiple Intelligences*, Gardner proposed the first concept of multiple intelligence. At that time, he identified seven intelligence according to three prerequisites and eight criteria for intelligence, Linguistic Intelligence, Logical-Mathematical Intelligence, Musical Intelligence, Spatial Intelligence, Bodily-Kinesthetic Intelligence, Intrapersonal Intelligence, and Interpersonal Intelligence. He refers to the structure of these intelligence as Multiple Intelligences.^[3]

3. Research Related

3.1 How parent leadership developed?

Parent leadership is a perception that widespread use in the human service and mental field, but the bounded research and the inadequacy of robust framework or modes for supposing parent leadership development. Despite the constrained research about parent leadership, some ideas on the crucial factors of it, such as parent empowerment, diversity parent leadership, identity, cultural identity. Cunningham found that the parents were trained to master the empowerment approach who were both improved their leadership capacity and activity. Swick (2001) thought parent should be facilitated to learn more and to serve their children as mentors which is a kind way of empowering parents. Walker (2009) examined that leadership language can shape parents as leaders^[4]. Studies of female leadership supported the importance of developing leadership identity, which may be exceptionally correlated to this study, as most of parent leaders are women.

3.2 Turman's finding on parent-child influence

Stanford University psychologist Turman has tracking study of genius children for many years. From 1921, he obtained IQ test data from 250,000 primary and middle school students, from which 1470 students' IQ scores are 140-200 known as study sample. Turman's main job is to track them, evaluate test results, record their education, marital health, and career development. These records are all included in the book *Genetic studies of genius*. Turman believed that the people he studied could become leaders and promote the development of science and art education, etc. When those Turman Man grew up, Turman collected complete records of the individuals who he divided into three groups, the more outstanding human group A, who can be called true winners, all top talents in all industries, 98% of them acquired Graduate degree. The worst Turman Man were divided into Group C, who had post office workers and coolies, whom Turman believed did not create a social value that matched their IQ. Others were classified in the B group. Finally, we found that the vast majority of the A group came from upper or middle-class families whose homes were filled with all kinds of books and half of their fathers with a bachelor's degree or above. Instead, the families in Group C were opposite sight, one-third of their fathers got a low degree, dropping out of school before eighth grade.

3.3 Parent-child relationship

In psychology, the parent-child relationship refers to the communication relationship between parents and children, including the communication between father and children, and the communication between mother and children. It is the first interpersonal relationship formed in life, but also the most basic, the most important relationship in the family. Parent-child relationship has a narrow and broad sense, in a narrow sense, parent-child relationship refers to the emotional connection between early children and parents, and broad sense of parent-child relationship refers to the interaction mode between parents and children, that is, the attitude and way of parenting.^[5]

Parents should consciously create a healthy and positive good atmosphere in their own families, through their own positive learning experience and improvement, effectively stimulate children's interest in learning, so as to help children realize the development of academic attainment. Parents should cultivate their children's interest in learning. A good family environment is not only necessary to cultivate learning, all the development of children is inseparable from a good family environment.

4. Concentric circles -positive parenting project

This paper aims to create the PLC mode for improving parents' leadership. This mode is designed as a concentric circles to promote a positive family culture and atmosphere, enhance the communication among the family members, build a family collaborative learning community and lifelong learning which supposing the better successful life for the children. In the circle center, children are surrounded by parents' love and care. Parent should take the responsibility and obligation to cultivate their beloved children in the second concentric circle. Beside the two concentric circles, 4C mode work as a association to form a good family atmosphere, good family communication, collaboration and century-long learning in a family professional learning community.

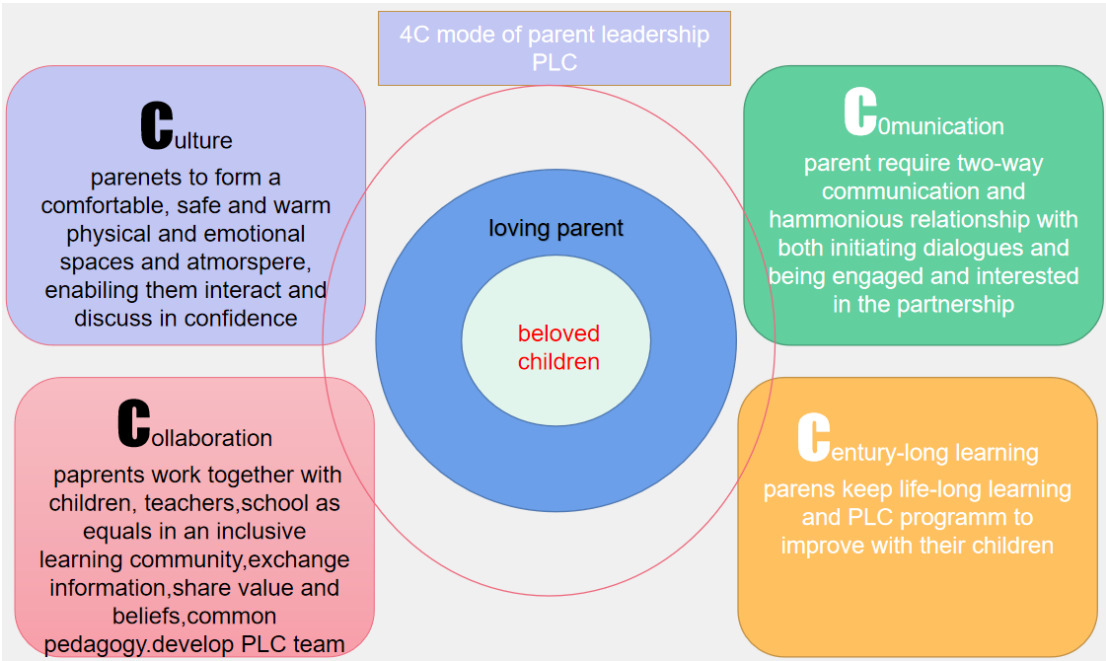
4.1 Family culture

In china, Parenting is included in the whole family, and the family atmosphere plays a pivotal role. A harmonious family atmosphere will inevitably promote a positive family upbringing environment, and on the contrary, the family atmosphere full of conflicts and disputes will lead to a relatively negative family upbringing environment. The family atmosphere related to upbringing includes the quality of the marriage, the communication and consultation between family members, the value orientation of family members, etc.^[6]

Macalenko wrote on his *Children's Education*, "Don't think that you are educating your child only when you talk to him, or teach

him, or guide him. At every moment in your family life, even when you are not at home, you educate your children. Parents' requirements for themselves, parents' respect for their own family members—— this is the primary and the main method of education!" Hence, the husband loves his wife, and wife care her husband, the warmth atmosphere and culture of the family are bound to influenced their children by what they constantly sees and hears. This intimate type of marital relationship, It will have good effects on their families, especially on their children. Make the child feel the intimacy and warmth of the family since childhood, they will know how to care for others and respect others; In a loving environment, children can also learn how to get along with people from their parents, learn to communicate with people. Make the children fully developed their various abilities under the harmonious and pleasant family culture; Husband and wife are able to communicate easily to agree on your children's education and taking more reasonable and effective educational measures. Establishing a good relationship between husband and wife is to create a family environment with a good culture and atmosphere.

Father plays a great role in promoting the formation of children's good personality quality. The father's personality characteristics often contain content that the mother does not have, such as determination, perseverance, responsibility, etc. The way fathers communicate between their children is usually more rational and logical, and children can learn this mindset by interacting with their fathers. At the same time, the father is more objective and more strict than his mother. Therefore, the father promotes the formation of compatriot confidence and courage, but also helps to promote the formation of their consciousness of rules and autonomy. However, in real life, fathers will indeed bear more pressure. Busy work makes them no time to accompany their children, less interaction with their children, and a lot of emotional estrangement between father-children. Due to the lack of father's role, "widowed parenting" and "fraudulent parenting" describe father on the Internet. Due to the lack of high-quality company of father, it is really unfavorable to the children's development of rule consciousness, autonomy, public morality education and other aspects.



Picture 1: 4C mode of parent leadership

4.2 Family communication

The traditional Chinese concept of parent-child too much emphasizes the one-way obligation of parents. They always take unilateral care and consideration from parents, but ignore the care of young children for their parents. In the process of raising children, parent need to the expression of love and response to their children timely rather than keep love in mind and feel embarrassed to express love. This is the charm of language is to let children feel love. In such a warm and open family, children are also influenced and learned to imitate the expression of parents love. Care and love should be mutual. Parents can change their roles, change their strategies and ideas, and encourage their children to express their care and love for themselves. When children express emotions, parents should also actively respond, and embrace their children, so that children can not only feel love since childhood, but also to actively express love. Parents can show to their children that their helpless side and need care and help of children. At the same time, the feedback to their parents can also exercise their children's gratitude and filial piety to their parents and elders.

4.3 Family collaboration

Family collaboration is a team leader including the parents, children, grandparents, and community personnel, etc. The parents is the "chief leader" of the team, whose course leadership is the sum of the "individual force" and the "synergy" of the team members. In the family collaboration with multi-subject participation, the parents, as the "leader" of this team, must have a certain team leadership ability. First, to implement the power enhancement, give play to the initiative and advantages of various subjects, especially the children ,and make suggestions for the their academic development; the second is to build a family collaboration leadership team of democratic, unity, open, thought-thinking, dialogue and exchange. Clarify the responsibilities and obligations of the family PLC members, encourage and guide innovation, and meet the development needs of the children on the premise of being consistent with the new dynamic pace of the academic development.

4.4 Family century-long learning

Learning family culture needs to foil a strong learning atmosphere. Then, it is very important to establish a vision that is effective and recognized for the majority of the organization members, and under the guidance of a forward-looking vision, all the organization members will learn together and make progress together. In addition, encourage family members to break through the shackles of the traditional single thinking mode, become negative to positive, passive to active, give full play to their creativity, subjectivity and initiative, cultivate deep family century-long learning consciousness, enhance family century-long learning, using cooperation, open, dialogue, communication team learning way, achieve common progress and growth. Learning material resources and cultural resources are the indispensable conditions and guarantee for the building of family century-long learning community.

5. Requirement to the parents under the Double-Reduction policy

Need to be pointed out that, according to the Double Reduction document, the strict supervision of off-campus training, it is not “one size fits all” solution to shut down all off-campus training institutions, but requires parents take their responsibility in the coaching parenting. At the same time, off-campus training institutions back to the functional positioning that they should have. Stimulate parents’ anxiety so as to promote their businesses which is not education but a industry business. The essence of education is not the shadow education but the school and family ,community,society education .

5.1 buliding up family- school close contact

Actively participate in parents’ meetings, parents’ education, take the initiative to communicate with teachers, understand children’ learning and physical and mental conditions, formulate targeted family-school linkage education plan, and build a harmonious family-school relationship.

5.2 Update the concept of parenting

Understand the regular pattern of children’s physical and mental growth, improve their own education quality and ability, rationally plan the future development direction of children, do not blindly send children to participate in off-school training.

5.3 A harmonious family atmosphere

Pay close attention to the changes of children’s thoughts and emotions, listen to the children’s aspirations, make good friends relationship with children, form a good communication and interaction mode, to help children solve problems.

5.4 We should guide students to reasonably use their time at home

Urge your child to go to bed on time to ensure enough sleep. Appropriate arrangement of housework, strengthen physical exercise, and carry out parent-child reading. Strengthen supervision over children’s online behavior, timely discovery and stop.

5.5 You might as well focus to cultivating children’s habits

Reading habits effectively promote the development of thinking; exercise habits effectively promote attention and concentration, labor habits help children establish correct values, responsibility, improve independence; participating in family life habits help the cultivation of civic consciousness; hobbies habits help shape a sound personality, comprehensive development, build confidence and positive health. Good habits achieve a good future, children are easier to achieve a sense of achievement and happiness, and more sufficient internal drive .^[7]

To implement the “double reduction” document, shadow education and training institutions must make a change. To put it simply, only by establishing a multiple evaluation system and creating multiple choices for students can students liberate students from their academic burden.

6. Conclusion

Parent leadership is an activity affected by many factors and at complex levels. In the project of building a parent leadership community, it is necessary to solve the problems of interests and responsibility distribution of each subject, so as to make the construction process smoothly. To promote the construction of parent leadership, under the atmosphere of collaboration-oriented concept, teamwork, thinking, innovation consciousness and so on, is bound to inject fresh blood into the new development of family culture.

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Research on the Development Path of Youth Campus Football from the Perspective of “Sports and Education Integration”

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Abstract: The development of youth campus football is an important strategic deployment made by the Party Central Committee and The State Council. The reform and development of campus football is an important measure to deepen the education reform and build a healthy China, a strong country in sports and a strong country in human resources. The development of youth campus football is a basic project to improve the popularity of football in China, and an exploration project to comprehensively promote the comprehensive reform of school sports and the in-depth development of sports and education integration. The integration development of sports and education has become an important logical starting point to promote the development of campus football in the new era.

Keywords: Sports and education integration; Campus football; Development path

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Preface

The youth campus football activity is a strategic activity jointly launched by the sports system and the education system for a single sport project. It is the product of the deep combination of sports and education. It is a comprehensive promotion of youth football by integrating the professional and technical resources of the sports system and the educational resources of the education system. One is to promote a wide range of teenagers to participate in football and enhance their physical health, so as to realize the educational function of “football affects people”; Secondly, on the basis of expanding the population of youth football, we find and train excellent “seedling” of youth campus football, improve the level of football, and realize the functional value of “people influence football”. It is a win-win situation for the sports system and the education system. However, due to institutional barriers and obstacles, the ideological cognition and development goals of the two systems are not unified in the promotion of youth campus football, resulting in poor communication and ineffective cooperation between sports and education departments. In practice, the outstanding performance is: one side “weak resources”, while the other side “idle resources” and so on the imbalance state, can not really gather strength, promote development together.

1. The connotation interpretation of the integration of sports and education

In recent years, sports and education departments in competitive sports reserve personnel training, the respect such as youth sports activities to carry out a series of dialogue and cooperation, and achieved initial results, but the two sides in the practical level still lack the depth of the unified target tasks, work move together enough, failed to fully share limited resources. In 2020, the General Administration of Sport of China and the Ministry of Education issued the Opinions on Deepening the Integration of Sports and Education to Promote the Healthy Development of Teenagers, which contains the requirements of “high-quality development” of the integration of sports and education. On development idea “about deepening teaching fused opinion” to promote the development of adolescent health explicitly pointed out that the development of teaching fused to wen “” people and” education “concept as the instruction, the sports and education to fully mix and form a resultant force, encourage education function and the value of the sports show stronger, realize the school sports and competitive sports on the concept and the idea of change. In the mode of development, not only on the macro requires national level of sports and education departments coordination, also requires a medium of the department of the party and government institutions should break the closed thinking, abandon department position, to strengthen the competitive sports reserve talent cultivation and promote the healthy development of the teenagers as the guidance, but also for micro school, family and personal path optimization design and related social organizations, We will intensify reform and promote integrated development. In terms of specific measures, it is required that the two main bodies of physical education and education departments should realize multi-dimensional integration such as integration of ideas, integration of goals, integration of resources and integration of measures. Adjustment and improvement should be made from the aspects of improving ideological understanding, updating

training model and reforming evaluation mechanism, emphasizing detailed measures and division of labor, actively connecting with society and market, promoting more social forces to help teenagers grow up healthily and maximizing the coordination of sports and education integration^[1]. In the presentation of results, it is required that high-level sports reserve talents trained by schools at all levels continue to emerge efficiently, and the effect and value of comprehensive education of school sports can be fully demonstrated.

2. The advantages of the integration of youth campus football teaching

The biggest advantage of sports and education integration is the advantage of resource integration, which is popularly said to “concentrate the forces of both sides to work together” to achieve the optimal effect. The development of the “integration of sports and education” of youth campus football means that the sports and education departments reach a consensus on the integration of development, and fully share and integrate the superior resources of their respective systems, so as to jointly affect the development of youth campus football. The integration of sports and education has diversified forms, rich sharing resources and rich integration content. Specific organizational units including: provincial, municipal federation and body WeiYi place province department of education, the city bureau of education body WeiYi, resultant force is formed between the four organizational units, condensing resources, common for xi ‘an youth campus football “teach fused” to promote work power, this is youth campus football “teaching fusion, in the development of the biggest advantage^[2]

3. Disadvantages of the integration of football teaching in campus for teenagers

The connotation of the return of competitive football to campus is to popularize football through a wide range of young students, so as to realize the improvement of football level. The two should be “joint grasp” or “progressive” relationship. Therefore, the integration of sports and education in the development of youth campus football should be the same. However, in the current promotion of the integration of youth campus football teaching, there is a trend of “inverted triangle”, that is, the integration of sports system and education system is more full, more standardized and more active in the cultivation of “elite crowd”. But for the youth campus football popularization level is “sprinkle sesame salt” fusion state, the center of gravity is serious. The reasons are as follows: the essential goal of the sports system is to train “advanced, elite and advanced” reserve talents, which mainly serves “elite groups” and conforms to the nature and positioning of the system^[3]. The concept of “exam-oriented education” and “enrollment rate” is still prominent in the education system, so it is relatively positive to cultivate a few elite youth players, not only to win glory for the school but also to improve the enrollment rate (channel for students with special talent). The education system lacks professional resources in the “improvement” level of youth campus football, so it collaborates with the sports system; However, the popularization level has the intention of “setting up another portal”, so the enthusiasm is not high. In this way, it leads to the phenomenon that the focus of the integration of the two systems of campus football is biased, and then the two systems should focus on the popularization of campus football.

4. The development strategy of the integration of football teaching in youth campus

4.1 The access mechanism of the establishment and promotion institutions

The Ministry of Education and the General Administration of Sports should jointly formulate the policies and systems of “access standards” for social sports clubs and other institutions to enter the campus. The school shall independently select cooperative clubs, and at the same time implement policies and incentives such as supervision during and after the event and relevant tax and venue, to stimulate the vitality of the market mechanism, and support social sports organizations to provide guidance for school sports teaching and competition training; If conditions permit, local governments can purchase sports services from social sports organizations to alleviate the shortage of physical education teachers in primary and secondary schools. For the current campus football development, first of all, with the rise of youth football, the current social youth football clubs organized teaching, competition and training market development has begun to take shape, become an effective complementary mechanism for off-campus football, the two complement each other and the flexible development of students’ personality. The general Administration of Sports and Football Association should further actively regulate and improve the orderly access and quality supervision of social training institutions, and implement relevant tax, site construction and other aspects of incentive policies and systems to support. Secondly, it is suggested that the Ministry of Education and the General Administration of Sports jointly formulate the “admission standard” for social sports clubs to enter the campus, and that schools with conditions can independently choose high-quality social resources to enter the campus services, or purchase services by education government departments to alleviate the problem of campus football teachers.^[4] At the same time, it is necessary for multiple departments to strengthen the construction of supervision system for the service process, fully stimulate the vitality and potential of resource competition and quality development of the social youth football market, and comprehensively optimize the environment for the integration of sports and education of youth football. Finally, the problem of campus football field resources in densely populated areas of big cities can be alleviated by using nearby social football club organization, community and public football field facilities resources.

4.2 Improve the campus football reward mechanism

Revitalizing Chinese football is a long-term project that requires the continuous efforts of several generations. Campus football is an important map for the revitalization of Chinese football and the foundation for the export of excellent football reserve talents. The rapid development of campus football requires the participation and dedication of a lot of young children who are interested in football and dream of football professionals, as well as a large number of football teachers and coaches with patience and high professional quality. Therefore, schools and educational administrative departments should establish perfect incentive mechanisms for campus football, such as “through-train” promotion mechanism for football students with special talents, intensive training for students and guidance mechanism for cultural courses during competitions, recruitment and training mechanism for high-level football teams in colleges and universities, and directional training mechanism for football teachers. Teachers (coaches) promotion, access, reward

and evaluation mechanism.^[5]The establishment and implementation of these incentive mechanisms will play a very positive role in promoting the work enthusiasm of students and teachers (coaches).

4.3 Open development promotes integration of sports and education

Carrying out the concept of “open” development can maximize the development of physical education and education resources, and solve the problem of inadequate interaction between physical education and education. To develop the integration of sports and education with the concept of open development, one is to promote the opening of resources within a teaching system, restore the important position and key role of sports in the school, and improve the effect of sports education through the linkage of intramural sports and education resources; The second is to promote the resource coordination between different teaching systems in the same region, especially between traditional sports schools and ordinary schools, there is complementarity and coordination between teaching resources; The third is to promote the mutual opening of teaching resources between urban and rural areas. Through mutual opening, it can promote the transfer of urban physical education resources to rural areas and optimize the physical education resources of rural education system. Fourth, the opening and cooperation between different levels of education systems and training units, such as primary schools, middle schools and universities, especially the establishment of a unified training system and path to higher education, and the effective establishment of a link mechanism for the integration of physical education and education, can improve the training path and outlet of sports talents.

4.4 Long-term planning to improve the depth of football teaching integration in youth colleges

In terms of the transformation from the concept of “combination of sports and education” to the concept of “integration of sports and education” in campus football, the main body demands of the integration development of campus football and the bottlenecks and problems faced in the implementation methods and paths are compared with the successful development of the integration of youth campus football and education in South Korea. At present, the development of Campus football in China is faced with such practical difficulties as the lack of overall regional policy development, the lack of scientific training system, the imperfect guarantee mechanism of reserve talent training, and the disunity of the “integration” development path of youth training of professional clubs and campus football. Campus football needs scientific comprehensive design and long-term planning in the construction of the path system and the guarantee of the cooperative mechanism of the path.^[6]

4.5 Establish a supervision mechanism to ensure the integrated development of campus football sports and education

Strengthening supervision and management is an important means to ensure executive power. Especially, the integrated development of youth campus football and education involves two departments, so it is necessary to establish a perfect supervision system to supervise the behavior norms of the two departments in the process of cooperative practice. Therefore, it is imperative to establish a supervision system for the integration of youth campus football and education. The word “supervision” has been interpreted by scholars in the academic world as “a series of administrative management and supervision behaviors that a relatively independent government agency or authorized social organization with legal status intervenes in the market allocation mechanism or the supply and demand decisions of enterprises and consumers according to certain legal norms”. In the new era, the government can set up a special supervision and coordination agency through administrative intervention and authorization, such as the “Supervision Committee”, which has higher authority than the sports and education functional departments. As a higher level of organization to supervise the sports department and education department in the promotion of youth campus football integration and behavior. After the establishment of the “supervision committee”, it is necessary to rely on this organization to establish a sound supervision system. “Supervision committee” should establish high-quality supervision team, the establishment of the supervision team should be elected by the government or open and fair election, honest and honest, supervise the sports department and education functional department reasonable division of labor, layer upon layer implementation; The “supervision committee” should clarify the contents and standards of supervision and assessment, which should be led by the government and jointly agreed by the senior managers of sports and education departments, so as to ensure the scientific, reasonable and operable supervision work; The “Supervision Committee” should establish a feedback mechanism. First of all, it should give feedback to the government as an important basis for macro-control and evaluation of sports and education integration. In addition, it should give feedback to the sports department and education department, which are the two main bodies, to help them find the shortcomings in their cooperation and make improvements.

5. Conclusion

The reform and development of Chinese football overall plan “proposed” the revitalization of football is the development of sports, the construction of sports power “of the important tasks, and the campus football as one of the important content, learning from football, football popularization education, culture, and promote each other, youth football skills acquisition football talent development, teacher team construction and so on several aspects to make the macro design and deployment. Subsequently, the Ministry of Education and other six departments issued the Implementation Opinions on Accelerating the Development of Youth Campus Football, under the leadership of the Ministry of Education to organize, implement and guide the campus football activities in the new era, defined the work objectives and specific tasks, put forward safeguards, and emphasized the organization and leadership. After years of efforts, campus football in the new era has made great progress in the level of “quantity”, but there are concerns in the level of “quality”, we should accurately study and judge, establish the awareness of the problem, to provide the basis for solving the problem.

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China-Oriented Second Language Learning and Acquisition

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Abstract: This paper first glances at the remarkable phenomenon of second language learning home and abroad, and raises the unsettling issue of many learners eventually getting unsuccessful or unsatisfactory learning results. With the aim of presenting whoever concerned, especially second language teachers, basic and professional knowledge and helping give them good insights into the issue and more, it purposefully provides certain practical knowledge of language and its properties, and also second language acquisition theories from mainly behaviorist, innatist, and interactionist perspectives, which are particularly seen in regard to those on second language teaching and learning in China. It then progresses to considerable variables or characteristics that greatly influence the success of language learning before it finally arrives at the conclusion of the paper.

Keywords: Language learning; Language teaching; Second language acquisition

English Gaining the knowledge of language plus second language learning and acquisition can be tremendously beneficial for second language teachers and for the students consequently, which a vast number of stakeholders in the field may have longed for or have not been aware of. This paper is aimed at serving the purposes of both spreading briefly some rudimentary practical knowledge of language and second language acquisition and enlightening second language teachers on perspectives pertaining to second language teaching and learning in China.

1. Second language learning globally and domestically

It is truly incredible that many people, nevertheless from different age groups and from different parts of the globe, are doing the same thing - learning a second language - at this every moment, and this phenomenon has been increasingly widespread and common. Universally, people may learn a language, such as English, French, Chinese, or Spanish, as a second language for many and various intentions, including fulfilling job requirements, sitting language exams, travelling, or simply pursuing interests and enhancing personal development. And based on the level of their language proficiency, second language learners may be broadly categorized into basic learners, intermediate learners, and advanced learners.

Thanks to the low threshold, it is rather easy to start the journey of learning a second language. Yet, to master the language fully is admittedly highly demanding. This explains that although the number of second language learners internationally might be astonishing, the number of successful second language learners may be astounding, given that only a really small portion of the second language learners ultimately manage to acquire the proficiency of the language in general.

Because of China's opening-up and the increasing globalization of the world economy, education, and culture, more and more Chinese people jump on the bandwagon of learning a second language. The English language, which has obtained recognition as the lingua franca worldwide, has long been the first choice for second language learners in China for cogent and apparent reasons. Notably, English, like Chinese or mathematics, has been included as a core subject on the curriculum at school throughout China for decades. Meanwhile, learning English has remarkably enjoyed growing popularity across the nation among non-school goers young and old. However, considering millions of school students taking English as a core subject from primary school to high school in China, only a mere fraction of them attain the mastery of the language upon high school graduation. Among the other learners, only a small part of them may succeed whereas the majority may fail generally. In other words, language learners do not succeed in learning a certain language equally (Brown, 2000). And, there are contributing or complicating elements such as beliefs in the society that need to be taken into account when it comes to language learning (Larsen-Freeman, 2018). What are the vital factors behind success or failure in second language learning? What are the special ingredients that are essential for success? Let us endeavour to find the answers by looking slightly closer at language, language acquisition theories, and other factors particularly relevant to second language teaching and learning.

2. Language and its components

Having a rudimentary knowledge of language is highly helpful and useful for language teaching. It is commonly acknowledged that effective teaching not only greatly facilitates learning, but also significantly improves learning experience and outcome. However, there is certainly no lack of unfortunate incidents in which language learners are unsuccessful because of incapable language teachers or poor language teaching, and vice versa. Brown (2000) indicates that it is particularly essential for language teachers to have

knowledge of language in order to be able to teach effectively because how a language teacher teaches a language is greatly determined by his or her understanding of the components and system of the language. There are a host of different or similar definitions of language available. Brown (2000) presents a composite of language definitions as follows:

- (1) Language is systematic.
 - (2) Language is a set of arbitrary symbols.
 - (3) Those symbols are primarily vocal, but may also be visual.
 - (4) The symbols have conventionalized meanings to which they refer.
 - (5) Language is used for communication.
 - (6) Language operates in a speech community or culture.
 - (7) Language is essentially human, although possibly not limited to humans.
 - (8) Language is acquired by all people in much the same way; language and language learning both have universal characteristics.
- (p.17)

Moreover, the functional modular properties of language that language learners need to acquire are primarily composed of phonology (the sound system), syntax (the combination of words into phrases and then into sentences), morphology (the structure and form of words), semantics (the meaning of words), and pragmatics (the way in which language is used) of language (Gass & Selinker, 2008; Gass, Behney, & Plonsky, 2020; Slabakova, 2016; Fromkin, Rodman, & Hyams, 2018). Also, the creativity nature of language suggests the creative process of language acquisition (VanPatten, & Williams, 2015; Mitchell & Myles, 2004).

3. Second language acquisition theories

The connection between Second Language Acquisition (SLA) and language pedagogy is prominent (Ellis, 2010). The history of second language learning in China closely relates to the development of SLA theories, which have an important influence on teaching instructions and thus play a fundamental and vital role in second language learning and teaching in China due to the prevailing instructed nature of second language learning nationwide. Correspondingly, the success or failure of second language learning can directly or indirectly be attributed to the influences of SLA theories, which mainly consist of three theoretical perspectives - behaviorist, innatist, and interactionist (Lightbown & Spada, 2013; Klein, 2014)

Behaviorist. In the 1940s and 1950s, behaviorism predominated and was hugely influential. Lightbown and Spada (2013) state that imitation and practice were viewed as primary processes in developing language by the behaviorist (e.g., B.F. Skinner). Behaviorism deems that all learning is “...the acquisition of a new behavior. The environment is the most important factor in learning.” “One must imitate correct models repeatedly” (VanPatten, & Williams, 2015, p.19). The drill-and-skill practice is the established norm in class. Errors are often directly rectified without delay. Stimulus, response, and reinforcement are emphasized according to behaviorism. The audiolingual method is employed in second language learning classrooms widely (Klein, 2014).

Behaviorism gained a foothold in China initially, and has been influencing second language learning in the country ever since. Due to its popularity in China, usually, where there is second language teaching and learning, there is behaviorism, which to a certain extent undeniably helps build up learners’ language ability and their self-confidence in the language through plenty of good imitation and reinforcement. Take learning English as a second language, there is a lot of learning vocabulary and texts by rote, and grammar is seriously emphasized in teaching and learning. Nonetheless, the learners are typically strong and competent in reading and writing, but weak and incompetent in listening and speaking. *Ya ba ying yu*, or *mute English* literally, is a special term that is used to describe the English learners’ English as they simply can not use English to converse with somebody, which might seem disheartening and frustrating. The learners usually shy away from speaking with others in English. Learners are often able to do well on paper, but unable to use the language in real ordinary daily conversation. The key concept among teachers and learners is that second language is taught and learned. The concept of *acquiring* language outside the classrooms or in social context might be vague or alien to them. Whatever is learned might be forgotten easily and quickly without acquisition. As a result, learners are not fully proficient in the language ultimately.

Innatist. In disagreement with the behaviorist, the innatist (e.g. Noam Chomsky) argued that language acquisition was attributed to some innate universal principles. Language acquisition device (LAD), universal grammar (UG), and the critical period hypothesis (CPH) all help account for language acquisition (Lightbown & Spada, 2013; Klein, 2014). Succeeding the innatist perspectives, Krashen (1982) presents five hypotheses about SLA that have been influencing second language teaching practices vastly in spite of some unfavorable relevant critiques. The five hypotheses are:

(1)The acquisition-learning hypothesis, which draws distinction between language learning and language acquisition. Learning is explicit and conscious, and takes place in formal situations, whereas acquisition is implicit and subconscious, and takes place in informal situations; learning focuses on form and grammar and depends on aptitude while acquisition focuses on needs and interests and depends on attitude; learning follows simple to complex order of learning, but acquisition follows stable order of acquisition. Based on the distinction, it can be said that language learning has been taking the center stage in China. While learning may help language learners become competent in especially linguistic accuracy development; acquisition can help them achieve proper communicative proficiency. With the advent of the Internet and advancement of technology in addition to reforms of English syllabuses at school and changes of teachers’ and students’ perceptions, acquisition will hopefully gain increasing attention and emphasis in China.

(2)The monitor hypothesis, which means that internalized grammar rules developed via explicit language learning serve as an editor or a monitor. Because only acquisition accounts for natural, easy, and comfortable communication, acquisition is primary while learning is secondary. Errors are not necessarily immediately corrected. Over time, Self-correction takes place which helps build up learners’ language competence. Second language learners in China these days are often encouraged to open their mouth to speak and not to be afraid to make mistakes. They are constantly imparted words of wisdom such as *Practice makes perfect*.

(3)The natural order hypothesis, which implies that grammatical features are acquired in a predictable order despite the existence of possible individual variations. This applies to both first and second language acquisition. However, the hypothesis is not always agreed upon at least in China. For instance, according to the hypothesis, *-ing* verb ending is acquired early while *-s/* possessive is acquired late, which is not necessarily the fact. It really varies in different contexts.

(4)The input hypothesis, which suggests that input should be comprehensible and at the level of $i+1$ (i = a learner's current language level; $+1$ = the challenging level which is a little beyond i). Language is only acquired through comprehensible input. Output plays little role in language acquisition. A silent period is allowed when obtaining comprehensible input. Krashen (2003) promotes free voluntary reading. He claims that free voluntary reading is powerful, effective, enjoyable for developing literacy and second language competence because of comprehensible input received in a low anxiety milieu. A significant number of language teachers in China nowadays acknowledge not only the importance of comprehensible input, but also the importance of comprehensible output in SLA. They deem that input and output complement each other in complete language acquisition.

(5)The affective filter hypothesis, which suggests filtering affective variables that may affect language acquisition. Some helpful affective variables include low anxiety, high motivation, self-confidence, and self-esteem. Affective variables are usually self-controllable. They vary from learner to learner, which to a large degree have a major impact on the success or failure in language acquisition. There is a well-known saying in China which depicts the magnitude of attitude. That is "Attitude is everything". More often than not, it is also true in SLA.

Interactionist. In recognition of innate learning mechanisms such as comprehensible input, the interactionist focuses on the interplay between the innate learning and acquiring capacities and the environment, especially including the influence of natural conversations during social interactions. In addition to the descriptions of significant roles and practices of interaction in the language classroom (Richard-Amato, 1988), researchers Loewen and Sato (2018) stress the indispensability of interaction in SLA, and elucidate the key components of interaction, which comprise input, negotiation, and output. Gestures, paraphrases, repetitions, or adapted speech for helping comprehension may take place in conversations between native and non-native speakers (Klein, 2014). Interaction with the environment is indispensable in language development and language acquisition. Yet, this might be quite challenging for second language learners in China considering the generally large class size at school and a Chinese-speaking society. It is less ideal for natural social interactions with native speakers to take place easily and frequently. Therefore, they may have to create or seek favorable environment for themselves. For example, they may use the Internet to talk to native speakers online, or take the initiative to speak with native speakers around them. Alternatively, they may watch movies and documentaries in the target language to explore and immerse themselves in the virtually authentic environment.

Furthermore, there are many other perspectives related to SLA. For example, Lightbown and Spada (2013) include that the cognitive perspective finds further evidence which suggests language acquisition is usage-based. The usage-based hypothesis argues that when children connect the language they hear with what they experience in their environment with their cognitive abilities, language acquisition takes place. This perspective emphasizes on children's creation of connections which depend on children's learning abilities and the environment. The connections also extend to collocations and grammatical expressions. Owing to the high exposure to tremendous learning opportunities, language acquisition occurs. Some language teachers are in favor of the usage-based perspective in China. They claim that there is considerable, genuine, steady, and progressive improvement in the learners' language competence through constant use of the language for academic, professional, and daily purposes. The perception of "learning is for use" is widely-held in China, especially when it comes to learning a skill. Lightbown and Spada (2013) also contain the sociocultural perspective, which basically suggests learning by talking with people from other cultures in social context. Indeed, learning a new language signifies leaning a new culture. Besides, globalization brings people around the world closer to one another, and good cross-cultural communication is crucial.

4. Language acquisition in general

It is generally acknowledged that language acquisition is a complex and enduring process. Brown (2000) shows that the success of language acquisition is influenced by many variables, including learner characteristics (e.g., education, intellectual capacities, abilities, personality, life experience), linguistic factors (e.g., first language, second language, language system), learning processes (e.g., cognitive processes, strategies, attention to form and meaning, memory and storage), age, context, and purposes. Lightbown and Spada (2013), Dörnyei (2014), Ortega (2014), and Saville-Troike and Barto (2016) similarly elaborate on more or less of these learners' individual distinct differences in second language learning. Gan, Humphreys, and Hamp-Lyons (2004) also find that successful language learners among some Chinese university students tend to have positive attitude, strong determination, clear learning goals, viable and better-used strategies, active use of resources, efficient self-management, constructive internal and external motivation, favorable engagement with learning activities and social interaction, good rapport with the teachers, and incremental as well as integrative views of language and language learning.

5. Conclusion

Finally, it can be concluded that having knowledge of second language learning and acquisition is eminently practical, and that successful second language learning and acquisition is an epic achievement. It takes right ingredients, from the knowledge of the language to the knowledge of second language acquisition theories and practices; from individual language learners to relevant contexts; from input to output; and from internal factors to external factors. The fruit of the undertaking is appreciated and enjoyed by those who are willing to devote sustained physical and intellectual effort plus reasonable and precious time.

And above all, hopefully, the paper serves its prime purposes well.

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Present Situation and Development Trend of Information Construction of Educational Management in Colleges and Universities

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Abstract: In the era of educational informatization 2.0, colleges and universities introduce information technology into teaching management and establish a systematic and perfect teaching management system, which has become an inevitable choice for colleges and universities to implement talent training strategy and realize innovative transformation of teaching development. Based on this, starting from the current situation of the informatization construction of teaching management in Colleges and universities, this paper considers the problems existing in the current construction and development, analyzes the development trend of teaching informatization, and then explores the corresponding development path in combination with the reality, in order to improve the informatization construction level of colleges and universities and smoothly enter the era of educational informatization 2.0.

Keywords: Teaching management; Information construction; Present situation; Development trend

1. Introduction

In 2018, the Ministry of Education issued the education informatization 2.0 action plan, which defined the establishment and improvement of the sustainable development mechanism of education informatization; In the same year, the guiding opinions on speeding up the construction of “double first class” in Colleges and universities again emphasized the task of promoting education in depth, integrating information technology, intelligent technology and education, and building a new mode of talent cultivation under the condition of “Internet plus”. At present, under the background of this era, colleges and universities in China actively invest in the information construction of teaching management and actively explore the path of teaching management from 1.0 era to 2.0 era. Of course, the informatization construction of teaching management in Colleges and universities must be long and arduous, and a comprehensive analysis of the current development situation and thinking about the development trend are the basic premise to explore the development path.

2. Current situation of information construction of educational management in Colleges and universities in China

2.1 The education management stage is dominated by manual operation and supplemented by stand-alone software processing

In the early 1990s, due to the lack of domestic computer software and hardware resources, especially the lack of computer network resources, the educational management of domestic colleges and universities is still mainly manual operation. Although most colleges and universities have introduced computers into educational management, their application scope is mostly limited to low-level applications such as document processing^[1]. Due to the shortcomings of the flat file database development system, these application software developed by it have poor fault tolerance and reference integrity, let alone compatibility. In addition, because the flat file storing data is structured at the operating system level, it is easy to cause data loss and disclosure, and is also easy to be damaged by computer viruses, which can not meet the needs of a large number of data processing and data security. At the same time, the plane data files of the single machine can not realize effective data sharing and concurrent access processing, resulting in the isolated and single information processed by these management software. In the education management work of each department, a large number of manual operations still need to be relied on. Therefore, it is decided that the manual operation can only be dominated at this stage, supplemented by the single machine management software.

2.2 Popularization status of information construction of educational management in Colleges and universities in China

At present, the vast majority of domestic colleges and universities are carrying out education management informatization in combination with their own school conditions, but the construction pace and scale are large or small, and the construction level is high or low. Of course, the implementation results are different. But generally speaking, after a period of efforts, the overall construction

level of education management informatization in Colleges and universities in China has made considerable progress^[2]. From the overall situation of the implementation of educational management informatization in Colleges and universities in China, due to the limitations of basic school running conditions such as teachers, venues and laboratories, the full credit system is still in the exploratory stage in the educational management of colleges and universities in China. Most colleges and universities in China have not yet implemented the full credit system, but actually implemented the educational management mode of academic year credit system. It is in the transitional stage to the complete credit system. Therefore, at this stage, the education management information construction of most colleges and universities in China is also based on this education management model.

3. Development trend of information construction of teaching management in Colleges and Universities

3.1 Intelligent trend

The informatization of teaching management is mainly reflected in the development and application of the Internet. The use of big data is aimed at each part of teaching management and promotes its development in the direction of intelligence. Nowadays, the establishment of virtual reality, augmented reality, programming language and database^[3]. These have been reflected and achieved remarkable results in the teaching management of colleges and universities, and will gradually become the default existence in the teaching management of colleges and universities. Moreover, most colleges and universities have established various “check-in learning” platforms in teaching, such as “U campus”, the software for English learning, “creating employment cloud classroom” and “excellent campus” of public elective courses. The wide use of these platforms reflects a development direction of teaching management informatization in Colleges and Universities in the era of big data.

3.2 Sharing trend

Colleges and universities have reached cooperative and friendly relations with many education platforms in order to share resources and provide better services for students. For example, the establishment of the school’s electronic library is funded by the school to purchase learning materials. Students can browse academic journals, magazines, interested books and other materials that originally need to pay a certain fee through the school library for free, which not only stimulates students’ learning interest, but also indirectly facilitates the management of paper books. Another example is the school’s “all-in-one card” service^[4]. After entering students’ information, they can enjoy one-stop services such as access control card, meal card, water card and campus card. At the same time, there is the logistics service system of relevant app, which can be fed back by students at any time, and managers can also maintain data in time. The development trend of resource sharing plays a powerful role in improving the efficiency of teaching management.

3.3 Data trend

Big data is playing a more and more important role in today’s society, which is also shown in the information construction of teaching management in Colleges and universities. The digitization mentioned here includes two aspects. One is non explicit data statistics, such as quality evaluation of teaching work, inspection of teaching results, etc. Second, the statistics of students’ usual performance assessment, attendance times and teaching hours.

3.4 Trend of division of labor

The relevant staff of teaching management in Colleges and universities have a clear division of labor, refine the tasks, assign responsibilities to people, and better cooperate to complete the relevant information management work. Of course, the ultimate goal of division of labor is still to integrate resources and create a good teaching environment for students.

4. Conclusion

To sum up, under the new situation of educational informatization development, colleges and universities should face up to the current situation of teaching management informatization construction, analyze the problems encountered in the transformation of teaching management from traditional mode to informatization mode, understand the development trend of teaching management informatization construction, explore construction strategies from many aspects, improve the informatization system, and promote the efficiency and efficiency of teaching management in Colleges and universities Orderly operation.

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Considering the Efficacy and Suitability of Task-Based Learning in a Chinese High School English Class

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Abstract: Task-Based Language Teaching (TBLT) refers to the use of tasks as the essential component of planning and instruction in language teaching. In TBLT, language learning becomes a process that provides many communicative opportunities for learners and primarily focuses on making meaning. Additionally, TBLT is a form of learner-centered teaching approach, in which learners learn the target language with self-motivated and task-based pair work or group work. Although TBLT have influenced English languages teaching throughout the world, with a number of Asian countries widely promoting TBLT in their English education policies, many difficulties have emerged with respect to implementing these methods in practice. In China, the ministry of national education proposed the new curriculum standard (2001), which clearly required application of task-based language teaching in to basic language teaching. However, many Chinese scholar argue that it is inadvisable to directly import and use Task-based language teaching in China, as this should be localized and teaching methods should be chosen flexibly. It is therefore important to apply these modern teaching methods with an exact and careful consideration of the cultural values and realistic environments.

Keywords: TBLT; Efficacy; Suitability; Chinese high school; English class

This essay aims to explore the extent to which TBLT is a both suitable and effective approach to English language teaching (ELT) in Chinese high school context and seeks to identify implications for further advancement of using TBLT in China and other similar contexts.

1. Context

The chosen context for this analysis is a public high school located in a medium-sized city, Loudi in Hunan province, central China. In this high school, there are three grades, with approximately 20 classes for every grade. Class size is approximately around 55 students per class, from different areas of the Hunan province. In summary, as proportional representation of the students, 50% originate from cities, 30% from towns and 20% villages. In general, over 80% of students will go to the university and among them, around 15% of students will be admitted to the key universities in China; only a few will look to study at overseas universities such as in the UK and USA.

In this school, from Monday to Saturday, seven forty-five minutes classes are conducted with ten-minute intervals between every class. Students with a total of ten English classes per week. Apart from that, teachers encourage students to take part in after-school self-study for a further three hours, and almost 97% of students will attend this. Teaching resources include both multimedia technologies and the blackboard. In terms of the teaching method, PPP is mainly used in this high school. About two thirds of teachers were very experienced with an average age of around 47, while the remainders were younger without significant teaching experience prior to their employment at this school. As regards the English lessons, teaching objectives focused on teaching students the knowledge of grammar and developing language skills that will be examined, namely reading, listening, and writing. The context was very much exam-oriented, with two important written assessments both at mid-term and the end of the semester. The English exams were designed to assessed three specific skills, namely, listening (20%), reading (30%), grammar and writing (50%).

2. Challenges in specific learning environment and broader context

In this specific study, one significant challenge was the lack of superior language environment and broader learning context and conditions as Chinese second language learners, with an absence of opportunities in any natural environment beyond the language learning classroom. Major proponents of and studies conducted into TBLT originate or are focused in countries where English is the official language, specifically, Nunan (Australia initially, then Hong Kong); Prabhu (India and Singapore); in contrast to the Chinese L2 learners in this study, learners are learning the target language through engaging in cultural integration. However, many primary and secondary school English teachers in China may lack professional competence, which leads them to being able to offer only limited help to their students. Furthermore, in China, high school students' motivation to learn English is mainly to succeed in exams in order to progress further in education, especially university entrance exams, so they principally focus on grammar learning rather than natural communicative purposes.

A further issue in the suitability and potential successful implementation of TBLT in China is the conceptual constraint between

the principal concepts of TBL and traditional language teaching methods used in China. Foreign language learning usually requires more formal instruction and other measures to make up for the lack of environmental support. In contrast, task-based language teaching emphasizes the meaning and fluency of language expressiveness which means focusing on acquisition of implicit knowledge while reducing the proportion of the literary education during the teaching process. Such a discrepancy in cultural values regarding teaching and learning makes it challenging in China to apply communicative approach in their classrooms.

Finally, large class sizes is much debated barriers to the effective application of TBL in China. The large classes are common, and teachers find it difficult to carry out some communicative activities whilst feeling confident in managing the whole class during the group work, thus, opting rather for a more traditional grammar-based teaching method. Furthermore, there is the challenge in introducing communicative activities and encouraging every student to participate in tasks actively. Moreover, TBLT is related to the performance-based assessments tend to be very time-consuming in such large size classrooms, therefore, teachers often feel powerless over management and assessment-related decisions, when implementing TBL in the classroom.

3. Pedagogical recommendations

One solution may be to develop communicative learning outside as well as inside the classroom. In many Chinese cities, English clubs can be often found. Such spaces not only offer students opportunities to practice English in a more natural environment, but further, serve as a means of granting participants greater autonomy and motivation in their learning. Moreover, multimedia and network resources have tremendous potential in education in task-based language teaching approach. Consequently, making full use of new technologies such as computer-mediated communication(CMC) in TBLT may be conducive to creating a better language learning environment for students.

The second recommendation is to shape a more flexible conceptualization of TBLT for teachers. TBLT was introduced as counter-approaches to the traditional language teaching methods in Asia. However, it may be feasible to effectively combine PPP with TBL in such a way that the teachers can minimize the limitations of PPP, instead of totally abandoning it. Communicative teaching methods do not exclude the role of explicit knowledge of language such like grammar structure. In fact, in many Asian countries, TBL were integrated into the curricula and education policies prior to teachers receiving sufficient training therein. So in order to effectively apply TBL in China, it is necessary to give teachers sufficient initial training so that they may acquire a real understanding of the nature of TBLT and be more confident before implementing it into practical situation.

Lastly, a scientific evaluation system is an important guarantee to achieve course objectives (Ministry of education of the People's Republic of China, 2001). For TBLT to be successfully and more effectively implemented in China, it should be noted that the evaluation content should be comprehensive, and the evaluation methods should also be diversified. Both the testable evaluation methods and the non-testable evaluation methods could be used, such as observation, question, discussion and the construction of learning files for learners. The current language evaluation system is too focused on knowledge and results while ignoring the humanistic perspective, thus a form of teaching rigidly centered on the exam has developed and as such this impedes the development of physical and mental abilities of students. Therefore, it is necessary to re-establish a more comprehensive and objective evaluation system in China.

4. Conclusion

This essay has described the teaching context by taking my class as an example. It can be seen clearly that TBL was helpful for students' future life, because of their authentic language using context, high motivation learning environment and cultivating comprehensive language ability of learners. However, there were many obstacles when implement TBL in the context, namely, lack of a real language environment, teacher's incomplete understanding of TBLT, cultural and contextual constraints. Consequently, some useful proposals are put forwards. The first is to create communicative language learning context outside as well as inside the classroom. The next suggestion is to shape a right and more flexible conceptualization of TBLT for teachers. The third is to build a comprehensive and scientific evaluation system. There seems to be no single golden method that could works very well for every learner regardless of context. Similarly, whether TBL could works in China or not depends on how flexibly these approaches can be conceptualized and localized.

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Configuration Strategy and Application of Siemens PLC Control Network

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Abstract: Siemens PLC provides a variety of control networks to meet the communication and control tasks of different automation systems. Through the analysis of Siemens industrial control network products, this paper puts forward some configuration methods of Siemens PLC control network. This paper expounds how to choose the control network scheme according to the specific situation of the control system in engineering practice. In this paper, the topology diagram of the control network is given, and the characteristics of the system configuration are summarized. It can provide reference for the design of similar monitoring system.

Keywords: PLC & PC; Control network; Allocation strategy

Introduction

Siemens PLC control network is mainly developed in computer automation control, digital analog communication and intelligent instrument technology. Enterprises in the process of industrial production, the use of Siemens PLC can effectively ensure the safety of industrial production, anti-interference ability is particularly strong, the probability of accidents is also particularly low. In order to meet the needs of enterprises at different levels of automation system control network, Siemens PLC research and development of control network products are particularly rich, these products in performance and other aspects have a very big difference. Therefore, enterprise users in the selection of Siemens PLC control network products, to actively according to the actual situation of the enterprise, select a reasonable product, reduce the economic production cost of the enterprise.

1. Siemens PLC control network type

1.1 Point-to-point interface network

The point-to-point interface network can define the communication protocol by the user, which is a free communication method. Under the application of this kind of network, S7-200/300 PLC can realize the data exchange with any communication protocol open equipment such as controller, printer, scanner, frequency converter, bar code and so on. The currently available communication protocols include ASCII driver, RK512, etc.

1.2 Industrial Ethernet

Industrial Ethernet conforms to the international standard IEEE802.3. It is a communication network designed specifically for industrial applications. It can communicate through optical cables, coaxial cables, industrial twisted pairs, etc. The protocols used are TCP/IP and ISO protocols. Siemens Industrial Ethernet has a maximum coverage of 150km, which can be connected to 1024 network nodes at most, and the data transmission rate is 10/100 Mb/s, supporting wide area networks.

1.3 Profibus network

The Profibus network is composed of three mutually compatible parts: Profibus-PA/-DP and Pro2fibis-FMS. It conforms to the IEC61158 international standard and is mainly used for on-site communication and workshop monitoring. The network can exchange data with up to 127 network nodes, and up to 10 repeaters can be connected in series to extend the communication distance. The maximum transmission rate is 12 Mb/s. The Profibus network is open, allowing many users to develop different products but all comply with the Profibus network protocol, that is, all products under the Profibus network can be connected to the same network for data exchange. It can meet the production control needs of different fields.

1.4 MPI network

MPI network is also called multipoint interface. MPI protocol is a network communication protocol of Siemens internal standard, and its physical layer is RS-485. Siemens PLC can build an MPI network by connecting the programming interface MPI on the CPU and the programming interface on the network card of the upper computer. The maximum transmission rate of the network is 12 Mb/s. Siemens PLC can be connected to and run on multiple devices such as computer, C7, human-machine interface, STEP7 software, etc. at the same time through the MPI network. The number of connections depends on the type of CPU used. In practical applications, this feature can be used to realize the economic and effective configuration of the PLC control network.

The MPI control network is suitable for communication requirements with low communication rate requirements and small

amount of information transmission. It can form a small PLC control network without additional hardware and software to realize the communication of data and information. It is economical, effective, Convenient operation, low cost and other advantages.

1.5 PPI network

PPI network is a control network specially developed by Siemens for S7-200PLC. It is also a master-slave protocol. That is, the slave station will only send information when the master station requires it, and respond to the corresponding request based on the address information. Will take the initiative to send information. This kind of network communication interface is integrated on the S7-200CPU, and can use ordinary double-core shielded twisted-pair cables for network communication. The baud rate is 9.6/19.2/187.5 kb/s.

1.6 AS-i interface (sensor-actuator interface) network

The Siemens PLCAS-i interface control network conforms to the international IECTG17B standard. It is located at the bottom of the automatic control system and can only transmit a small amount of data information. It is usually used to connect on-site binary devices with AS-i interfaces.

Among the numerous network types of Siemens PLC, their functions are very different, and each has certain advantages and disadvantages, but they are all designed to meet the needs of different levels of control networks. Generally speaking, control networks can be divided into two categories: one is a communication network that meets international standards, namely industrial Ethernet, Profibus, AS-i interface; the other is a dedicated communication network developed by Siemens, namely MPI, PPI, point-to-point interface. When the user chooses to control the network, the first consideration is to determine the specific type of network.

Generally speaking, communication networks that comply with international standards, such as industrial Ethernet and Profibus, have transmission speeds, transmission distances, and transmission capacities that are far superior to dedicated communication networks, and are powerful and provide interconnection and interoperability when forming networks. Good and flexible. However, it is often necessary to add more software and hardware facilities, the one-time investment cost is relatively large, and the development process of technology application is also relatively complicated.

For example, for a communication network that conforms to international standards, Industrial Ethernet is a communication system used at the management level and the unit level. It is used for communication occasions where time requirements are not too strict and a large amount of data needs to be transmitted, and it can be connected remotely through a gateway. However, industrial Ethernet is the product of the extension of ordinary Ethernet technology in the control network. The CSMA/CD media access control method is adopted, which is non-real-time in nature and cannot meet the real-time requirements of communication in the industrial automation field. Therefore, industrial Ethernet has always been considered unsuitable for use in the underlying control network. Another example is Profibus, a communication network that complies with international standards. It is significantly better than PPI and MPI networks in terms of performance. Its electrical transmission distance can reach 9.6 km. If optical cable is used, the transmission distance can reach 90 km, and the transmission rate can reach 12Mb/s. For non-Siemens devices to be interconnected with the Profibus control network, as long as the device supports Profibus related protocols and can provide GSD files and communicate. But relatively speaking, its software and hardware investment is relatively large, and the development cost is relatively high.

For the dedicated communication network developed by Siemens, such as MPI, PPI, and point-to-point interface, the main performance is not as good as the communication network that meets international standards, and it is also difficult to achieve interconnection and interoperability with non-SIMATICNET products, but its software and hardware investment costs Lower, it also occupies an important share in the development and application of control networks.

For example, MPI communication is a simple and economical communication method used when the communication rate is not high and the communication data volume is not large. It can form a small PLC control communication network, realize a small amount of data exchange between PLCs, and realize networkization without additional hardware and software expenses. The cost is low, and the usage is simple. It is a cost-effective network solution for Siemens PLCs. plan. Another example is the use of PPI protocol for communication between S7-200 series PLCs is very convenient, without any additional software and hardware, only use NETR/NETW two sentences to communicate, but its transmission capacity and transmission rate are low.

2. Configuration requirements of Siemens PLC control network

2.1 Communication ability

In Siemens PLC network control, the following network communication functions must be possessed, S5 compatible communication, S7 basic communication, standard communication and OP communication. S5 compatible communication can receive and send ports to optimize the communication between STMATICS5 and S7 series. S7 basic communication can provide simple and powerful communication tasks for PLC network control. The realization of S7 basic communication needs to pass the MPI network; At the same time, it also has SFC that can be used for user programming. OP communication is mainly to use PLC for data communication to realize programming and human-computer interactive operation services. Standard communication enables communication between various manufacturers and different automation systems. In the actual engineering application process, it is necessary to actively select appropriate communication functions based on the specific conditions in the Siemens PLC control network.

2.2 Communication interface

At present, the interface modes of Siemens PLC control network mainly include PG/PC communication card, module processor, PLC special communication module and PLC host programming interface. The PG/PC communication card is mainly used to control the connection of the PG/PC side of the network, and connect the PG/PC equipment to the corresponding network. However, due to its variety, it is necessary to carefully distinguish each function during the selection and use process. difference. For example, the CP5511 device is not equipped with a microprocessor. At this time, the computer can be connected to the MPI network, which can

effectively ensure the connection of later work. The module processor is mainly connected to the PLC side. The module processor is extremely intelligent and can automatically connect the PLC to the appropriate network, and the application to the system CPU is also very small, reducing the burden on the CPU. There are also big differences in the types and functions of the module processors. In the process of selection and use, you also need to make a careful distinction. The programming interface of the host computer in the Siemens S7 series can double as a communication interface in the control network. For example, the S7-200 series can not only have a programming interface on the PLC host, but also provide a dedicated MPI and PPI control network communication interface.

2.3 Transmission medium of Siemens PLC control network

In the Siemens PLC control network, there are many types of transmission media to choose from. In the Siemens PLC control network, there are many types of transmission media to choose from. Take Profibus-DP network as an example, the transmission medium of this kind of network can adopt the following several ways. First, electrical data transmission. Electrical data transmission uses standard circular cross-sections, shielded twisted-pair cables with PE sheaths, and underground cables for data transmission. Second, wireless data transmission. The wireless data transmission is mainly through the infrared connection module, and the wireless data transmission is carried out within a distance of 15 meters. Third, optical cable data transmission. Optical cable data transmission mainly uses plastic or glass fiber optical cables for data transmission. This method of data transmission has a particularly long transmission distance, and can be used not only indoors, but also for outdoor network data transmission.

3. Configuration strategy and application of Siemens PLC Control network

3.1 Specific application in water company

Generally speaking, a water company is composed of two different departments in terms of operation, namely the water source area and the water plant area. Generally speaking, a water company is composed of two different departments in terms of operation, namely the water source area and the water plant area. Compared with other large-scale production enterprises, the water company needs to control the network TV, and the amount of information transmission that needs to be controlled in the specific operation process is less, and the data transmission distance is also shorter, so in the specific operation process In the MPI network communication mode in the Siemens PLC control network can be used. In the process of applying Siemens PLC control network, the water company constructed a small control network through the application of MIP communication method. Through analysis, it can be found that the MPI network mainly consists of three slave stations in the water source area, a PLC master station, and an upper computer in the water plant. The CPU model used by the master station is S7-300PLC of 3121FM. And the model of the CPU used by each slave station is S7-200PLC of 224XP. Then, use the RS485 repeater to expand the original network (this link is carried out in the physical layer), and appropriately extend the communication distance. In this design process, in order to ensure that the remote communication service can meet the remote monitoring and working needs of the water plant, the communication distance should be appropriately extended. Through analysis, it can be seen that the extension to 1.2km is an ideal length, which not only meets the operational requirements. , And it will not cause waste of resources. In addition, through analysis, it can be found that the water company has relatively low requirements for timeliness in the control tasks, so the passive mode can be selected in the specific working mode between the master station and the slave station. Generally speaking, the signal transmission is completed by the master station, and the monitoring function is fully exerted, so as to realize the comprehensive control and supervision of the water plant and provide high-quality water for the community. In addition, a complete MPI network should be used to cover the upper PC and PLC in the specific design process.

3.2 Specific applications in iron and steel enterprises

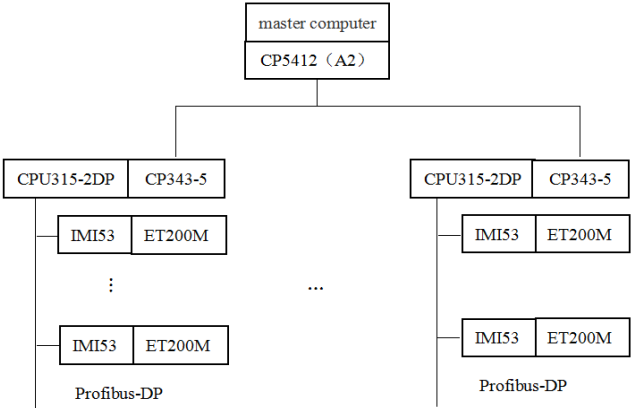


Figure1: Profibus controls the network topology

As we all know, steel companies will involve many objects that need to be controlled in the specific production process. Among them, the more critical control objects are coolant beds, pushers, cutting machines and other equipment that need to be used in the steel production process. There are many types of equipment, and each type of equipment plays a different role in the steel production process. Therefore, the control point is relatively complicated, and because the amount of information transmission is relatively large, this increases to a certain extent. It is difficult to control. Based on this, the Siemens PLC control network selected by steel companies in the specific production process should be a Profibus network compatible with national standards to avoid adverse effects on steel production. After steel companies make specific decisions, they also need to divide the control system to form multiple PLC control stations based on the actual production situation of the company itself and the specific location of the equipment in the production

workshop. At the same time, it is necessary to ensure the data between different points. Communication can be completed through chain control technology to achieve the final production goal. In addition, the Profibus-DP network has two different access methods in the field data link layer, namely the token bus method and the hybrid method. The former is to use the token to transfer the library information to the main station, and the main station can request or send data information from the main station after obtaining the token.

However, the slave station is different. It needs to react passively or send data information to the main station during the specific operation. This method is difficult to report that the data can be highly efficient and accurate in the specific transmission process. Therefore, in the process of optimizing the Siemens PLC control network, all control stations are often set as the master station. In this way, it can be ensured that the data information inside the control system can be exchanged freely to ensure the stable operation of the system sex.

In addition, in the specific configuration process, in order to reduce costs and improve the safety and reliability of the system during operation, the steel plant uses a 315-2DP CPU for S7-300PLC in all main stations. It can be found through actual application results that the integrated Profibus-DP network can be used as the master station with this type of CPU, so that a first-level subnet can be formed in specific operations.

In addition, through the application of the ET200M module as a remote I/O slave station, the construction of the Profibus-DP control network topology is completed. Analyzing the problem from an overall perspective, it is not difficult to find that the Siemens PLC control network is essentially a two-level subnet structure, and the main role of the Profibus network at the bottom is to provide corresponding communication services for the PLC master station and the remote slave station. To ensure the reasonable transmission of information, the main function of the top-level Profibus-DP subnet is to provide corresponding data communication between the PLC master station and the upper computer. Due to the large amount of data transmission involved between different master stations and the upper computer and the master station, in the specific design process, the top-level subnet is best to use the multi-protocol hybrid mode to complete the corresponding operation operations, so as to ensure reasonable operation sex.

After iron and steel enterprises have applied Siemens PLC control network, through long-term application practice, it can be found that the automation control and production efficiency of equipment in iron and steel enterprises have been significantly enhanced, and production costs have also decreased, which has improved the economic benefits of enterprises. It can be seen that reasonable application of Siemens PLC control network and reasonable configuration of it can promote the healthy development of the engineering field.

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Analysis on the Innovative Approaches of College English Translation Teaching Based on New Media Technology

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Abstract: Information technology is developing rapidly in China. New media technologies of different types and adapting to different environments continue to appear, and produce good application effects in various fields, so as to provide a solid backing for the development and innovation of China's education industry. Specifically, English translation teaching and related activities in Colleges and universities, We can also see the role of new media technology in promoting innovation. When using new media technology, we should pay attention to its improvement on the depth and breadth of students' thinking, and carry out thinking from the perspectives of application innovation, basic innovation, combined innovation and practical innovation, so as to finally provide support for the improvement of English translation teaching quality.

Keywords: New media; Technology; Translation teaching; Innovative approach

Under the background of the sustainable development of information technology, positive thinking has also been carried out in the field of education. The exploration of the combination of new media technology and teaching activities is unified with the opinions on the improvement of educational standardization put forward by the education department. College English translation teaching should also pay attention to this trend, continue to strengthen the exploration of innovative strategies in practice, make full use of the functions of new media technology and platform, innovate translation teaching methods, enrich students' practical opportunities, and truly serve the improvement of classroom teaching quality.

1. Understanding of College English translation teaching under New Media Technology

Since the 1980s, with unprecedented influence, modern information technology has made it possible to change many contents and models involved in English translation teaching. In particular, the continuous emergence of new media technology has made English translation teaching activities colorful. When we observe English translation classes in Colleges and universities, we can find that teachers are increasingly adopting multimedia technology to provide students with audio or video resources, and even directly place English translation teaching activities in the environment of Internet and mobile terminals. The interactive characteristics are becoming more and more obvious. In fact, due to the mature development of new media technology, in recent years, it can be seen that there have been earth shaking changes in the way of activities in College English translation teaching, which is not only in line with the overall needs of China's social development, but also unified with the needs of translation teaching.

It is generally believed that in the context of new media technology, computer equipment and Internet technology will provide a more friendly channel for teaching. This channel can benefit a lot in information communication and information processing. Among the multimedia interactive system channels, there are many contents such as text, image and video, as well as advantages such as network teaching and independent learning platform. Because in the context of new media technology, teachers have more operational space to carry out translation teaching activities.

In short, the reason why we advocate new media technology and emphasize its role in translation teaching is that in the era of big data, the number of information resources increases exponentially and has the possibility of deep integration with various industries. Therefore, it is necessary for college teachers to actively adapt to the trend of social development and introduce ideal teaching ideas and strategies with a more positive attitude. In this way, college students can finally take this opportunity to improve their translation literacy, develop into high-quality talents in line with the current social requirements, and provide support for their job selection and employment.^[1]

2. How to innovate college English translation teaching under the new media technology

2.1 Development of teachers' comprehensive ability

In order to make students' translation ability more advanced under the new media technology, it is an effective and innovative way to make great efforts in the development of teachers' comprehensive ability and inspire and infect students with teachers' actions. For the vast majority of colleges and universities, if they want to fully develop teachers' comprehensive ability, the key approach is also the introduction, practice and in-depth thinking of new media technology. In other words, due to the support of new media technology and content, teachers will increase a lot of opportunities to improve their comprehensive ability with the help of different types of

intelligent terminals, including computers and smart phones, we can learn knowledge related to English translation with students at any time.

2.2 Consolidate students' learning foundation

The value of tamping the foundation is outstanding. For example, if the sentence "people or chat up, the heart is flawless" is translated into English, students can smoothly understand the original meaning and make corresponding expression only after the foundation is consolidated. A large number of digital teaching resources involved in new media technology can enable students to obtain learning benefits. Combined with English translation teaching, students can quickly compare various English sentences and understand what better translation results are in the process of comparison and analysis, What is the difference between the translation questions in college teaching and those in middle school, and have a deeper understanding of several translation levels of "faithfulness, expressiveness and elegance". Such understanding and cognition is a necessary way for students to consolidate their learning foundation. In addition, relying on the new media translation teaching resources that become modules can also enable students to strengthen and consolidate the weak links of the subject according to their own actual situation, which will solve the basic imbalance in the process of English translation. Therefore, based on the premise of the unity of students' foundation, teachers can try their best to achieve a smooth and moderate teaching rhythm, so as to make the course promotion smooth and natural.

2.3 Combination of information teaching mode

If many cutting-edge teaching models want to achieve ideal results, they must be inextricably linked with new media and digital teaching resources, such as micro class, flipped class and inquiry learning model. Among them, there are many application links of digital teaching resources and a large number of applications, especially in micro class teaching, Teachers have the responsibility and obligation to present all the contents of the textbook in the form of micro class video, so that students can complete their learning without opening the textbook. At the same time, teachers can also highlight their modular advantages from the perspective of digital teaching resources, refer to students' basic mastery and actual teaching progress, reconstruct the knowledge framework of teaching materials, and give corresponding supplements and extensions. Such practices can better avoid the lack of unity of teaching materials and promote the transformation of translation teaching to the direction of flexibility. Moreover, teachers should also pay attention to the combination of information teaching mode. Compared with traditional teaching methods, this mode is more closely connected with the Internet. Therefore, materials can be updated at any time, so that the translation content faced by students is always at the forefront of the development of the times.^[2]

2.4 Constantly improve the assessment methods of English Teaching

With more and more attention paid to oral English, the traditional English teaching assessment method has been unable to adapt to the modern English teaching mode. Therefore, we should constantly improve the assessment methods of English teaching and enhance the objectivity and effectiveness of the assessment. The purpose of the assessment is not to simply rank the scores obtained by students, but to really test students' English literacy. Teachers should make full use of the communication platform supported by new media, such as using wechat for English test. The test content is not only a written test, but should involve listening, speaking, reading and writing. Combined with students' performance at all levels, teachers should conduct a comprehensive evaluation to deeply understand students' shortcomings in one aspect.^[3]

3. Conclusion

In short, based on the specific development background of new media technology, colleges and universities need to pay attention to the effective utilization of new media equipment and platforms in translation teaching, so as to broaden the depth and breadth of students' learning. In order to achieve this effect, teachers can think from the perspectives of application innovation, basic innovation, combined innovation and practical innovation, It really urges students to constantly improve their own knowledge framework and specific content, and cultivate high-quality talents in line with the needs of social development.

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Research Review on the Chinese Dream since the New Era

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Abstract: Since the new era, the theory and practice of the Chinese dream have become the hot spot of academic research. The academia has conducted in-depth research on the background, core connotation, essential characteristics and realization path of the Chinese dream, and has achieved fruitful research results. However, there are still a lack of systematic integration of Chinese dream theory, lack of historical traceability of Chinese dream theory, lack of integration of Chinese dream and other disciplines, which need to be further discussed in the academic circles.

Keywords: New Era; Chinese Dream; Review

On November 29, 2012, General Secretary Xi Jinping first put forward the Chinese Dream in the Road of Renaissance exhibition. He pointed out that realizing the great rejuvenation of the Chinese nation is the greatest dream of the Chinese nation since modern times. As the great vision of the Chinese people for the great rejuvenation of the Chinese nation, the Chinese dream is related to China's future development direction and has always been a hot issue in the academic circles. Since the new era, the academic circle has conducted in-depth research on the background, the core connotation, the essential characteristics of the Chinese dream, which has achieved fruitful results and expounded and demonstrated the great value significance of realizing the Chinese Dream from different perspectives. However, these achievements are also insufficient. In view of this, it is reviewing and sorting out the existing achievements of academic research on the Chinese Dream since the new era. It is of distinct theoretical significance and practical value for deepening the basic theoretical research of the Chinese Dream and expanding the research direction of practical education of the Chinese Dream.

1. A Basic Theoretical Study on the Chinese Dream

At present, the basic theoretical research on the Chinese dream mainly focuses on the background, connotation and value of the Chinese dream, which is as follows:

1.1 The background for the Chinese Dream

As a beautiful yearning of the contemporary Chinese people for the future society, the Chinese Dream not only has a distinct practical background, but also has a profound historical origin and theoretical background. In this regard, the academic circle mainly has the following views:

In terms of the historical origin of the Chinese Dream, it is rooted in the excellent traditional Chinese culture. For example, some scholars believe that the Chinese Dream is the inheritance of the thought of virtue, rule of virtue and the harmony culture.^[1] Other scholars believe that the Confucian Datong ideal is an important ideological resource of the Chinese dream, which is the latest discourse expression of the Confucian Datong ideal in contemporary China.^[2]

In terms of the theoretical background of the Chinese Dream, it is the inheritance and development of the Marxist thought on communism and the historical materialism. As some scholars believe that the ultimate goal of the Chinese dream is to achieve communism, which is guided by Marxist historical materialism and communist ideology.^[3] Other scholars believe that the Chinese dream is the realistic expression of the common ideal of socialism with Chinese characteristics, and it is the high unity of lofty ideals and common ideals.^[4] The Marxist theory of freedom and all-round development of people has been fully realized at present, and it can be said that the theory and practice of Marxism have built the original framework for the Chinese dream.

In terms of the time background of the Chinese Dream, it meets the development needs of China's political, economic, social and other aspects, and shows the good image and vitality of China at present. Some scholars believe that Chinese dream was born in a decisive period of transition from an overall moderately prosperous society to a moderately prosperous society in all respects. During this social transition period, the common spiritual state and ideal consensus of all the Chinese people is the social background of the Chinese dream.^[5] Another scholars believe that China's modernization process is at a node of transformation from take-off to mature stage and Chinese dream is the strategic goal proposed to adapt to this node stage.^[6]

The above analysis has comprehensively sorted out the background of the Chinese Dream theory from the historical origin, theoretical background and time background of the Chinese Dream. This not only clarifies the historical traceability of the Chinese dream, but also fully shows that the Chinese dream is the product of combining Marxist theory and the practice of socialism with Chinese characteristics, providing enlightenment and reference for the academic community to continue the study of the Chinese dream theory. In fact, the Chinese dream is the latest achievement of Marxist theory of sinicization and the product of the combination

of theory and practice. Therefore, the background of the Chinese dream should not only be clarified from the early theory of Marxism, but also from the process of the Communist Party of China leading the Chinese people to carry out revolution, reform and construction, which needs to be further explored by scholars from the perspective of historical research.

1.2 The connotation of the Chinese Dream

After clarifying the background of the Chinese Dream, we should clearly define the core connotation of the Chinese dream, which is the theoretical premise for the academic circle to carry out research related to the Chinese Dream. On the connotation of the Chinese Dream, the academic community has different understandings of this. In summary, there are mainly the following views:

The basic content of the Chinese dream is from the meaning of the Chinese dream. Some scholars believe that the Chinese Dream is to realize the great rejuvenation of the Chinese nation, the prosperity of the country, the nation and the happiness of the people.^[7]

See the important connotation of the Chinese dream from the perspective of relationship dimension. From the perspective of the world, the nation and the people, the scholar Han Qingxiang proposed that the Chinese dream is not only the dream of a strong country, the dream of peace; but also the dream of the nation, the dream of the people. It is also a dream of fairness and justice, and it is everyone's dream of opportunity.^[8] There are also scholars from the national, national and international perspectives, believe that the Chinese dream is a dream of great rejuvenation, is the dream of the people at different levels from the country to the dream, is a beautiful blueprint in the hearts of the people; is the dream of always adhere to the 'peace, development, cooperation, win-win', is connected with the world dream.^[9]

See the international connotation of the Chinese dream from a world perspective. Some scholars believe that the Chinese dream aims to seek national independence and national liberation. It is to pursue the international status of a great country.^[10] The Chinese dream is the dream of the country and the nation, and it is an achievable dream with the goal of realizing the rise of China.

Based on the goal of realizing the great rejuvenation of the Chinese nation, the above definition has a relatively comprehensive understanding of the basic connotation, important connotation and international connotation of the Chinese Dream from different perspectives. However, its deficiency lies in that the connotation of the Chinese dream is regarded as self-evident. It does not see the concept that the Chinese dream is development, which will produce corresponding content changes with the changes of The Times and ignore The Times and development of the Chinese Dream. As socialism with Chinese characteristics has entered a new era, major changes have taken place in China's historical orientation. Changes have taken place to different degrees in China's society, politics, economy, culture and people's livelihood. In the future study, the Chinese Dream should start from a new historical orientation, be closely related with the transformation theory of the main contradiction in society, and then explore the new connotation of The Times of the Chinese Dream.

1.3 The value of the Chinese Dream

There are many different viewpoints on the proposed value and significance of the Chinese Dream. In summary, it mainly focuses on theoretical value, practical value and international value.

In terms of the theoretical value, some scholars discuss the theoretical significance of the Chinese dream from the perspective of the sinicization of Marxism. He believes that the Chinese dream reflects the historical path, ideological essence, theoretical quality and value orientation of the sinicization of Marxism. Taking the value orientation as an example, he believes that the Chinese Dream is the wisdom of the integration of eastern and western cultures in the process of historical development, which not only reflects the openness of Marxism, but also reflects the inclusiveness of traditional Chinese culture.^[11] Other scholars believe that the Chinese dream as a discourse system has ideological significance, and it creatively opens up a society with Chinese characteristics. The universal dialogue between the system of theoretical theory and the world, and provides a new theoretical defense system for the legitimacy of socialism with Chinese characteristics.^[12]

In terms of the practical value, some scholars believe that the practical value of the Chinese dream is to enhance Chinese consensus; boost the Chinese spirit; gather Chinese strength, and promote China's new development.^[13] Another scholars believe that the people of all ethnic groups will be under the banner of the Chinese dream, adhere to the socialist core values, in the cause of the socialist national spirit condensed patriotism as the core, with reform as the core of the spirit of The Times, the two tension of spiritual integration is the Chinese spirit.^[14] Have a dream to have a goal, to have a goal to forge ahead. The real value of the Chinese Dream lies in the joint efforts of the Chinese people and work together under the guidance of the Chinese Dream.

In terms of the international significance, some scholars believe that the world historical significance of the Chinese dream lies in sketching the concept of life community to overcome the opposition between human and nature; the recognition of the social community transcends the western liberal political civilization since modern times; and promoting the world calendar of building a community with a shared future for mankind History process.^[15]

The above analysis clearly explores the significance of the current Chinese Dream for China and the world from the three aspects of theoretical value, practical value and international value. The proposal of the Chinese Dream gives people guidance to achieve the goal in value orientation, which also clarifies the western misjudgment of the China threat theory and shows that the Chinese dream is a dream of peace, cooperation, win-win and sharing. On the other hand, the Chinese dream is also a transcendence on the basis of rejuvenation. It gives people the opportunity to excel and the ultimate care for the pursuit of people's free liberation and all-round development. However, at present, few studies have combined the essential connotation of the Chinese dream with the value significance and discussed the deep significance of the Chinese dream: people-oriented, which needs to be explored further.^[16]

2. Research on the realization path of the Chinese Dream

On the realization path of the Chinese Dream, the academic community has discussed it from different perspectives. In summary, there are mainly the following four viewpoints:

Adhere to the three must. To realize the Chinese dream, we must follow the path of socialism with Chinese characteristics, uphold

the leadership of the CPC, carry forward the Chinese spirit, and pool China's strength.^[17]

Firm three confidence. Road confidence provides the right path to realize the Chinese dream; theoretical confidence provides a scientific action guide for the Chinese dream; institutional confidence provides a clear fundamental guarantee for the Chinese dream.^[18]

Strengthen the six-in-one development. From a six-in-one perspective, scholars realize the Chinese dream should promote economic construction, lay a solid material foundation for the realization of the Chinese dream.^[19]

Continue to hard work to revitalize the country. To realize the Chinese dream, we must rely on practical work. For example, some scholars believe that *empty talk mistakes the country and revitalize the country* points out the fundamental way to realize the Chinese dream.^[20] Another scholars believe that realizing the Chinese dream requires unity of knowledge and action.^[21]

3. Future progress of the Chinese Dream research

Since the new era, the Chinese dream has attracted more attention from the academic community and achieved research results in many aspects, such as exploring the background, connotation, characteristics and value of the Chinese dream, studying the relationship between the Chinese dream and the personal dream, and exploring the realization path to some extent. The above research basically involves the basic theory and practical operation of the Chinese Dream, adheres to the Marxist theory of sinicization theoretically, and provides certain help for the realization of the common ideal of the Chinese dream in practice. But on this basis, these achievements also have shortcomings such as insufficient background traceability research of the Chinese Dream and narrow research vision, which need further in-depth research in the academic community.

Firstly, Strengthen the study of the basic theory of the Chinese Dream. Most of the academic research on the Chinese Dream focuses more on practical guidance and ignores its basic theoretical research. From the existing theoretical achievements of Chinese Dream, although the academic circle has research on the background, connotation and characteristics of Chinese Dream, they lack influential and innovative works. From this level, future research needs to focus on the systematic integration of the basic theoretical research of the Chinese Dream, deeply answer a series of basic theoretical questions such as how the Chinese Dream is confirmed, how to reveal, how to be realized^[22], and conduct practical education research on this basis.

Secondly, Pay attention to the historical traceability research of the Chinese Dream. The Chinese dream is rooted in traditional Chinese culture and has profound historical and cultural deposits. To realize the Chinese dream, we also need to draw Chinese wisdom from the Chinese stories, inspire the Chinese spirit and pool its strength. However, judging from the current literature research, a very small number of articles combine with Chinese traditional cultural ideas to deeply explore the historical traceability of the Chinese dream. Future research should sort out the development context of the Chinese dream from the perspective of comparing history and reality, realize the necessity and value significance of the Chinese dream on this basis, and lay the theoretical foundation for the realization of the Chinese dream.

Thirdly, Expand the vision of the theoretical and practical research of the Chinese dream. Young college students are the future of the country. The realization of the Chinese dream needs the relay struggle of young college students, which need to improve the college students' ideological and political quality in many aspects. However, most of the current interdisciplinary research focuses on the Chinese dream and the education of ideals and beliefs of college students, and the research achievements in other interdisciplinary fields are relatively few. To this end, the future research of the Chinese dream should broaden the horizon, enrich the research content, such as the combination of the Chinese dream with collectivism education, patriotism education, labor education, etc., and explore the paths and measures of integration in practice.

In short, since the new era, the academic community has actively explored the background, connotation and characteristics of the Chinese Dream, actively applied the Chinese Dream theory to the practice education of socialism with Chinese characteristics, explored many effective realization paths, and enriched the research of Marxist sinicization theory, but there are still some deficiencies. In the future, the theory and practice of the Chinese dream should focus on the above problems, and constantly deepen its guidance to education in practice.

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Study on the Effect of Stability of Athletes' Technical Movements on the Performance of Crossbow Shooting in Crossbow Shooting Competitions

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Abstract: As a competitive sport with minority characteristics, crossbow shooting has a long history of development in China's minority regions. Research and analysis of the stability of the technical movements of athletes in crossbow shooting competition on the crossbow shooting competition performance research, for the analysis of minority crossbow shooting techniques, to promote the dissemination of minority crossbow shooting techniques have important positive reference significance. The article analyzes the influence of the stability of athletes' technical movements on their performance in crossbow shooting competitions through mathematical and statistical methods, etc. It is intended to provide a reference for promoting the technical development of crossbow shooting movements and improving the performance of crossbow shooting athletes in competition.

Keywords: Crossbow shooting; Technical movements; Stability; Score

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Preface

Nowadays, more and more people are paying attention to sports events, and television networks are bringing these little-known minority sports to the screen. Crossbow shooting, a classic minority sport, has received a lot of attention from the general public since its broadcast. Improving the stability of technical movements of crossbow shooting athletes under the strict requirements of the game to achieve the purpose of improving the final performance has become the main content of the current study of crossbow shooting sports. The study and analysis of the influence of the stability of athletes' technical movements in crossbow shooting competitions on the performance of crossbow shooting competitions have essential and positive reference significance for improving the crossbow shooting techniques of ethnic minorities and promoting the dissemination of crossbow shooting techniques of ethnic minorities.

1. Research results and analysis

1.1 Crossbow shooting technology-related content

Crossbow shooting techniques are divided into three main areas: crossbow shooting preparation, crossbow shooting posture, and crossbow shooting action^[1].

1.1.1 Crossbow shooting preparation

Crossbow shooting preparation refers to the preparation action before the athlete shoots, mainly pulling the string and setting the arrow. It requires the athlete to place the crossbow in front of the body, bend the knees, and half squat or sit on the bench, step on the crossbow piece with both feet and then hold the middle of the crossbow string with both hands and pull the string into the socket. To place the arrow, pick up the crossbow with both hands and hold it horizontally directly in the front, holding the lower part of the crossbow body with one hand and placing the arrow in the crossbow slot with the other^[2].

1.1.2 Crossbow shooting posture

Crossbow shooting posture is mainly divided into stance and kneeling posture. Stance: The athlete is required to have both feet on the ground, standing left and right with shoulder width, holding the lower part of the crossbow with one hand and controlling the trigger with the other hand, with the arm hanging in the air and the crossbow not touching the athlete's body or other related parts. Kneeling position: The athlete's toes of one foot, knee, and the palm of the other foot are on the ground to form triangle support, holding the crossbow with the same grip as the standing position, one elbow can be placed above the knee, and the body of the crossbow is not required to be in direct or indirect contact with the athlete's body^[3].

1.1.3 Crossbow shooting action

Crossbow shooting is one of the most important aspects of the sport of crossbow shooting. It mainly consists of three elements:

crossbow shooting, aiming, and shooting, which is closely related and affects each other.

(1) According to crossbow action

It is the basis of technical movements and is a prerequisite for accurate shooting. The athlete is generally required to hold the lower middle part of the crossbow body with the left hand forward, the left elbow inward, the right hand holding the crossbow neck, and the first joint of the index finger gently resting on the trigger. The crossbow should be kept parallel to the ground and at the same height as the shoulder. At the same time, both hands should be coordinated to keep the crossbow balanced and stable.

(2) Aiming action

It is an important part of the crossbow shooting action and must be aimed correctly regardless of the position used. When aiming, the athlete should concentrate mainly on the level relationship between the collimator and the gap. At the same time, the athlete can close the left eye and aim with the right eye, or the athlete can aim with both eyes open. Aiming with both eyes open can reduce visual fatigue and is beneficial to shooting. When aiming, the athlete should hold his breath, and the breath should not be held for too long, generally not more than 30 seconds is good.

(3) Shooting action

Shooting is a key part of the crossbow shooting action. The correct shooting action is for the athlete to press back on the trigger with the first knuckle of the right hand evenly and squarely, with the rest of the fingers relaxed and with the same force. The correct grip position is the first knuckle of the index finger that can be easily pressed on the trigger. The force of the index finger is the most important action of the trigger. The requirement of force is even force, not sudden force when pulling the trigger, but a soft and even force

2. A before-and-after reference to experimental data on crossbow shooting technology

Table 1 Comparison of the results of shooting five arrows before the experiment between the experimental group and the control group

Comparison of the number of individuals shooting five arrows with the average score of ten training sessions (rings)										
Mean number of rings	40	41	42	43	44	45	46	47	48	49
Experimental group (person, n=30)	8	2	5	4	3	2	2	2	1	1
Control group (person, n=30)	9	4	6	4	2	2	2	1	1	0

By the selected experimental group and the control group, each group of 30 athletes. Before the experiment, it is known that the average score of people in the experimental group is 42.7 rings, and the average score of people in the control group is also 42.6 rings. The average score of training of athletes in both groups is comparable.

2.1 A study of the effect of understanding the concepts related to crossbow shooting techniques on crossbow shooting performance

During crossbow shooting drills, coaches demonstrate the technique. At the same time, by observing the technical movements of the crossbow shooter and providing careful instruction, the student builds a concept of the crossbow shooting technique. After the students understand the concepts, they are allowed to practice on their own. For the control group, the coach explained and demonstrated the movements and let the athletes imitate the exercises without emphasizing the concepts related to the crossbow shooting technique. After one week, the results of the two groups were as follows.

Table 2 Effect of knowledge of concepts related to crossbow shooting technique on performance

Mean score of ten training sessions for the individual shooting of five arrows (rings)										
Mean number of rings	40	41	42	43	44	45	46	47	48	49
Experimental group (person, n=30)	2	2	3	2	6	5	4	2	2	1
Control group (person, n=30)	6	8	2	12	1	1	0	0	0	0

The above table shows that the athletes in the experimental group had an accurate personal understanding of the concepts related to the crossbow shooting technique with an in-depth understanding of the concepts related to the crossbow shooting technique. In terms of training performance, they also improved significantly with a per capita score of 44 rings, but not as significant as the athletes in the experimental group. This result strongly suggests that first establishing the concepts related to the technical movements of crossbow shooting athletes has an essential role in improving the athletic performance of crossbow shooting athletes.

2.2 According to the study of the effect of crossbow technique stability exercises on crossbow shooting performance

Crossbow relying, as the foundation of crossbow shooting technique, has an important impact on improving crossbow shooting performance. From the stand crossbow relying exercise and the kneeling crossbow relying exercise, the experimental group instructors require the movement to have the feet apart, as wide as the shoulders, in a standing position, with the left hand reaching forward to hold the lower middle of the crossbow bed, the left elbow inward, the right hand holding the crossbow neck, the first joint of the index finger resting on the trigger, and the crossbow to be horizontal, as high as the shoulders. Through practice, after one week of training, the athletes in the experimental and control groups mastered the crossbow shooting crossbow relying technical movements as follows^[4].

Table 3 Analysis of the mastery of standing crossbow relying and kneeling crossbow relying in the experimental and control groups

Stand crossbow relying	Kneeling crossbow relying
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	Good	Average	Poor	Good	Average	Poor
Experimental group (people, n=30)	20	8	2	22	7	1
Control group (people, n=30)	12	9	8	19	6	5

According to the analysis of the data in the table, in the experimental group, the mastery of standing crossbow relying and kneeling crossbow relying was relatively good. In the control group, the mastery of standing crossbow relying and kneeling crossbow relying was worse than that of the athletes in the experimental group. There were athletes in the control group who had poorer mastery in standing crossbow relying and kneeling crossbow relying.

At the same time, the study analyzed the effect of crossbow relying technique stability on performance as follows:

Table 4 Effect of crossbow relying technique stability on the performance of the experimental and control groups

	Mean score of ten training sessions for individual shooting five arrows (rings)									
Mean number of rings	40	41	42	43	44	45	46	47	48	49
Experimental group (person, n=30)	1	3	2	1	8	9	1	2	3	0
Control group (person, n=30)	5	6	8	9	1	1	0	0	0	0

By analyzing the above table, we can see that in the experimental group, the average score of the athletes who went through the crossbow relying technique stability training was 44.9 rings, while the average score of the control group was only 41.1 rings, and the score of the control group was much lower than that of the experimental group. It can be seen that the more consistent the crossbow shooting athlete's crossbow relying technique is, the better the crossbow shooting training performance.

2.3 Study on the effect of aiming stability exercises on crossbow shooting performance

As an important part of crossbow shooting, aiming plays a key role. Two main forms of training are taken in aiming training: The first is the close-range aiming training. The second is to practice through the four-point aiming method. The four-point aiming method mainly refers to: placing the crossbow on a dependency, requiring the height of the dependency to be the same as the crossbow shooting position is taken. Through the analysis of the above two forms of aiming, the athletes in the experimental group can practice through close range aiming training and four-point aiming training, while the control group adopts the traditional training form, and after one week of training in both groups, with 30 mm as the base point requirement, the aiming base points of the two groups are recorded as follows:

Table 5 Analysis of targeting bases for the experimental and control groups

Range	1-4 mm	4-30 mm	Over 30 mm
Experimental group (people, n=30)	18	8	4
Control group (people, n=30)	6	16	8

Analysis of the data in the table shows that the experimental group aimed within 30 mm of the base point and aimed within a more precise base point range. In the control group, the athletes had a larger range of aiming bases, with the vast majority of athletes in the middle range, fewer people in the precise range, and athletes who were beyond the 30 mm base point. The experimental comparison shows that the experimental group using close-range aiming training and four-point aiming training is more stable in their aiming technique than the control group not trained with these two training methods.

The analysis of the study on the effect of targeting stability on performance is as follows:

Table 6 The effect of targeting stability on performance in the experimental and control groups

	Mean score of ten training sessions for individual shooting five arrows (rings)									
Mean number of rings	40	41	42	43	44	45	46	47	48	49
Experimental group (person, n=30)	2	1	3	4	9	4	3	2	2	0
Control group (person, n=30)	8	6	8	5	1	1	1	0	0	0

By comparing the results of the aimability training, it was found that the average score of the experimental group shooting five arrows after participating in the aimability training was 45.9 rings, while the average score of the control group athletes who did not participate in the aimability training was 42.6 rings. The athletes in the experimental group with higher aiming stability shot five arrows with a much higher average score than the control group. The more accurate the aiming, the stronger the aiming stability, the better the athletes' crossbow shooting performance.

3. Conclusion

Crossbow shooting as a traditional national sport, its idea of competition and communication deserves to be passed on to modern people. In the sport of crossbow shooting, the more stability the athletes' technical movements, the better their crossbow shooting competition results.

To guarantee the stability of crossbow shooting technical movements, it is first necessary to have a deep grasp of the concepts and requirements related to crossbow shooting. To improve the stability of the technical movements of the crossbow shooting athlete, a thorough analysis of the crossbow shooting movement is needed to understand that the crossbow shooting movement is the most important aspect of the sport of crossbow shooting. The correctness and stability of crossbow shooting technical movements are

related to the hit rate of the arrow shot.

Crossbow shooting mainly consists of three elements: crossbow relying, aiming, and shooting, which is interrelated and affect each other. Only by training the stability of crossbow relying, aiming, and shooting can we improve the stability of the athletes' techniques in the crossbow shooting competition so that we can efficiently improve the stability of our bodies and movements and improve the performance of crossbow shooting.

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A Interventional Study of the Carving Art of the Hitching Post Head in Modern Sculpture

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Abstract: Chinese folk art is the embodiment of folkways in China. With the further deepening of people's ideology, the academic study of folk culture gradually gets away from the previous concept in recent decades, while folk culture has been included in the academic discussion and studied by scholars in depth. The hitching post art carving on the north of Wei River Basin is a representative of folk art. Through in-depth digging and organizing of a large number of documentary materials and historical relics, the hitching post head carving art has become one of the northern folk carving art forms that cannot be ignored in the history of ancient Chinese sculpture. From the study of the artistic expression form of the hitching post head, we see the charm of such folk art form, of which academic value does not only stay in the digging of cultural relics and history, but also has a profound influence on the modern folk carving art.

Keywords: Hitching post; Folk art; On the north of Wei River Basin; Stone carving art; Modern sculpture; Sculpture

1. Definition and Origin of Hitching Post

1.1 Definition of hitching post

The hitching post is a folk carving art unique to the ancient northern China, which is used for hitching horses outside buildings. According to the statistics of the existing hitching posts, most of them are made of "stone", and only a few are wood, metal, etc. Most of the existing hitching posts belong to the folk carving art to some extent, but their function extends to a symbol of stabilizing the household and praying for good fortune other than hitching horses. In June 1982, during a survey of folk art history, the staff of the Shaanxi Provincial Art Museum discovered a large number of stone posts in front of many shops, villages and houses on the south of Wei River Basin. These peculiarly shaped and richly carved stone posts with unique artistic charm are generally between 1.8 and 2.5 meters in height and 0.25 meters in width, with round carved statues at their heads and hollow stone holes for tying draught animals, combining practical and decorative functions, which are called "hitching posts".

1.2 Origins

From historical pictorial records, the artistic history of the hitching posts and post heads have artistic expression forms of different periods in the artistic history development. From the available pictorial materials, it is found that the earliest record of a hitching post is Han Gan's "A picture of Night-Shining White" from the Tang Dynasty, which depicts the image of Emperor Xuanzong's beloved horse struggling to free itself from the hitching post. This is the first record of a hitching post in history. Judging from the height of the horse, it can be presumed that the hitching post should be about 3 meters in height. This post does not have the head carving, so instead of calling it a "post", it's more like a hitching column



Fig. 1 Tang - Han Gan's "A Picture of Night-Shining White" Fig.

2 Song - "A Scroll of a Hundred Horses"

The next record of hitching posts is the Song Dynasty's "A Scroll of a Hundred Horses", which depicts 13 vertical posts about two meters in height, with cylindrical post bodies, tied to horses hitched by cross-shaped wooden posts punched in the hitching post. The post heads are in the shape of wooden clubs and the posts are wooden. The hitching posts of the period have changed slightly

compared to those of the Tang dynasty: those of the Tang dynasty were made of square stone with a height of about three meters and a flat top, while those of the Song dynasty were mostly cylindrical. Compared to the art form of the later hitching post, their lines are simpler and more concise, and there is barely ornamentation or post head carving, which is also the only formal feature of the hitching post in the Tang and Song dynasties that can be derived from the available documentary sources. In the Yuan dynasty later, the hitching post depicted in Ren Renfa's "Feeding Horses" became complex, with a six-pronged post body with a slotted head, and the post head was decorated with a combined figure of upturned lotus and mallet-shaped clouds. The material was determined to be stone, with a column body of about 2.5 meters in height, and the initial ornamental carving on the hitching post head. However, functionality was not the first to be considered on the hitching posts of this period, because no holes were punched on the posts. However, the artistic characteristics of the hitching post head carving have already appeared in this period, because the hitching post in Yuan Dynasty has generally begun to consider the artistry of hitching post head carving, where most of the post heads were of simple auspicious patterns, mainly auspicious clouds and plants, and also a very few of animals and figures. The hitching post of this period not only maintained the simple outline of that in the Tang and Song dynasties, but also gradually developed and transformed into the form of carving of characters, animals and other ornaments at the post head, which laid a solid foundation for the development of the art of hitching post head carving in the Ming and Qing dynasties, and also played a role in carrying on the development of the art of hitching post head carving in general afterwards. The Ming and Qing dynasties were the peak of the development of the hitching post, when pedestals and some decorative patterns were added to the post body, and the post head part had formed the features we see now, such as figures, animals, and the combination of figures and animals, as well as some geometric and plant images. In the late Qing Dynasty, the tradition was continued in the image, but also with innovations. The hitching posts of this period combined with images of unique species to create new forms, such as the hitching posts in the form of ancient coins, with a simple integral shape tactfully combined with the shape of ancient coins. Nowadays, horses have gradually lost their importance in people's lives, which has led to the gradual



fading of hitching post in the later period. Therefore, the hitching posts we can still see now are the wealth left to us by the ancients

Fig. 3 Hitching post heads of the Ming and Qing dynasties Fig. 4 Hitching post head of the late Qing dynasty Fig. 5 Collection of Xi'an Academy of Fine Arts

2. The Art of Hitching Post Head Carving

2.1 Structural characteristics of the hitching post shape

The hitching posts in the area on the north of Wei River Basin were generally carved from a single piece of stone and was mostly a square column with the lower end buried in the soil. The post is divided into four parts from top to bottom, that are, the post head, the post neck, the post body and the post root. The post head is generally a round carved statue, with rich shapes and contents. The post neck is the connecting part between the post head and the post body, and is also the pedestal to support the statue of the post head. The pedestals are usually round on the top and square on the bottom, and have corresponding patterns carved into the surface, such as lotus petals, deer, horses, ancient stories, clouds and water and other auspicious patterns. The post is mostly in the shape of a tetragonal post, with a few in the shape of an octagon post, which is basically symmetrical and regular in shape. The tetragonal post is carved with banded relief patterns, and very few are carved with words. See Fig. 5 below.

2.2 Artistic Expression Form of Post Head Carving

2.2.1 Artistic features of animal patterns in post head carving

The animal patterns are mainly lions, monkeys, horses and oxen. Animal patterns are the most on hitching posts found so far, with the lion being the most commonly seen. The stone lion occupies an important part in the hitching post sculpture. The stone lions were placed in palaces, temples and folk houses, or on the sides of gates, representing majesty and solemnity in Chinese cultural history. The stone lion is a representative symbol of ancient Chinese history and culture, as well as a representative of the good fortune and blessings prayed for by numerous Chinese people.

2.2.2 Artistic features of figure patterns in post head carving

The figure patterns are the most spectacular and most valuable to study among the hitching post carvings. The figures of warriors, musicians, shepherds, children, and mythological figures in different ages, occupations, and expressions are presented. Among the many figures, it is possible to identify minority such as the Manchu nationality, the Hui nationality and the Mongolian minority by their facial features, by judging from faces, costumes and hand-held tools, and a large number of ethnic figures that look like those of Central and West Asia are also found. Among the figures, some Buddha statues, mythological figures and heroic figures are symbols of civil society praying for happiness and well-being, as well as for good fortune. These figures often hold Ruyi, fairy peaches, gourds

or treasure vases. As in Fig. 7, A Maid Holding a Vase by a Pitching Post, is a Qing Dynasty bluestone carving in which the author depicts a maid figure with a high bun, long hair on the shoulders, smiling and blinking, wearing earrings, holding a vase with both hands and sitting cross-legged with her head slightly tilted. In terms of artistic expression, the figure is dynamic and stretched with rich facial expressions, and we can sense the maid's posture of quietly waiting with a smile. The space between the vase and the figure is just the hole used for tying the horse's reins, which exists in the whole stature without a sense of rigidity. The vase is pronounced as the same as "Safe" in Chinese, so holding the bottle means checking in with families for safety, implying people's prayers for happiness and a better life.



Fig. 6 Post head - stone lion Collection of Xi'an Academy of Fine Arts



Fig. 7 Post head - figure Collection of Guanzhong Folk Art Museum

2.2.3 Artistic features of the combined forms of figures and animals in post head carvings

Among the combined forms of figures and animals, there are human and lion, horse, kylin, elephant, etc., among which the combination of human and lion is the most commonly seen, usually with the human harnessing the lion or standing next to the lion. Because of the limited area of the post head, the human figure is generally dominated, while the lion shows only the head and upper body. The two front feet and chest of the lion are hollowed out into holes for hitching. The stone lion's twisted body is highlighted, while the rider is bent over, looking like rushing forward. The facial expressions of the figures and their clothes are carved in great detail, and so are the objects held in hands. The stone carving as a whole makes comprehensive use of circular carving, relief carving and line carving techniques, which have strong local characteristics. The human-harnessing-lion figures can be traced back to ancient Chinese paintings, and there is an inherent relationship in appearance between the human-harnessing-lion figures in the hitching post and the human-harnessing-animal graphics in early Liangzhu culture. It is likely that the prevalence of this style of stone carving in the Guanzhong region was related to the heyday of the Qing dynasty.



Fig. 8 Post head - figures and animals Collection of Xi'an Academy of Fine Arts

As shown in the right side of Fig. 8, the front of the lion is finely carved, and the two front legs of the lion are parallel to the front of the stone post. The figure at the post head is just in the right size, without exceeding the scope of the hitching post. The back of the lion is shown on the left in Fig. 8. The specific form is shaped without breaking the square orientation of the post itself, and the simplified treatment does not destroy the overall trend. Moreover, from some angle of views, the central axis is diagonal, with the entire body expanding to the sides, while from others angle of views, the stature takes the diagonal as the front side and expanding backwards in the form of a cube. The space between the legs of the lion is cleverly used as a place for the hitching rope.

2.2.4 Artistic features of other forms in post head carving

In addition to these three common forms, there are also images of plants, geometric images, pavilions and ancient coins. The plants are mainly peaches and lotus buds, and the geometric images are mainly ellipsoidal, spherical and polyhedral. The pavilion and ancient coins are scaled down and generalized according to the original images, which are new shapes that appeared after the late Qing Dynasty. The peach is an important image of folk auspicious culture and a symbol of longevity, such as the immortal peach and the longevity peach. Given longevity peaches to the elderly means to wish them a long and healthy life. As shown in Figure 9, the ancient money hitching post is carved in bluestone into a rectangular body. The overall shape is simple, and is not divided into post head, post neck, post body, etc., but there is only an ancient coin stature carved on the post head without any decoration. The coin is engraved

with “Xianfeng Ninth Years” with a square hole chiseled in the center for hitching, implying rich and complete and also meaning that people should be sophisticated in the outside and Integrity in the inside at the same time.

3. Influence of Sculptural Manifestation Pattern of the Post Head on Modern Sculpture

3.1 Influence of the pitching post head art on modern carving art

The sculpture of the hitching post head focuses on the overall images and tends to simplify it, highlighting the thoughts and feelings that need to be expressed, while deleting unnecessary details, which is an indispensable creation technique in modern sculptural creation. From the existing sculptures of the hitching post head, it can be seen that they are vivid in shape and refined in carving, and all of them are in the form of columns. Some of the post head carvings even show the unity of nature and human, not leaving too many traces of artificial carving but more of works by the nature. The expressions of the figures in the post head carvings are vivid, and the line carving are influenced by Chinese painting, with smooth lines and a sense of reality. Although the sculptures at the post head are also circular carving on posts, they attach great importance to the carving of the front, and the back is outlined with simple lines, which seem to be impalpable but meaningful. The animals on the post head carvings are all spiritual beasts from folklore, and the folk artisans gave these animals an implied meaning of kindness as well as some kind of divine position. All the animals represented in the hitching post art are known as divine creatures in folklore, and their postures are mostly depicted in anthropomorphic and exaggerated means.

(1) Beauty in proportional structure. Song Yu from the Warring States period once said, “It will be too long if increase a little, and too short if decrease a little.” The hitching post head is presented in circular carving, except for some round and oval post heads. The animals and figures are created on the basis of the square stone column, focusing on the front and sides, while the back keeps the original overall shape. The overall body of the post highlights the post head, maintaining the integrity of the sculpture. The proportional structure of the hitching post generally has four parts, that are, the post head, the post neck, the post body, and the post root, which are arranged in natural and reasonable proportions. The relief carving works on the post body are often in the form of lotus-scrolled-with-grass patterns, giving people a comfortable and relaxed feeling. The post neck is also decorated with drum stools and lotus petals, presented in a flat and round shape. The layout of the proportional structure of hitching post on the north of Wei River Basin is as perfect and natural as the that of the Ionic columns of the ancient Roman period. In the creation of today’s sculpture, the traditional design language forms are still valued.

(2) Beauty of symmetry. Everything in the world basically follows the principle of symmetry. Most of the hitching posts are square stone columns, which, when viewed from a distance, are basically symmetrical from top to bottom and left to right. The circular carvings carved at the post head are also carved on the diagonal of a square, the relief carvings on the post neck are symmetrically presented, and the post body is even more symmetrically for being a column. The beauty of symmetry is also one of the aesthetic rules in modern artistic creation.

(3) Beauty of contrast. The beauty of contrast between the real and the imaginary is a distinctive feature of the hitching post, mainly in the contrast between the meticulous carving of the post head and the sketchy treatment of the post body, which gives a sense of relaxation in terms of aesthetics. Most of the sculptures on the post head and post neck are presented in the form of relief carving, and the contrast between the real and the imaginary is basically used in the treatment of lines, which is beautiful. The beauty of contrast is also a more important part of modern art creation.

(4) Beauty of the nature. The art of hitching post head carving is folkloric, without too many constraints, so it is free in carving creation and pursues natural unity in the carving technique. Auguste Rodin once said, “When sculpting, do not think in terms of the plane surface, but in terms of the high convex surface”, which is especially important for every sculptor. Sculpture is a three-dimensional existence, if our eyes do not find its sense of space, then the sculpture we create will be flat. The drawing of the work, on the other hand, is about using lines to reflect the presence of contours and using surfaces to present the stereoscopic appearance. In the carving of the post head, the artisans simply highlighted the volume of space in the overall sculpture and did not go overboard with the treatment of lines, focusing on the beauty of nature. The beauty of nature is also what many sculptors pursued throughout their lives.

4. Conclusions

Art is a way to express a state of mind. When expressing such a state of mind, we must have the most basic knowledge system and practice our hands in order to make our artwork “alive”. Be patient and never aspire to “inspiration”, because without the accumulation of quantity, there will be no leap in quality. Artists with techniques do not necessarily create good works without having ideas. Whoever just imitate nature and copy nature is only craftsman, but not qualified to be called an artist. We shall not pursue “like” or “exactly is” when presenting every piece of work, for such works will only be copies of nature and lifeless.

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Research on Ideological and Political Teaching Reform of “Shadow price” in Operations Research

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Abstract: The integration of professional courses and ideological and political elements is an important content of the current teaching reform in universities. Taking the shadow price section of operations research course as the research object, this paper carries out the ideological and political teaching reform. By combing and designing the ideological and political elements of multiple teaching links such as teaching objectives, teaching contents, teaching methods and ideas and teaching organization, a better teaching effect is achieved, students’ learning investment is effectively improved, and a better educational effect is finally achieved.

Keywords: Operations research; Shadow price; Curriculum thought and politics; Reform in education

Introduction

Integrating Ideological and political elements into professional curriculum education is one of the important aspects of higher education teaching reform in China. As the core course of management, Operational Research has the characteristics of strong practicality and rich connotation of optimization thinking. It is also a high-quality choice for ideological and political teaching reform. Shadow price is one of the main knowledge points of dual problems in Operational Research, and it is a further explanation of the optimal solution of dual problems. Shadow price effectively reflects the economic significance of duality and has strong practical application value. At the same time, it also coincides with economics, production management and other disciplines, which can well show the scientific practice value and enhance students’ interest. Therefore, taking the management specialty as the teaching object, I have reformed the teaching objectives, teaching contents, teaching methods and teaching organization of this section, in order to integrate the ideological and political elements into the whole process of the curriculum and achieve a better educational effect.

1. Analysis of teaching objectives

Students majoring in management are the main talents of future enterprise management. Besides mastering mature management decision-making methods, they also need to have good social responsibility, patriotism and management quality. Accordingly, the knowledge, capability and value objectives of this subsection are determined as follows:

Knowledge objective: Understand the definition of shadow price; Understand the economic significance of shadow prices; Understand the connotation of opportunity cost and marginal profit of shadow price; Understand the relation between shadow price, simplex method and duality; Master decision-making application of shadow price^[1].

Ability objective: Master the relationship between shadow price, market price and enterprise cost, and have the ability to apply shadow price to enterprise decision-making.

Value objective: To establish the philosophical thought of dialectical unity; Understand the practical value of science; Understand the influence of environment on decision-making, strengthen the sense of responsibility and patriotism; Strengthen discipline acceptance.

2. Ideological and political reform of teaching content of “shadow price”

The teaching content includes the main information and materials transmitted to students by the course, which plays a basic role in the realization of the course objectives. In order to strengthen the ideological and political gene in the teaching content, this paper rearrangement the knowledge points, teaching cases and curriculum problems in the shadow price section.

2.1 Analysis of Ideological and political elements in knowledge points

The main knowledge points of the shadow price section include: the definition of shadow price, the economic significance of shadow price, the connotation of shadow price and the decision-making application of shadow price. Among them, the ideological and political elements contained in each knowledge point are shown in Table 1:

Table 1 Ideological and political elements in key points of knowledge

Knowledge points	Ideological and political elements
Definition of shadow price	The multifaceted nature of things

Economic significance of shadow price	Philosophical thought of dialectical unity
Connotation of shadow price	Comprehensiveness and integration of disciplines
Decision making application of shadow price	Scientific nature of management and scientific practical value
Interpretation of test number and duality by shadow price	The preciseness of science, science is more than science

2.2 Curriculum Case Reform

Compared with the curriculum knowledge points, the curriculum cases are more specific and vivid, which is an important channel to help students understand the economic significance and scientific management behind the model, and mobilize their learning enthusiasm. Therefore, the course cases of each knowledge point are redesigned in this course. The details are as follows:

(1)Definition case of shadow price: Design the case of “The limit of Xiao Zhang and the bottom line of Xiao Li”, and consider the diversity and unity of decision-making through the opposite decision-making of the self-use and sale of Xiao Zhang’s enterprise resources;

(2)Economic significance cases of shadow price: Design simple and interesting cases of “Dormitory Apple trading”, “Apple trading on desert island”, “Apple trading on Apple island” and “Price and model of Huawei mobile phone” to help students understand the consistency between mathematical model and daily rules. Introduce the economic significance of opportunity cost and marginal profit, combined with the transaction difference between air and time, remind students to cherish time, cultivate the concept of the overall situation and establish the big picture concept.

(3)Decision cases of shadow price: Combined with current political hot spots, the price of Chinese chips, Huawei’s response strategies, the sales price of silk products under the epidemic, help students understand the allocation decision of enterprise resources, and strengthen their dialectical thinking ability and patriotism through the dynamic balance between shadow price and market price.

2.3 Curriculum problem chain design

Setting an appropriate problem environment in the teaching content can help students better construct their own knowledge system in communication, cooperation and exploration, and improve their learning ability. The chain of speculative questions in the “shadow price” section are as follows:

- (1)What is the optimal solution of the dual problem of optimal production planning?
- (2)How much is an apple in Southwest Petroleum University? How much is it on a desert island?
- (3)What is the difference between shadow price and market price?
- (4)How much can an apple sell on Apple island?
- (5)Looking at the complementary relaxation theorem through the shadow price, what do you think of?
- (6)How can an enterprise make a price decision for purchasing and selling resources?
- (7)How to understand the hot events of enterprises in recent years, such as the restriction of chips, the price of mobile phones and the price chaos under the epidemic?
- (8)In the free market, what is the final trend of shadow price and market price?
- (9)Are scarce resources available from within the enterprise?
- (10)Is there a cost to using your own resources?
- (11)Look at the inspection number with shadow price and think about the reasons for producing products?
- (12)Think about the cost of your own games and dramas? Allocate your energy and time reasonably.

3. Teaching methods and ideas

The teaching methods of this course are diverse and flexible, combined with online and offline channels, and comprehensively apply fun, situational, discussion, inquiry, and case-based methods. The main teaching methods and ideas are as follows:

(1)With Xiao Zhang and Xiao Li as the protagonists of the story, design the story of Apple transactions and device transactions. Through the role-playing by students, help students understand the definition and connotation of shadow price from vivid stories.

(2)Ingenious use of hot events such as epidemics and chips and actual corporate decisions for case teaching. The knowledge points are integrated into the realistic decision-making of contemporary enterprises and countries, and the knowledge transfer process is transformed into the empirical and speculative process of realistic decision-making, helping students understand the practical value of science. At the same time, through the epidemic and chips, the students’ national pride and sense of honor are enhanced, and the ideals and beliefs of serving the country are established.

(3)Knowledge construction based on the problem chain. Follow the law of students’ understanding, decompose the main points of knowledge into a problem chain, guide students to explore and construct the knowledge content of this class, understand the consistency of science and daily laws, and improve students’ thinking and research ability^[2].

(4)Group teaching activities. The overall arrangement and free choice are combined. The students are divided into large learning groups with 8 students in each group, and then the students in the group are freely combined into a mutual aid group of 2 to 3 people.

The team leader and group member’s rights and responsibilities of each group are clearly defined. And, the mutual assistance and evaluation mechanism are established within the group, too.

4. Teaching organization reform

Teaching organization is a channel for ideological and political education throughout the curriculum. The course organization and corresponding ideological and political elements of the “shadow price” section are shown in Table 2.

Table 2 Ideological and political elements in curriculum organization

Classroom organization	Ideological and political elements
Course group	Enhance awareness of responsibility and cooperation, deepen emotional communication
Preparation before class	Ask the right questions and learn with questions
In-class teaching	Discipline awareness, speculative ability, and understanding of the practical value of science
Extension after class	Learn from the past, endless learning, dynamics and complexity of management

The specific teaching organization process is as follows:

(1)Before class: With the online teaching platform——Xuetang.com, a 10-minute video will be given to help students quickly understand the learning objectives of this lesson; Pre-class tasks: Review simplex method and duality properties. Sign in within the group before the class, and the group leader is responsible for supervising and summarizing the completion of the pre-class tasks with the students.

(2)In class: The course is guided by the trading story of Xiao Zhang and Xiao Li to help students understand the meaning of shadow price. By trading apples in a fun setting, students are inspired to deeply understand the relationship between price and environment; Through the connection among shadow price, simplex method, duality, classic economics viewpoints and production management methods, students’ understanding of operations research have improved; Discuss the case of Chinese enterprises, understand the scientific nature of management, and strengthen students’ patriotic spirit and sense of national honor; Teachers and students summarize and sort out the key knowledge points of shadow price. Finally, inspired by the shadow price, students were asked to think about their own costs and waste in time planning.

(3)After-class: Through the after-class discussion arranged by “Xuetang”, the students are asked to think about the shadow price in life and analyze the possible changes in the practical application of the optimal production plan. At the same time, analyze the shadow price of playing games, shopping on Taobao, brushing mobile phones, watching TV dramas, etc..

5. Analysis of teaching effect

Through the ideological and political reform of the “shadow price” section, the curriculum has achieved the following teaching effects:

Enhance students’ interest in learning. Through the interesting cases and imaginative scenes in this class, the classroom atmosphere is extremely active. Students have a good grasp of knowledge.

Strengthened the students’ patriotism to serve the country. With the in-depth understanding of price deviations under the epidemic, chip loss and Huawei’s business practices, the students’ management and practice capabilities have been improved, and the students’ sense of national honor and willingness to serve the country have been strengthened.

Help students to clarify the connotation and value of this course. This course analyzes the connotation of opportunity cost and marginal profit of shadow value, re-understands the economic meaning of test number and duality, and discusses the relationship between shadow price and production decision. Help students understand the comprehensiveness and management practice value of operations research.

Improve the teacher’s own quality. Educators are also educated. On the one hand, in the process of designing interesting teaching cases and sorting out the chain of knowledge problems, teachers’ professional ability has been further improved. On the other hand, in order to achieve the teaching goals, teachers need to conduct extensive research about the prices of the epidemic, the pain of chips, and Huawei’s mobile phone strategy, which can further improve their own literacy and strengthen their willingness to educate.

To sum up, through the reform of the ideological and political curriculum in the shadow price section, not only the students’ learning investment has been increased, but also the ability of the teachers and students has been improved and finally achieved excellent educational effect.

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Research on Catalyst Selection Based on Simulated Annealing Algorithm

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Abstract: In this paper, the effect of catalyst selection on C4 olefin yield was studied based on simulated annealing algorithm. Firstly, using the processed data, through the influence model of different components of the catalyst and the combination method of multiple linear regression, the comprehensive influence model of the catalyst on the yield of C4 olefins is obtained. Then, through the simulated annealing algorithm, it is found that when $t=405^{\circ}\text{C}$, the C4 olefin yield reaches the highest, 52.92%. Finally, when the reaction temperature needs to be less than 350°C , it is found that when $t=350^{\circ}\text{C}$, the C4 olefin yield reaches the highest, 20.79%.

Keywords: Simulated annealing model; Optimal combination; Catalyst performance

1. Introduction

C4 olefins are widely used in the production of chemical products and medicine. Their traditional production methods use fossil energy as raw materials. However, with the shortage of fossil energy output and the aggravation of its impact on the environment, the energy supply gradually tends to be diversified, and the development of new clean energy becomes more and more urgent. Ethanol is the raw material for the production of C4 olefins. It not only has a wide range of sources and is green and clean, but also the use of ethanol to prepare C4 olefins can bring huge economic benefits^[1]. However, in the preparation process, the catalyst combination and temperature will have an impact on the selectivity and yield of C4 olefins. Therefore, it is of great significance and value to explore the process conditions for the preparation of C4 olefins by ethanol catalytic coupling through the combination design of catalysts.

2. Comprehensive impact model

2.1 Model establishment

We know the comprehensive influence function $f(\delta_1, T)$ of CO loading and temperature, the comprehensive influence function $g(\delta_2, T)$ of ethanol concentration and temperature, the amount of Co/SiO₂, the loading ratio of Co/SiO₂ and AHP and the comprehensive influence function $\phi(\delta_3, \delta_4, T)$. In order to obtain the comprehensive influence model of the three, we carry out linear multivariate combination treatment on the three^[2].

$$H(\delta_1, \delta_2, \delta_3, \delta_4, T) = \omega_1 f(\delta_1, T) + \omega_2 g(\delta_2, T) + \omega_3 \phi(\delta_3, \delta_4, T) \quad (1)$$

Since there is an influence of temperature in the three formulas we obtained, that is, the change of temperature may affect the simultaneous change of the three formulas. At the same time, considering the possible temperature error in the actual observation and measurement, we introduce the temperature correction coefficient γ , that is:

$$H(\delta_1, \delta_2, \delta_3, \delta_4, \gamma T) = \omega_1 f(\delta_1, \gamma T) + \omega_2 g(\delta_2, \gamma T) + \omega_3 \phi(\delta_3, \delta_4, \gamma T) \quad (2)$$

The goal of this problem is to solve the combination of temperature and catalyst when the C4 olefin yield is maximum under two given conditions. Therefore, we need to express the objective function, that is:

$$\min H(\delta_1, \delta_2, \delta_3, \delta_4, \gamma T)_{\text{Ethylene conversion rate}} \cdot H(\delta_1, \delta_2, \delta_3, \delta_4, \gamma T)_{\text{C4 olefin selectivity}} \quad (3)$$

Because the model is complex, we need to set the definition domain of the parameters in the model to improve the calculation speed of the model. The specific parameter range can be determined according to the analysis of the impact of different variables.

(1) Setting of temperature range

Firstly, for the temperature T , we can judge that when the temperature is low, the ethanol conversion rate and C4 olefin selectivity are also relatively low, and the C4 olefin yield should also be relatively low at this time. When the temperature increases, the overall ethanol conversion rate and C4 olefin yield show an increasing trend, and the C4 olefin yield should also show an increasing trend. According to this trend and combined with our fitted function, it can be obtained that when $T > 400^{\circ}\text{C}$, the yield of C4 olefins may continue to increase. Therefore, in order to better find the best temperature and reduce our calculation time, we set the temperature range to

$$250 < T \leq 500 \quad (4)$$

(2) Setting of Co load range

We can find that the C4 olefin yield has reached the maximum within the known variation range of Co load, and further from our

analysis results, the C4 olefin yield continues to decline when the co load continues to increase. Comprehensively, we set the range of Co load as

$$0.5 \leq \delta_1 \leq 5 \quad (5)$$

(3) Determination of ethanol concentration

Through our analysis of the impact of different ethanol concentrations, we can find that when the ethanol concentration is greater than 1.68ml/min, the conversion rate of ethanol and the yield of C4 olefins continue to decline, but the selectivity of C4 olefins shows an upward trend. Combined with the relationship between Fig.7 and our fitting, we can find that when the ethanol concentration is greater than 2.1ml/min, C4 olefin selectivity may also increase. Since C4 olefin yield is the product of ethanol conversion rate and C4 olefin selectivity, with the increase of C4 olefin selectivity, C4 olefin yield may also show an upward trend when ethanol reaches a certain concentration. Therefore, with the continuous increase of ethanol concentration, C4 olefin yield may have a maximum value. In order to ensure the accuracy of the model, we set the range of ethanol concentration δ_2 as

$$0.3 \leq \delta_2 \leq 4 \quad (6)$$

(4) Determination of Co/SiO₂ content and range of Co/SiO₂ and charge ratio

According to our analysis results on the influence of Co/SiO₂ content δ_3 and Co/SiO₂ and HAP loading ratio δ_4 , when the Co/SiO₂ content is greater than 50mg or the Co/SiO₂ and HAP loading ratio is greater than 1, the C4 olefin yield shows a continuous downward trend. At the same time, under this condition, the conversion rate of ethanol and C4 olefin selectivity also show a downward trend. Through the image, we can also find that the three should still show a downward trend with the increase of influence conditions. Therefore, considering comprehensively, we set the range of Co/SiO₂ content δ_3 and Co/SiO₂ and HAP loading ratio δ_4 as:

$$10 \leq \delta_3 \leq 200 \quad (7)$$

$$0.49 \leq \delta_4 \leq 2.03 \quad (8)$$

At this point, we can get the complete expression of our model

Objective function:

$$\min H(\delta_1, \delta_2, \delta_3, \delta_4, \gamma T)_{\text{Ethylene conversion rate}} \cdot H(\delta_1, \delta_2, \delta_3, \delta_4, \gamma T)_{\text{C4 olefin selectivity}} \quad (9)$$

$$\text{s.t.} \begin{cases} H(\delta_1, \delta_2, \delta_3, \delta_4, T) = \omega_1 f(\delta_1, T) + \omega_2 g(\delta_2, T) + \omega_3 \varphi(\delta_3, \delta_4, T) \\ 250 < T \leq 500 \\ 0.5 \leq \delta_1 \leq 5 \\ 0.3 \leq \delta_2 \leq 4 \\ 10 \leq \delta_3 \leq 200 \\ 0.49 \leq \delta_4 \leq 2.03 \end{cases} \quad (10)$$

2.2 Model solution

Firstly, in this model, considering the particularity of temperature in this model, we take the temperature correction coefficient as $\gamma = 0.9$. Secondly, it is necessary to solve the value of the model parameter ω_i . According to the processed data, we bring the value of δ_i and temperature T in each group of data into our known $f(\delta_1, T)$, $g(\delta_2, T)$ and $\varphi(\delta_3, \delta_4, T)$, and 114 groups of parameters can be obtained:

$$\begin{cases} f_i & i = 1, 2, \dots, 114 \\ g_i & i = 1, 2, \dots, 114 \\ \varphi_i & i = 1, 2, \dots, 114 \end{cases} \quad (11)$$

At this time, for $H(\delta_1, \delta_2, \delta_3, \delta_4, \gamma T)$, we can regard ω_i as an independent variable. At this time, the formula is a multivariate linear function about ω_i . Therefore, we can obtain the parameter value according to the 114 groups of data obtained by us through the method of multivariate linear fitting.

We import the data into Matlab. Through MATLAB multiple linear regression, the parameter value is:

$$\begin{cases} \omega_1 = [0.16112, 0.038035] \\ \omega_2 = [0.54379, 0.63744] \\ \omega_3 = [0.35258, 1.0062] \\ z_1 = 1.2843 \\ z_2 = -12.24 \end{cases} \quad (12)$$

For this problem, the model we build is more complex, so it is difficult to find a better solution by using the general algorithm, and the efficiency of the solution is low. For finding the optimal solution of the problem, we use simulated annealing algorithm to solve it.

Let's briefly explain several quantities in the process^[3].

(1) Metropolis guidelines

If $\text{new}_y < \text{beginning}_y$, then accept the new solution; If $\text{new}_y > \text{beginning}_y$, then calculate $\Delta f = \text{beginning}_x - \text{new}_y$, and calculate

$$p = e^{-\Delta f / T_i}, \text{ and then randomly generate a random number } r \text{ that obeys uniform distribution in the interval } [0, 1]. \text{ If}$$

$r < p$, accept the new solution new_y ;

(2) Attenuation function of control temperature

The attenuation function can take many forms. A common attenuation function is $T_{k+1} = \alpha T_k$. Where α is a constant, which can be taken as 0.5-0.99. Its value determines the cooling process. Slowing down the speed of temperature attenuation may lead to an increase in the number of iterations of the algorithm process, so that the transformation accepted by the algorithm process, the neighborhood visited and the solution space searched will increase, and then return to the optimal solution. However, the

solution time will increase greatly. At present, it is generally 0.95.

We imported the model into Matlab and solved it by programming. When the temperature is $t=405^{\circ}\text{C}$, the maximum yield of C4 olefin is 52.92%. At this time, the conversion rate of ethanol is 83.8% and the selectivity of C4 olefin is 63.42%. See Table 1 for the detailed composition of the catalyst.

Tab1 Composition of catalyst when $T=405$ degrees.

Co load	Ethanol concentration	Co/SiO ₂ content	HAP content	Co/SiO ₂ and HAP loading ratio
3.728	0.300	200	161.576	1.238

We set the temperature condition to $T=350$ degrees, put our model into Matlab again, and solved it by programming. When $T=350$ degrees, the maximum yield of C4 olefin is 20.79%. At this time, the conversion rate of ethanol is 52.35%, and the selectivity of C4 olefin is 39.71%. See table 2 for the detailed composition of the catalyst.

Tab2 Composition of catalyst when $t=350$ degrees.

Co load	Ethanol concentration	Co/SiO ₂ content	HAP content	Co/SiO ₂ and HAP loading ratio
3.703	0.301	200	162.823	1.228

3. Model Evaluation

In this paper, each component of the catalyst is put together to make a linear combination, and again through the multiple function regression model, the comprehensive influence model of the catalyst on the yield of C4 olefins is accurately established, and the catalyst combination and reaction temperature with the highest yield of C4 olefins are found through the simulated annealing algorithm. The catalyst combination with the highest C4 olefin yield when the reaction temperature is less than 350°C was also obtained by changing the temperature conditions. The disadvantage of the model is that when the reaction temperature is greater than 410°C , there is not much data in the model, resulting in the lack of accuracy when the reaction temperature is greater than 410°C , so the model can not judge the C4 olefin yield at all temperatures.

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Solution of Enterprise Ordering and Transportation Scheme Based on Planning Decision Model

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Abstract: This paper mainly studies the ordering and transportation of raw materials in production enterprises. In order to improve production efficiency and meet the production needs of enterprises, it is necessary to formulate a scientific and reasonable ordering and transportation scheme. Firstly, this paper analyzes the data and arranges the total supply of 402 suppliers from large to small. It is found that the supply of the first 60 suppliers accounts for 99% of the total supply, and the other suppliers accounting for only 1% of the supply are of low importance to the enterprise. Then, this paper establishes the TOPSIS comprehensive evaluation model, formulates the three indicators of total supply, stability and dishonesty, objectively weights the evaluation model by using the entropy weight method, and finally selects the top 10 suppliers.

Keywords: TOPSIS comprehensive evaluation model; Entropy weight method

1. Introduction

A manufacturing enterprise mainly engaged in building and decorative plates mainly takes lignocellulosic and other vegetable fiber materials as raw materials. The raw materials can be divided into three categories: A, B and C. The number of production weeks arranged by the enterprise every year is 48 weeks, and a 24 week material ordering and transportation plan needs to be formulated in advance, that is, the supplier, ordering quantity and transporter need to be determined according to the production capacity, so as to complete the ordering and transportation of raw materials of the production enterprise. Qian Zhuo once pointed out: "Whoever can survive in the competition will get greater development space and more opportunities."^[1] It can be seen that the transportation and ordering of raw materials are very important to the development of enterprises.

The production enterprise has a weekly capacity of 28200 cubic meters, and does not produce a cubic meter of products^[2]. It needs 0.6 cubic meters of class A raw materials, 0.66 cubic meters of class B raw materials or 0.72 cubic meters of class C raw materials. Due to various conditions, the raw material suppliers required by the production enterprise cannot supply goods strictly according to the order quantity, that is, the actual supply quantity may not be equal to the order quantity. In order to maintain the raw material inventory that meets the production demand for no less than two weeks as far as possible, so as to ensure the normal production needs, enterprises often purchase all the raw materials of suppliers. The upper limit of each transporter is 6000 cubic meters per week, which is often transported by one transporter.

At the same time, in the process of actual transportation, the loss of raw materials is also one of the influencing factors^[3]. The ratio of loss quantity to supply quantity is defined as the loss rate, and the number of raw materials actually transported by the forwarder to the production enterprise is defined as the receiving quantity.

As we all know, the cost will affect the benefit of the enterprise. The unit price of class A raw materials and class B raw materials are 20% and 10% higher than that of class C raw materials respectively. The unit transportation cost and storage cost of class A, B and C are equal.

2. Model Pretreatment

2.1 Indicators reflecting the importance of production

Set some indicators that can reflect the importance of production. From the perspective of ensuring enterprise production, through data mining^[4], we set three indicators: total supply, stability and dishonesty.

Total supply refers to the sum of the quantity of raw materials supplied by each supplier within five years (240 weeks).

The stability index is reflected by the standard deviation. Fill all the data with supply equal to 0 in 240 weeks with the average value of other non-zero weeks, and then calculate the standard deviation.

Dishonesty refers to the value obtained by comparing the difference between the number of orders for raw materials required by the manufacturer and the number of raw materials provided by the supplier with the number of orders for raw materials required. When this ratio is greater than 0, the number of orders required is greater than the supply.

The supplier's supply quantity is defined as dishonesty; After mining the data, it is found that the enterprises are listed in the table

of enterprise order quantity in Annex 1

The total order quantity of 402 suppliers is converted into production capacity of 8909859 cubic meters. However, in the table of supplier supply quantity, the total supply quantity is converted into production capacity of 6703971 cubic meters, which is about 24.76% less than the order quantity converted into production capacity, and is still less than 28200 cubic meters multiplied by 6768000 cubic meters in 240 weeks. Therefore, if the supplier's supply is greater than the enterprise's order

Quantity, that is, when the ratio is less than or equal to 0, it is beneficial to the benefit of the enterprise, which is defined as not breaking faith.

After summing up the ratio of supplier's dishonesty and dividing it by its dishonesty times, the average dishonesty degree of the supplier is obtained.

2.2 Data simplification

Through further data mining, we found that the supply volume of the top 60 suppliers accounted for 99% of the total supply volume of all 402, and the total supply volume of the remaining 342 accounted for 1% of the total supply volume. Therefore, it is reasonable to believe that we should select the 50 suppliers that are most important to ensure the production of the enterprise from the top 60 suppliers.

3. TOPSIS evaluation model

3.1 TOPSIS evaluation model is established according to the selected indicators

(1) The analysis of the three indicators shows that the total supply is benefit indicators (the higher the index value, the better the index), and the stability and credibility are cost indicators (the lower the index value, the better).

Therefore, the first step is to forward the two indicators of stability and dishonesty:

X_{ij} forms a matrix with 60 rows and 3 columns (the row represents the supplier and the column represents the selected three indicators), which is recorded as matrix X ;

Now forward the two indicators of stability and dishonesty corresponding to columns 2 and 3. The processing formula is

$$\max X_{ij} - X_{ij}$$

(2) Dimensionless matrix X with formula $Z_{ij} = X_{ij} / \sqrt{\sum_{i=1}^{60} X_{ij}^2}$ to obtain matrix Z with 60 rows and 3 columns;

3.2 There are 60 objects to be evaluated and the standardized matrix of 3 evaluation indicators.

$$Z = \begin{bmatrix} Z_{11} & \cdots & Z_{13} \\ \vdots & \ddots & \vdots \\ Z_{601} & \cdots & Z_{603} \end{bmatrix} \quad (1)$$

Define maximum:

$$Z^+ = (\max\{z_{11}, z_{21}, \dots, z_{601}\}, \max\{z_{12}, z_{22}, \dots, z_{602}\}, \max\{z_{13}, z_{23}, \dots, z_{603}\}) \quad (2)$$

Define minimum:

$$Z^- = (\min\{z_{11}, z_{21}, \dots, z_{601}\}, \min\{z_{12}, z_{22}, \dots, z_{602}\}, \min\{z_{13}, z_{23}, \dots, z_{603}\}) \quad (3)$$

Define the distance between the i th evaluation object and the maximum value

$$D_i^+ = \sqrt{\sum_{j=1}^3 \omega_j (Z_j^+ - z_{ij})^2} \quad (4)$$

Define the distance between the i th evaluation object and the minimum value

$$D_i^- = \sqrt{\sum_{j=1}^3 \omega_j (Z_j^- - z_{ij})^2} \quad (5)$$

To sum up, we can calculate the score of the I (I is matrix 2...Matrix 6) evaluation object without normalization treatment:

$$S_i = D_i^- / (D_i^+ + D_i^-) \quad (6)$$

3.3 Solution of TOPSIS evaluation model

(1) Data forward.

(2) Dimensionless treatment.

(3) Calculate distance.

The top 10 most important suppliers can be solved by Python as shown in the table below:

Tab1 Top 50 most important suppliers.

business	raw material	dishonesty	stability	total supply	score	rank
S229	A	0.001404835	780.8170124	591478.3333	0.088344	1
S140	B	0.024041505	6607.421782	457646.9697	0.068378	2
S361	C	0.001411585	559.3990277	455666.6667	0.068131	3
S108	B	0.006280917	1856.677227	365075.7576	0.054524	4
S282	A	5.0846E-05	644.6309235	282233.3333	0.042092	5

S151	C	0.009152599	2534.498368	270136.1111	0.040267	6
S275	A	0.000141681	192.5077797	264255	0.039396	7
S329	A	0.000187124	198.7770017	260863.3333	0.038887	8
S340	B	0.000376159	241.7978358	259736.3636	0.038718	9
S139	B	0.004998809	3201.647143	230093.9394	0.034253	10

4. Entropy weight method

4.1 Solution of information entropy

After simplifying the data as a whole, the original data of 60 groups of suppliers selected are standardized, and the effect indicators and cost indicators are obtained as follows:

$$(S_{ij})_n = (x_{ij} - x_{jmin}) / (x_{jmax} - x_{jmin}) \quad (7)$$

$$(S_{ij})_h = (x_{jmax} - x_{ij}) / (x_{jmax} - x_{jmin}) \quad (8)$$

Then the obtained indexes are standardized to obtain the index standardization matrix:

$$S = \begin{bmatrix} S_{11} & \cdots & S_{13} \\ \vdots & \ddots & \vdots \\ S_{601} & \cdots & S_{603} \end{bmatrix} \quad (9)$$

Calculate the probability matrix P from the probability calculation formula $p_{ij} = s_{ij} / \sum_{i=1}^{60} s_{ij}$.

Calculated information entropy $e_j = \sum_{i=1}^{60} p_{ij} \cdot \ln p_{ij}$.

4.2 Solution of information utility value

Defined by the information utility value:

$$d_j = 1 - e_j \quad (10)$$

4.3 Solution of weight coefficient

After normalizing the information utility value, the entropy weight of each index is:

$$\omega_j = (1 - e_j) / (\sum 1 - e_j) \quad (11)$$

The calculated indicators are shown in the table below:

Tab2 Indicators.			
Term	Information entropy e	Information utility value d	Weight coefficient w
MMS-total supply	0.8705	0.1295	91.90%
NMMS-dishonesty	0.9959	0.0041	2.89%
NMMS-stability	0.9927	0.0073	5.20%

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Research on Ordering and Transportation of Raw Materials Based on Gray Scale

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Abstract: In this paper, a scientific and reasonable production planning evaluation system is established based on the order quantity and supply quantity data of raw material suppliers related to a construction and decoration plate manufacturer. In order to conduct quantitative analysis on all supplier data, we first process the data, select five indicators that can reflect the supplier's ability, establish a grey correlation analysis and evaluation model, obtain the importance of each supplier, determine the top 50 most important suppliers, and finally draw a ranking box chart with SPSS software for visual inspection.

Keywords: Grey correlation analysis; Linear programming; Gray prediction

1. Introduction

A manufacturer of building and decorative plates hopes to establish a scientific and reasonable production planning evaluation system by analyzing the ordering quantity and supply quantity data of raw material suppliers, transportation loss rate data of transporters, procurement cost of raw materials and other factors, so as to determine the ordering scheme and transportation scheme of raw materials under various production conditions, so as to maximize the production efficiency of the enterprise.

The raw materials used in the production of the enterprise can be divided into three types: A, B and C. The production is arranged 48 weeks a year. It is necessary to formulate a 24 week raw material order and transfer plan in advance, that is, determine the suppliers to be ordered and the corresponding weekly order quantity according to the capacity requirements, determine the forwarder and entrust it to transfer the weekly supply quantity of the supplier to the enterprise warehouse.

The weekly production capacity of the enterprise is 28200 cubic meters, and 0.6 cubic meters of class A raw materials, 0.66 cubic meters of class B raw materials, or 0.72 cubic meters of class C raw materials are consumed per cubic meter of products. Due to the particularity of raw materials, the supplier cannot guarantee to supply strictly according to the order quantity, and the actual supply quantity may be more or less than the order quantity. In order to ensure the needs of normal production, the enterprise should keep the inventory of raw materials that meet the production needs of two weeks as much as possible. Therefore, the enterprise always purchases all the raw materials actually provided by the supplier.

In the actual transportation process, there will be a certain loss of raw materials. The transportation capacity of each forwarder is 6000 m³/week. Generally, raw materials supplied by one supplier every week shall be transported by one forwarder as far as possible.

The purchase cost of raw materials directly affects the production efficiency of enterprises. In practice, the purchase unit price of class A and class B raw materials is 20% and 10% higher than that of class C raw materials respectively. The unit cost of transportation and storage of three types of raw materials is the same.

2. Grey Relational Model

2.1 Train of thought analysis

Annex 1 gives the order quantity and supply quantity data of 402 raw material suppliers in recent 5 years (240 weeks in total). For problem 1, we first process the data of all suppliers, calculate and compare the relevant data by establishing a specific index system, and quantify the supply characteristics of suppliers. Establish the importance evaluation model of individual suppliers to ensure the production of enterprises to reflect the importance of each supplier to ensure the production of enterprises. On this basis, rank and determine the 50 most important suppliers.

2.2 Determination of evaluation indicators

We record the digital code of all supplier IDs in the table as $I(1 \sim 402, I_z)$, the order quantity (240 weeks) from the enterprise to each supplier as M_i , and the supply quantity (240 weeks) from each supplier to the enterprise as N_i .

In addition to the original data known in the annex, we also use the above indicators to construct the following newly defined indicators:

- (1) The total number of weeks with weekly order quantity of "0" from the enterprise to each supplier is recorded as X_i ;
- (2) Divide the supply quantity of each supplier to the enterprise by the number of effective supply weeks to obtain the effective

mean value of each supplier's weekly supply quantity, which can intuitively reflect the centralized trend of supplier supply, which is recorded as X_2 :

$$X_2 = \frac{1}{240 - \text{num}(M_i = N_i = 0)} \sum_{i=1}^{402} S_i \quad (1)$$

2.3 supplier to obtain the stability of the supply quantity of each supplier, which is recorded as X_3 :

$$X_3 = \frac{1}{n} \left[\sum_{i=1}^{402} (X_i - X_2)^2 \right] \quad (2)$$

4. Define the ratio of the supply quantity of each supplier to the order quantity of the enterprise in these 240 weeks as the fit between supply and demand, which is recorded as X_4 :

$$X_4 = \frac{N_i}{M_i} \quad (3)$$

2.3.1 Establish the importance evaluation model of individual supplier to ensure enterprise production

We use the evaluation indexes proposed above to establish the evaluation model. We need to find out the relationship between each index and the importance of individual suppliers to ensure enterprise production. The grey system theory was first put forward by Professor Deng Julong, a famous scholar in China, in 1982, and grey correlation analysis came into being [1]. Grey correlation analysis provides a quantitative measurement standard for the development and change trend of a system. Therefore, we think it is very suitable for the dynamic process analysis of each evaluation index and the importance of individual suppliers to ensure enterprise production.

2.3.2 Grey relational analysis principle

In the process of system development, if the change trend of the two factors is consistent, that is, the degree of synchronous change is high, it can be said that the degree of correlation between the two factors is high; On the contrary, the degree of correlation is low. Therefore, the grey correlation analysis method is a method to measure the correlation degree between various factors according to the similarity or dissimilarity of the development trend between various factors (called "grey correlation degree"). The grey system theory puts forward the concept of grey correlation analysis of each subsystem, and tries to find the numerical relationship between the factors in the system through a certain method.

The specific calculation steps of grey system correlation analysis are as follows:

(1) Determine the reference sequence and comparison sequence: the data sequence reflecting the behavior characteristics of the system is called the reference sequence. The data series composed of factors affecting system behavior is called comparison series.

(2) Dimensionless processing: due to the different physical meanings of various factors in the system, the dimensions of the data are not necessarily the same, which is not convenient for comparison, or it is difficult to get a correct conclusion during comparison. Therefore, dimensionless data processing is generally necessary in grey correlation analysis.

(3) Calculate the grey correlation coefficient between the reference series and the comparison series: the so-called correlation degree is essentially the difference degree of geometry between curves. Therefore, the difference between curves can be used as a measure of correlation degree.

(4) Calculation of correlation degree: because the correlation coefficient is the correlation degree value of the comparison series and the reference series at each time (i.e. each point in the curve), it has more than one number, and the information is too scattered to facilitate overall comparison. Therefore, it is necessary to concentrate the correlation coefficient of each time (i.e. each point in the curve) into one value, that is, calculate its average value as the quantitative expression of the correlation degree between the comparison series and the reference series.

2.3.3 Grey relational analysis principle

According to the above four basic steps of grey correlation analysis principle, the specific calculation steps of this problem are as follows:

Step 1. Determine the reference sequence and the comparison sequence. According to the practical significance of the five indicators in enterprise production, we take $[1, 1, 1, 0.1, 0.001]$ as the reference sequence, $Y = \{y(k), k=1, 2, \dots, 5\}$; Taking the total number of weeks X_1 , effective mean X_2 , variance X_3 , fit between supply and demand X_4 and the sum of supply N_i with weekly order quantity of "0" from

the enterprise to each supplier as the comparison sequence, $C_i = \{c_i(k), k=1, 2, \dots, 5\}$.

Step 2. Dimensionless treatment. Write a program in MATLAB to standardize each sequence.

Step 3. Find the difference sequence. The difference column $\Delta c_i(k)$ between the reference sequence y and the comparison sequence C_i is:

$$\Delta c_i(k) = |Y(k) - C_i(k)| \quad (4)$$

Step 4. Find the minimum difference and maximum difference of the difference sequence.

$$\Delta_{ik} \min = \min_i \min_k \Delta c_i(k) \quad (5)$$

$$\Delta_{ik} \max = \max_i \max_k \Delta c_i(k) \quad (6)$$

Step 5. Solve the correlation coefficient. Correlation coefficients of reference sequence Y and comparison sequence C_i is:

$$\gamma_i(k)\Delta_{ik} = \frac{\Delta_{ik}min + \rho\Delta_{ik}max}{\Delta_i(k) + \rho\Delta_{ik}max} \quad (7)$$

Step 6.Solve the correlation degree.

$$\xi_i = \frac{1}{n} \sum_{k=1}^{402} \gamma_i(k) \quad (8)$$

2.3.4 Solution of model

The correlation matrix can be obtained by programming with MATLAB $\Gamma = [\xi_1, \xi_2, \dots, \xi_{402}]$. The data in the matrix are arranged in descending order. The top 50 data correspond to the 50 most important raw material suppliers for the production of the enterprise.

Tab1 The 50 most important raw material suppliers for the production of the enterprise.

Num	ID	Num	ID	Num	ID	Num	ID	Num	ID
1	S275	11	S352	21	S364	31	S388	41	S114
2	S229	12	S282	22	S040	32	S397	42	S314
3	S329	13	S108	23	S367	33	S150	43	S291
4	S361	14	S194	24	S055	34	S007	44	S023
5	S268	15	S247	25	S395	35	S307	45	S189
6	S306	16	S330	26	S143	36	S074	46	S123
7	S340	17	S308	27	S294	37	S244	47	S003
8	S151	18	S365	28	S346	38	S245	48	S146
9	S131	19	S284	29	S218	39	S263	49	S138
10	S356	20	S031	30	S362	40	S129	50	S080

2.3.5 Model test

By observing the distribution of abnormal points on the box line diagram, the abnormal data of various indexes can be obtained intuitively.

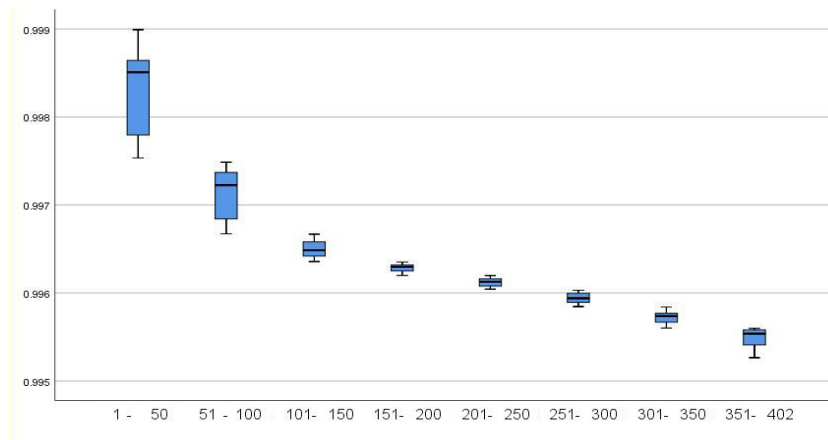


Fig2 Box diagram.

3. Model evaluation and generalization

3.1 Model evaluation

(1) In this paper, the simulation process is used many times to bring the theoretical value into the model for simulation solution, and the resulting data is more scientific and reliable;

(2) In this paper, the planning model is used to analyze the production planning scheme, and the planning process is optimized by many algorithm ideas, which makes the calculation simple and easy to solve;

3.2 Model generalization

After the mathematical programming model is established, genetic algorithm or particle swarm optimization algorithm can be used to assist in the solution of the programming model, which can greatly improve the speed of solution and ensure that the results will not fall into the local optimal solution.

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Research on Manufacturer Supply Model Based on Analytic Hierarchy Process

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Abstract: This paper studies the optimal solution model of manufacturer based on multivariate linear programming and analytic hierarchy process. Firstly, based on visual processing, the evaluation indexes are determined as supply quantity, full rate, stable rate and order times. Reasonably set the weight, evaluate 402 suppliers and determine the 50 most important suppliers for the enterprise. Then, using the linear programming optimization method, the optimal solution of supplier selection without transportation loss is obtained. Finally, taking the full rate, loss variance and acceptance rate as the evaluation indexes, the transportation company with the lowest transportation loss is determined. Finally, the most economical material quantity actually needed by the production enterprise is calculated, and the supplier selection and transportation company selection under the condition of loss are given.

Keywords: Multivariate linear function; Analytic hierarchy process

1. Introduction

The raw materials used by the production enterprises of building and decorative plates are mainly wood fiber and other vegetable fiber materials, which can be divided into three types: A, B and C. The enterprise arranges production 48 weeks a year. It needs to formulate a 24 week raw material ordering and transportation plan in advance, determine the suppliers to be ordered and the corresponding weekly ordering quantity according to the demand, and select the logistics company to transport to the enterprise warehouse.

2. Establishment and solution of model

2.1 Model of problem 1

2.1.1 Model establishment

Different suppliers intuitively indicate that the order quantity is different. At the same time, it reflects that the square difference and supply quantity are different for different material categories (A, B and C). The variance s reflects the full rate of supply and supply quantity, indicating the choice of enterprises for different suppliers. In order to better select the 50 most important businesses for the enterprise, the evaluation indicators are order times, supply quantity and full rate. The full rate is the times/total times with supply rate ≥ 1 , and supply rate = supply quantity/order quantity. The weights of evaluation indicators are shown in Table 1 below. The stable delivery rate is the supplier's ability to meet the enterprise's order. The smaller the variance, the stronger the supply capacity, the greater the variance, and the weaker the supply capacity. Therefore, it can be expressed by variance S .

$$S_1^2 = \sum_{i=1}^{240} \frac{(Q_1 - Q)^2}{239}. \quad (1)$$

Tab1 Supplier weight value

Supply quantity	Full rate	Order times	Stable rate
0.15	0.3	0.1	0.45

Where q is the supply order ratio, that is, the ratio of weekly supply/weekly order. For the calculation of variance S_1^2 , first eliminate the data with order quantity of 0, and then divide three intervals of $\{x|x=0\}$, $\{x|0 < x < 1\}$, and $\{x|x=1\}$ according to the supply order ratio Q . Among them, the case of $\{x|x > 1\}$ is classified as $\{x|x=1\}$, which is the same as $\{x|x=1\}$ because the supply ratio is considered to be 1 for the case of $\{x|x > 1\}$. Finally, calculate the variance s . Forward the variance.

$$S_{forward} = \max - S_i \quad (2)$$

Define the distance D_i between the i ($i=0, 1, 2, \dots, 402$) evaluation object and the maximum value. Define the distance D_i between the i ($i=0, 1, 2, \dots, 402$) evaluation object and the maximum value.

2.1.2 Model solution

Apply matlab to solve 402 suppliers. For the final 50 enterprises, the final results of the evaluation criteria are shown in the figure below.

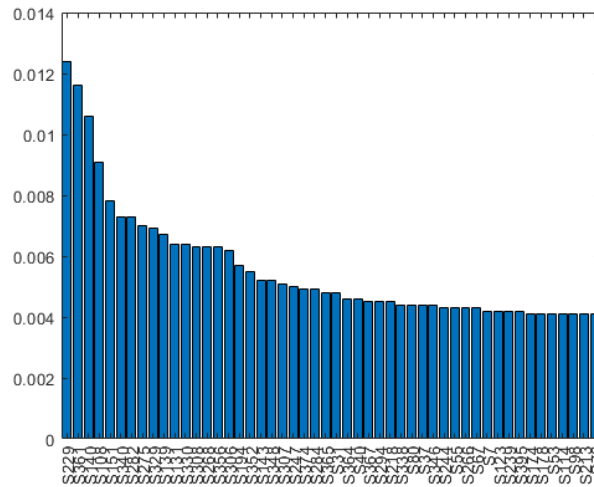


Fig 1 evaluation of top 50 important businesses

So far, 50 of the 402 enterprises have selected the most important businesses for the enterprise. The selection of the weight of businesses depends on the big data in literature [4-5], and the weight of enterprises for suppliers is obtained. Among them, s229, s361, S140, S108 and S151 are outstanding in terms of supply quantity, number of purchase orders, full rate and stable rate, and the other 45 are evaluated as average.

2.2 Model of problem 2

2.2.1 Model establishment

Firstly, when there is no transportation loss, the supply quantity can meet the order quantity, and there is 5.64×10^4 , the weekly production capacity of the enterprise needs to be guaranteed to be 2.82×10^4 . The definition requires Y_{\min} to establish a linear differential [1]

$$\begin{cases} Y_{\min} = x_1 + x_2 + \dots + x_{50} \\ \frac{A}{0.6} + \frac{B}{0.66} + \frac{C}{0.72} \geq 2.82 \times 10^4 \end{cases} \quad (3)$$

Where Pr = "average supply order ratio" \times "Total order quantity" / "order times", for expressions A, B and C:

$$\begin{cases} A = \sum_{i=1}^{50} (p_{rAi} \times x_{Ai}) \\ B = \sum_{i=1}^{50} (p_{rBi} \times x_{Bi}) \\ C = \sum_{i=1}^{50} (p_{rCi} \times x_{Ci}) \end{cases} \quad (4)$$

For the question, set the unit price of C as 1, add the constraint formula based on formula (3) and (4), and calculate the minimum cost w_{\min} without transportation loss [2-3]. $W_{\min} = 1.2A + 1.1B + C$. (5)

Then, under the condition of minimum cost, there is no dissipation minimum capacity. The minimum loss is obtained by adding the loss condition under the minimum capacity condition under the condition of no loss. Therefore, the constraint equation of the minimum production requirements of the enterprise under the condition of loss is:

$$\begin{cases} Y_{\min} = x_1 + x_2 + \dots + x_{50} \\ \frac{A}{0.6} + \frac{B}{0.66} + \frac{C}{0.72} \geq 2.82 \times 10^4 + \left(\frac{\omega_A}{1.2 \times 0.6} + \frac{\omega_B}{1.1 \times 0.66} + \frac{\omega_C}{1 \times 0.72} \right) \beta \\ \omega_{\min} = \omega_A + \omega_B + \omega_C \\ \omega_A \leq \omega_{\min} \\ \omega_B \leq \omega_{\min} \\ \omega_C \leq \omega_{\min} \end{cases} \quad (6) \quad \begin{bmatrix} 2 & 1 & 7 \\ 0.25 & 0.1428 & 1 \end{bmatrix} \quad (7)$$

Among β is the loss ratio, ω_A is the amount re spent on material A, ω_B the amount re spent on material B, ω_C the amount re spent on material C. In order to better formulate the scheme, select the freight forwarder with strong transportation capacity, and take the full rate, loss variance and acceptance rate as the evaluation indicators for visual processing.

The rough ranking of forwarder capability indicators can be preliminarily obtained in order to more intuitively express the selection needs of enterprises for transporters and better describe the evaluation of transporters. The evaluation indexes of variance, full law and acceptance rate are established, and the weight value of transporters is calculated by analytic hierarchy process.

The hierarchical structure model is established [4], the M-C judgment matrix is constructed, and the pairwise comparison matrix is obtained based on the pairwise comparison of the three elements of criterion layer C.

Tab 2 Weight calculation of evaluation layer

Evaluation criterion	Arithmetic average	Geometric average	Characteristic value
Reception rate	0.3151	0.3150	0.3150

Loss variance	0.6025	0.6026	0.6026
Full rate	0.0824	0.0823	0.0823

Finally,Cr=0.0019<0.1,and the consistency of the matrix is reasonable.

The model is simplified.It can be seen from radar figure that the loss variance of T4 and T5 transportation companies is large,indicating that there are large fluctuations in the transportation process of T4 and T5,and other parameters are slightly lower than those of other transportation companies.The loss variance of T7 transportation company is higher than T4 and T5,and the acceptance rate is lower than T4 and T5.Therefore,T4,T5 and T7 transportation companies are not considered in the scoring model(transportation capacity T7>T4>T5).Establish the comparison matrix of C₁-P,C₂-P and C₃-P.

$$\begin{pmatrix} 1 & \frac{1}{3} & \frac{1}{3} & 2 & 3 \\ 3 & 1 & 1 & 3 & 3 \\ 3 & 1 & 1 & 4 & 4 \\ \frac{1}{2} & \frac{1}{3} & \frac{1}{4} & 1 & 1 \\ \frac{1}{3} & \frac{1}{3} & \frac{1}{4} & 1 & 1 \end{pmatrix} \begin{pmatrix} 1 & 2 & 3 & 2 & 1 \\ \frac{1}{2} & 1 & 2 & 1 & \frac{1}{2} \\ \frac{1}{3} & \frac{1}{2} & 1 & \frac{1}{2} & \frac{1}{3} \\ \frac{1}{2} & \frac{1}{3} & 2 & 1 & \frac{1}{2} \\ \frac{1}{2} & 2 & 3 & 2 & 1 \end{pmatrix} \begin{pmatrix} 1 & 1 & 2 & 5 & 7 \\ \frac{1}{2} & \frac{1}{2} & \frac{1}{3} & 5 & 7 \\ \frac{1}{3} & \frac{1}{3} & 1 & 3 & 4 \\ \frac{1}{5} & \frac{1}{5} & \frac{1}{3} & 1 & 1 \\ \frac{1}{7} & \frac{1}{7} & \frac{1}{4} & 1 & 1 \end{pmatrix}, (7)$$

2.2.2 Model solution

Based on formula(3)and(4),at least 20 companies s229,s361,S140,S108,S151,S340,s282,s275,s329,S139,s131,S330,S308,S268,S356,S306,s348,S307,S37 and s395 can meet the first question.For the second question,under the condition of no transportation loss,since the optimal solution is exactly equal to 28200m3,the ordering scheme in the next 24 weeks can be recycled,that is,it is the same as the scheme in the first week:suppliers of S140 s131 s364 S367 s346 S53 S213 are excluded,and all other suppliers are selected.

Select the transportation merchant capacity result based on formula(5)~(7).

Tab3 Transporter T1~T8 ranking				
ID	Full rate	Reception rate	Loss variance	Score
T3	0.4875	0.9908	4.4256	0.256684
T2	1.0000	0.9946	4.3503	0.227384
T6	0.9000	0.9810	0.5504	0.209238
T1	1.0000	0.9981	2.3243	0.179207
T8	0.8458	0.9711	0.8079	0.127385
T7	1.0000	0.9792	0.4874	0.101548
T4	0.4250	0.9899	0.2690	0.714235
T5	0.3458	0.9843	0.2608	0.512621

3. Model Evaluation

3.1 Advantages of the model

- (1)For model 1,TOPSIS analysis is adopted to greatly improve the accuracy of the model under the condition of giving the weight through investigation,and give the selection of reasonable suppliers.At the same time,the visualization more intuitively expresses the situation of each ordering and supplier.
- (2)For model 2,the analytic hierarchy process is used to analyze the actual situation of suppliers and shippers,as well as the establishment of matrix,which greatly improves the accuracy of model parameters,improves the application ability of the model,and makes the final goal well quantified.At the same time,based on lingo's method and regression formula,the results under the condition of loss are finally calculated.

3.2 Disadvantages of the model

For model 2,the prediction is based on 240 weeks,and every 4 weeks is a change cycle,without considering the change of each week.At the same time,the matrix establishment of analytic hierarchy process is subjective and has certain limitations.

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A Study on Cultivation of Student Cadres of Medical Colleges Based on the Art Therapy——A Case Study of North Sichuan Medical College

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Abstract: Art therapy is a form of psychotherapy that uses art media as its primary mode of communication. This paper analyzes the mental health of medical student cadres and explores the influence of art therapy through the form of expression and advantageous characteristics of art therapy, so as to protect the physical and mental health of student cadres, and promote the application and development of art therapy in college students' affairs.

Keywords: Art therapy; Medical college; Student cadres

Fund projects: Teaching Reform Project of North Sichuan Medical College, The Importance of Art Education to Medical Students' Mental Health Education.

1. Research background

Art therapy, as a creative arts therapy profession, originated in the fields of art and psychotherapy. The British Association of Art Therapists defines art therapy as "a form of psychotherapy that uses art media as its primary mode of expression and communication." The American Art Therapy Association defines art therapy as: "an integrative mental health and human services profession that enriches the lives of individuals, families, and communities through active art-making, creative process, applied psychological theory, and human experience within a psychotherapeutic relationship." As an important part of psychotherapy, Art therapy is diverse, artistic, flexible, and interesting, which has a certain therapeutic effect on people with psychological disorders and mental problems. At present, with the rapid development of social economy and the improvement of people's living, people are paying more and more attention to health, and the requirements for medical services are also increasing year by year, which puts forward higher requirements for the comprehensive quality of medical personnel. At the same time, medical colleges and universities undertake the important task of cultivating medical talents for China, which increases the pressure and impact of medical college students in study, emotion, employment, social communication and many other aspects. Therefore, strengthening the education of medical students has become a key part of improving the quality of medical services. As important organizers, implementers and coordinators in student affairs, medical student cadres play an important role in college education.

In the 1980s, China drew on the experience of western countries and applies art therapy in medical treatment. In recent years, art therapy is becoming more and more easily accepted and recognized in college students' affairs. In essence, art therapy has the external function of personal inner psychology, personality and emotion, and plays an important role in the ideological and political work of students in medical colleges.

2. Analysis of medical college student cadres—Take North Sichuan Medical College as an example

The paper investigates the student cadres from North Sichuan Medical College and this survey was conducted by random sampling, 400 questionnaires and 380 valid questionnaires were distributed. The recovery questionnaire was 95%, and SPSS software was used for data statistical analysis. The questionnaire design mainly includes the motivation, self-evaluation and existing problems, so as to analyze the mental health of student cadres.

2.1 Motivation of student cadres

According to the survey results, 89.5% of the student cadres think that the purpose of being a student cadre is to improve themselves, 68.7% of the student cadres think they want to make more friends, 57.5% of the student cadres want to enrich their life, 34.1% of the student cadres want to obtain more certificates, and 21.3% of the student cadres think they can get a lot of "invisible benefits". This shows that student cadres are generally positive, and a small number of people have utilitarian psychology.

2.2 Self-evaluation of student cadres

According to the survey, 82.5% of the student cadres said they increased their confidence and their abilities in the process of being

student cadres, but 29.1% of the student cadres thought they had a happy time in the process of work, but in many times they were helpless and depressed. After becoming student cadres, 91.9% of the student cadres think they are more busy, 79.9% of the student cadres think the responsibility becomes greater, and 11.9% of the student cadres think their statues have improved.

2.3 Problems existing in student cadres

In the process of doing student affairs, 69.6% of the student cadres believed that there was a little gap, 45.8% of the student cadres thought that the biggest problem is the lack of enthusiasm and initiative, and 34.7% of the student cadres thought that the team is not cohesive, and 56.3% of the student cadres believed that support and encourage student cadres can mobilize their enthusiasm when dealing with students affairs. It can be seen from the survey that the mainstream of student cadres is positive. With the change of the external environment, the training of student cadres has also changed greatly, and there are also many problems: strong utilitarian heart, lack of systematic training and target guidance, strong self-awareness, sensitive interpersonal relationship, etc.

To sum up, it is of great practical significance to correctly understand and analyze the mental health problems of college student cadres in the new era, and actively thinking and taking corresponding measures is important to improving the mental health quality of medical students. The author summarized the reasons for the psychological problems of medical student cadres as follows: (1) At present, medical students live in an era of rapid economic development and a flood of massive information. Influenced by various social thoughts and trends, their hearts are empty, lack faith, value reality, pursuit of material enjoyment and obvious utilitarian tendency. (2) Student cadres' self-esteem is strong, sometimes lazy, susceptible to emotional infection. (3) Student cadres have distinct personality, strong thirst for knowledge and high personal development goals, but their psychological resistance ability is poor.

3. The influence of art therapy on college student cadres

3.1 Main forms of art therapy

Art therapy is a non-verbal visual performance art, which conducts psychological intervention and treatment through the artistic means of painting, music, dance, game, etc. As the main form of expression of art therapy, painting can express the inner emotions of patients and reflect the information in people's heart and subconscious mind. Unlike painting therapy, music therapy is a systematic, complete treatment process that involves all the material and activities related to music in the process of psychotherapy. In addition, dance therapy is also an effective psychotherapy method in art therapy, it takes the body as part of the finished language, showing inner, abstract thoughts and emotions through free dance and open movements in relaxation, understanding implied emotions in dance rhythm and rhythm.

3.2 Advantages of art therapy

Firstly, the advantage of art therapy is that it is a non-linguistic artistic way that can peep into students' inner activities and thoughts in an artistic way. Secondly, art therapy is more implicit and mild than other treatment methods, mainly reflected in the symbolic nature of artistic activities. Student cadres often take a negative avoidance attitude towards psychological communication, and artistic treatment can improve the situation. In the artistic creation activities, whether it is painting works or dance music, they can become the outlet of students' cadres to vent their emotions, so that student cadres can express their ideas in a more implicit and gentle way. Finally, artistic treatment can better help student cadres to establish the environmental relationship between themselves and the outside world, and achieve a state of balance and unity.

4. Psychological counseling strategy of art therapy for medical college student cadres

The application of art therapy in college student management has certain practical significance and reference significance, but for such a group of medical school student cadres, they should provide targeted and individualized services for student cadres when carrying out relevant art therapy activities. Specifically, three aspects need to be noted.

4.1 Fully understand and support student cadres and establish a benign relationship of two-way interaction

If there is no good relationship, it may arouse the rebellious psychology of student cadres. Therefore, it is crucial to establish a professional relationship with a good two-way interaction. Only on the basis of the mutual trust relationship can student cadres open their minds and freely express their true thoughts through art therapy.

4.2 Center on student cadres

Encourage and guide student cadres to actively participate in art therapy activities. In the process of art therapy, always pay attention to the state of student cadres, take student cadres as the center, the content of art therapy activities should be in line with the psychological characteristics of student cadres, and promote the mental healthy growth of student cadres. On the other hand, it is necessary to guide the student cadres to express their true feelings. For example, let student cadres interpret the painting works, the art therapist can fully understand the inner world and needs of the student cadres. At the same time, it helps art therapists to specifically understand student cadres and solve the problem of student cadres.

4.3 Analyze student cadres comprehensively and systematically

Taking painting art as an example, one or several paintings of student cadres are not enough to fully show all the needs and problems of their entire inner world. In the use of painting art therapy, it is necessary to avoid the judgment of student cadres through a single painting work, combine the multiple data of student cadres, such as the family structure, growth environment, social relationship, growth experience, etc. The painting content of student cadres of different ages is different. The same point is that painting can replace language communication. When analyzing the student cadres' paintings, the art therapists should not only encourage the student cadres to express and interpret themselves, but also need to combine many aspects of information, and they should not blindly listen to the expression of the student cadres. It cannot be concluded through the one-sided analysis of artistic treatment, only when the feedback and accurate interpretation of the whole process of student cadres' participation is comprehensive and systematic, can we

better help students cadres adjust their psychological state through art therapy, solve the problems of student cadres, and promote the healthy growth and development of student cadres.

5. Conclusion

In recent years, art therapy mode has been more and more used in students affairs in China. For student cadres, the intervention mode is more targeted and special. The use of art therapy in student cadres needs to clarify art therapy goals and steps, and it is also important to guide student cadres actively participate in activities. Only adhere to the principle of individuality, pay attention to the personality and characteristics of student cadres, stimulate the creative potential and interest of student cadres can get satisfactory results. At the same time, art therapists should accept, respect and understand student cadres, dig the student cadres inner real emotional needs, help student cadres solve problems, promote student cadres vent emotions, express themselves, adjust student cadres psychology, promote the healthy growth of student cadres. In addition, it is still necessary to constantly summarize the problems encountered in art therapy in the work of student cadres and further improve the role mechanism of art therapy in the affairs of student cadres.

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Software Quality Management of Small Outsourcing Companies Based on CMMI Model

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Abstract: The development of outsourcing companies is stimulated by the digital trend of the industry and the penetration of digital technology. They are striving to adapt to industry application scenarios, and improving software quality has become the focus of outsourcing companies. This paper takes small outsourcing companies as the research object, adopts the Capability Maturity Model Integration (CMMI) model to conduct a comprehensive design for continuous improvement of the outsourcing company's business processes, and evaluates software quality maturity capabilities through expert scoring methods, and selects some key areas as indicators to build the model and the maturity ability level is determined. Taking the general business process of the small outsourcing company as a benchmark, comprehensively evaluate its main key domain indicators, and analyze the improved maturity level as IV, which provides a constructive basis for the small outsourcing company to further improve the software quality.

Keywords: Outsourcing company; Software quality; CMMI model

1. Introduction

In the era of digital transformation, the software industry is booming. In order to reduce the development cost of software projects, a new strategy—outsourcing model has emerged. From the China Service Outsourcing Development Report 2019, it can be known that the number of outsourcing companies in China continues to increase. The development of new technologies has prompted people to put forward higher expectations for software quality, and service outsourcing must adapt to the application scenarios of the industry. However, agile development and CMMI certification have promoted the upgrading of the outsourcing industry^[1], Rian Permana et al^[2] evaluated the software process of the CMMI framework and prioritized the execution of key areas, which can effectively improve software quality management and improve the hidden dangers of software quality problems.

Based on the in-depth study of the CMMI model, this article optimizes the business process of small outsourcing companies, and uses expert scoring methods to determine the maturity level of the process after the optimized process design, as the goal of process optimization. The application of the model will help small outsourcing companies optimize their software quality management business processes and lay a foundation for undertaking larger-scale outsourcing projects.

2. Problems in software projects of small outsourcing companies

In the research of this project, the following problems mainly exist in the implementation of the software project. First, unclear requirements, frequent changes, lack of document management, etc. will lead to problems such as rework and project delays. Second, there are phenomena such as lack of communication and lack of focus on overall coupling in the coding stage, resulting in weak correlation between functions. The uneven development level of members will affect the quality of the project. The progress of the project is entirely dependent on the person in charge for communication and coordination, and it is easy to lose sight of one another. Third, the delayed delivery in the coding phase will result in the compression of the testing phase, which is likely to cause dissatisfaction and conflicts among the testing department. The testing method is relatively simple, mostly through manual, lack of technical software evaluation^[3].

3. Software development process improvement plan design

CMMI is a quality management standard, a model that guides the software to gradually mature. It is divided into five levels: initial level, managed level, defined level, quantitative management level, optimized management level, and progressive levels. The maturity of the software process is getting higher and higher.

With the goal of improving software quality, review is added in the requirements phase, and requirements documents are written for use in the development phase, so that document resources can be traced, and at the same time, it is convenient for later testing to develop test cases and standardize requirements changes. During the coding phase, we communicate regularly and develop and design functions in parallel. At the same time, we promote Personal Software Processes to continuously improve personal development level, and strive to reduce error rates and improve overall quality. In the testing phase, integration testing is carried out, acceptance standards are established, defect management is established, defects are classified and effectively tracked, and testing is carried out throughout the entire coding process. The improved business process is shown in Figure 2.

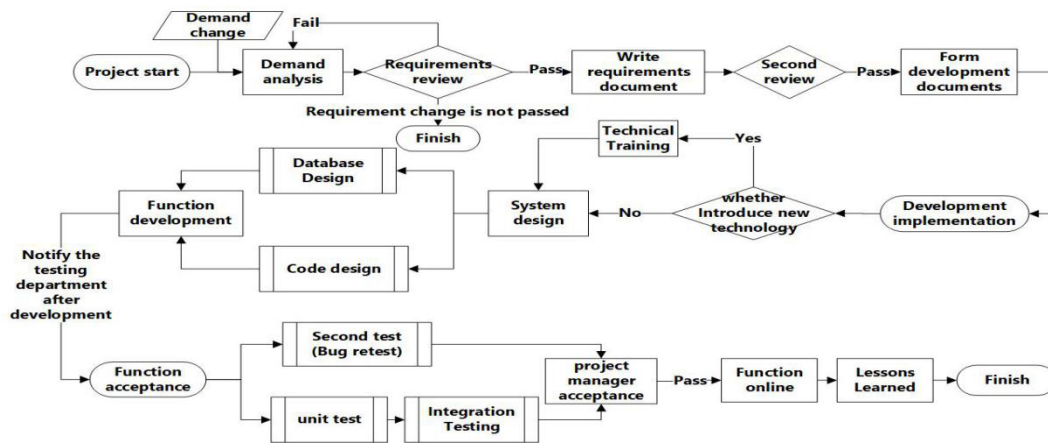


Figure 2 Diagram of business process improvement

4. Model construction and index selection

In the actual evaluation process, establish an index system with develop-nodes as the first-level indicators and quantitative work in each node as the second-level indicators, as shown in Table 1.

Table 1 Software Quality Management Evaluation System

Serial number	Target layer(T)	First level indicator(FI)	Secondary indicators(SI)
1	Small outsourcing company management maturity (M)	Requesting research (M1)	Demand management (M11)
2			Configuration management (M12)
3			Project Plan (M13)
4		Development implementation (M2)	Code design (M21)
5			Database Design (M22)
6			function development (M23)
7			Risk Management (M24)
8			QC (M25)
9		Function test (M3)	Unit Test (M31)
10			Integration Testing (M32)
11			Function maintenance (M33)

Experts with development experience are invited to score the indicators according to the grading principle of analytic hierarchy process, and build an indicator matrix, that is, if factor A is equal to factor B, the score is 1, if it is slightly more important, the score is 3, the more important is 5, and strongly important is 7. Calculate the weights by column, and then take the arithmetic average of each index, construct a multi-level fuzzy evaluation matrix^[4] and associate it with the maturity level, and finally obtain the quality maturity evaluation value.

Table 2 Judgment matrix of first-level indicators

	M1	M2	M3
M1	1	1/5	1/3
M2	5	1	5
M3	3	1/5	1

Table 3 Calculation results of the weights of first-level indicators

	M1	M1	M1	Weights(W)
M1	0.1111	0.1429	0.0527	0.1022
M2	0.5556	0.7143	0.7895	0.6865
M3	0.3333	0.1429	0.1578	0.2113

Based on the CMMI level, each indicator is divided into five levels I-V, and the corresponding scores are 1-5 points, that is, the higher the level, the higher the score. Invite three experts with develop experience to judge and score the established index system. If the index meets the conditions of level I, score 1 point, and so on, and calculate the proportion of each level after aggregating, as shown in Table 4.

Table 4 Indicator weights and expert scoring statistics

T	FI	W	SI	W	Scoring index				
					1	2	3	4	5
M	M1	0.1022	M11	0.2829	0.0000	0.3333	0.6667	0.0000	0.0000
			M12	0.2357	0.0000	0.6667	0.3333	0.0000	0.0000
			M13	0.4813	0.0000	0.3333	0.3333	0.3333	0.0000
			M21	0.0531	0.0000	0.6667	0.3333	0.0000	0.0000
			M22	0.0573	0.0000	0.6667	0.3333	0.0000	0.0000
	M2	0.6865	M23	0.1878	0.0000	0.3333	0.3333	0.3333	0.0000
			M24	0.3615	0.0000	0.0000	0.6667	0.3333	0.0000
			M25	0.3405	0.0000	0.0000	0.3333	0.3333	0.3333
			M31	0.4403	0.3333	0.3333	0.3333	0.0000	0.0000
			M32	0.3267	0.0000	0.0000	0.6667	0.3333	0.0000
	M3	0.2113	M33	0.2352	0.0000	0.0000	0.6667	0.3333	0.0000

Taking the multi-level fuzzy evaluation matrix as the benchmark, Calculate the matrix product of the secondary index and the proportion of expert scores. Take the three second-level indicators of the first-level indicator M1 as an example, use the ordinary matrix product algorithm to calculate the score value, and P is the matrix established by the score ratio corresponding to M11, M12, and M13, calculate $M_1 * P$

$$=[0.2819 \quad 0.2357 \quad 0.4813] \times \begin{bmatrix} 0.0000 & 0.3333 & 0.6667 & 0.0000 & 0.0000 \\ 0.0000 & 0.6667 & 0.3333 & 0.0000 & 0.0000 \\ 0.0000 & 0.3333 & 0.3333 & 0.3333 & 0.0000 \end{bmatrix}$$

$$= [0.0000 \quad 0.4118 \quad 0.4276 \quad 0.1604 \quad 0.0000]$$

In the same way, calculate the score value of the secondary index of M2=

$$[0.0000 \quad 0.1362 \quad 0.4539 \quad 0.2966 \quad 0.1135]$$

In the same way, calculate the score value of the secondary index of M3=

$$[0.1468 \quad 0.1468 \quad 0.5214 \quad 0.1873 \quad 0.0000]$$

Calculate the score value of the first-level indicator in the same way, matrix

P' is the matrix established by the score value of

$$\begin{matrix} \text{the secondary index, calculate} \\ M \times P \end{matrix} = \begin{bmatrix} 0.1022 & 0.6865 & 0.2113 \end{bmatrix} \times \begin{bmatrix} 0.0000 & 0.4118 & 0.4276 & 0.1604 & 0.0000 \\ 0.0000 & 0.1362 & 0.4539 & 0.2966 & 0.1135 \\ 0.1468 & 0.1468 & 0.5214 & 0.1873 & 0.0000 \end{bmatrix}$$

$$= [0.0310 \quad 0.1666 \quad 0.4654 \quad 0.2596 \quad 0.0779]$$

Multiply the final score of the first level indicator by the maturity level, calculate the maturity evaluation value MV, calculate MV

$$= [0.0310 \quad 0.1666 \quad 0.4654 \quad 0.2596 \quad 0.0779] \times [1 \quad 2 \quad 3 \quad 4 \quad 5]^T = 3.1883$$

Judge the maturity level of MV based on the original maximum membership degree. The improved process quality management maturity level is IV, indicating that the small outsourcing company can achieve a quantitative level of software project development according to this improved process.

5. Conclusion

This article takes small outsourcing companies as the research object, carries out a comprehensive design for continuous improvement of business processes based on the CMMI model, and continues to promote the improvement of the PSP. The software quality maturity capability is evaluated by expert scoring and other methods. The quality maturity evaluation value is calculated by the fuzzy evaluation method to be 3.1883, that is, the maturity level is Level IV, indicating that the company's management has reached the quantitative management level, and it is a small outsourcing company. The next process improvement goal provides strong support.

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Research on Optimal Ordering Scheme of Raw Materials Based on Multi-Objective Programming Model

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Abstract: By analyzing the characteristics of 402 suppliers, this paper formulates the optimal ordering scheme for enterprises according to different ordering objectives, and determines the maximum potential of enterprise capacity improvement by predicting the upper limit of suppliers' supply capacity. Firstly, we establish a multi-objective programming model aiming at the lowest cost, and then use genetic algorithm to determine the specific ordering scheme. Finally, through sensitivity analysis, it is found that the cost fluctuation under the optimal ordering scheme is within a certain range and does not change much. Combined with the distribution diagram of supplier completion rate, it can be seen that the completion rate of most suppliers is relatively stable.

Keywords: Genetic Algorithm; Multi Objective Planning; Ordering Scheme

1. Introduction

Suppliers belong to an open system of the supply chain. With the development of the times, suppliers play an important role in the supply chain, and the supplier selection mechanism is diversified. Therefore, when enterprise decision makers select suppliers to analyze the specific situation of the enterprise in detail, they should formulate corresponding ordering strategies according to the long-term development strategy of the enterprise. This paper makes a choice for the minimum number of raw material suppliers that the enterprise can meet the production, and formulates the most economical raw material ordering scheme every week in the next 24 weeks.

2. Model Establishment and Solution

2.1 Establish the Most Economical Planning Model for Raw Material Ordering

2.1.1 Determination of Decision Variables

This paper formulates the most economical raw material ordering scheme for the enterprise every week in the next 24 weeks. First, select suppliers with strong comprehensive ability. We assume that these suppliers can complete the orders given to them by the enterprise. It may be assumed that the order quantity is roughly equal to the supply quantity. The ordering scheme is to determine the supply quantity of the supplier.

Therefore, 0-1 matrix S is introduced to define that the suppliers selected in this question are among the above selected suppliers.

Taking class A supplier as an example, 21×24 matrix X^A representing supply quantity:

$$X^A = \begin{pmatrix} x_1^A & x_2^A & \dots & x_{1,24}^A \\ x_2^A & x_2^A & \dots & x_{2,24}^A \\ \dots & \dots & \dots & \dots \\ x_{21,1}^A & x_{21,2}^A & \dots & x_{21,24}^A \end{pmatrix} \quad (1)$$

Where, x_j^A represents the supply volume of the i th class A supplier in week j . Similarly, the supply capacity matrices X^B and X^C of class B and class C enterprises can be established.

2.1.2 Determination of Constraints

Constraint 1: capacity limit

The order quantity shall not be less than the inventory of production raw materials for two weeks. The order of raw materials in the first week shall not be less than the demand of products in the first two weeks (including this week), and the supply of the next week only needs to be guaranteed in the remaining weeks:

$$\left(\frac{S^A \cdot X^A}{0.6} + \frac{S^B \cdot X^B}{0.6} + \frac{S^C \cdot X^C}{0.2} \right) \geq \begin{pmatrix} 5.4 \times 10^4 & & & \\ & 2.8 \times 10^4 & & \\ & & \dots & \\ & & & 2.8 \times 10^4 \end{pmatrix} \quad (9) \quad (2)$$

Among them, S^A 、 S^B 、 S^C are 0-1 constant matrices. In order to ensure that the suppliers selected here are from the selected suppliers. X^A X^B X^C are decision variable matrices.

Constraint 2: limit of maximum supply capacity

The supply quantity obtained at a supplier's premises in the current week will not exceed the maximum supply quantity of the supply quantity in that week. Take the first week's supply volume of the first class A supplier as an example:

$$x_1^A \leq \max_1^A \quad (3)$$

Where, \max^A is the value coefficient.

2.1.3 Determination of Objective Function

The most economical raw material ordering scheme is required, that is, the minimum cost. For the cost here, we only consider the cost of purchased raw materials, that is, the cost paid to the supplier. According to the requirement "the purchase unit price of class A and class B raw materials is 20% and 10% higher than that of class C raw materials respectively", assuming that the unit price of material C is 1, then A is 1.2 and B is 1.1.

The cost of purchasing materials is the quantity of A, B and C multiplied by their unit price. Taking the first week's supply of class A materials as an example, since there are 21 class A merchants, the calculation formula is:

$$1.2 * \sum_{j=1}^1 s_{1j}^A \times x_j^A \quad (4)$$

The direct cost for week i is:

$$1.2 * \sum_{j=1}^1 s_j^A \times x_j^A + 1.1 * \sum_{j=1}^4 s_j^B \times x_j^B + 1 * \sum_{j=1}^5 s_j^C \times x_j^C, (i = 1, 2, \dots, 24) \quad (5)$$

2.1.4 Model Establishment

The most economical ordering model is as follows:

$$\begin{aligned} \min \quad & 1.2 * \sum_{j=1}^1 s_j^A \times x_j^A + 1.1 * \sum_{j=1}^4 s_j^B \times x_j^B + 1 * \sum_{j=1}^5 s_j^C \times x_j^C, (i = 1, 2, \dots, 24) \\ s.t. \quad & \begin{cases} x_j \leq \max_j, \quad (j = 1, 2, \dots, 50; j = 1, 2, \dots, 24) \\ \left(\frac{S^A * X^A}{0.6} + \frac{S^B * X^B}{0.6} + \frac{S^C * X^C}{0.2} \right) \geq \begin{pmatrix} 5.6 \times 10^4 & & & & \\ & 2.8 \times 10^4 & & & \\ & & \dots & & \\ & & & 2.8 \times 10^4 & \end{pmatrix} \end{cases} \end{aligned} \quad (6)$$

2.2 Model Solution

Genetic algorithm is also used to solve the problem, but the coding mode of chromosome is changed, and the supply quantity is coded in integer form. The supply quantity of the supplier every week is represented by floating point numbers. Make statistical chart:

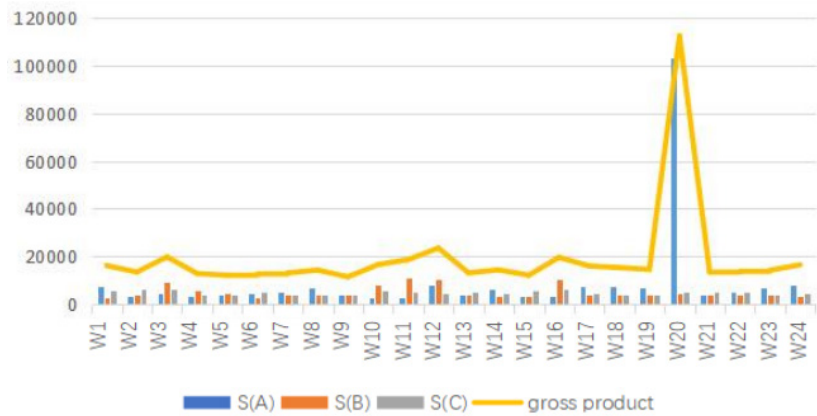


Figure 1 Distribution of minimum supplier results

2.3 Implementation Effect Evaluation Based on Sensitivity Analysis

When making the most economical order scheme, the average completion rate of each enterprise is used to measure the completion degree of the order placed. In fact, the completion rate of each supplier is a random variable. In order to study the impact on the cost if the supply quantity of some suppliers does not meet the order requirements or exceeds the order quantity, sensitivity analysis was used.

Randomly select the completion rate of 50 suppliers in 10 weeks, and find out the ordering scheme cost of the average completion rate corresponding to the number of weeks, so as to obtain the cost comparison diagram of the optimal ordering scheme is as follows:

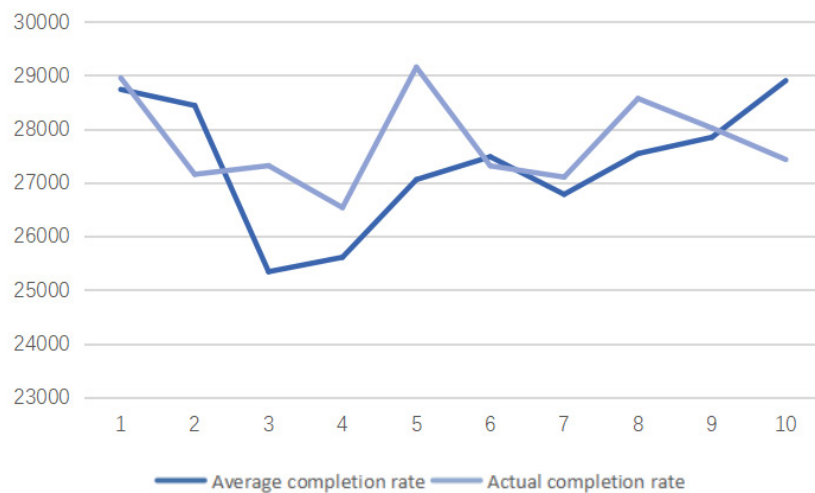


Figure 2 cost comparison of optimal ordering scheme

The chart analysis shows that the cost under the optimal ordering scheme fluctuates in a certain range and changes little. Combined with the supplier's completion rate variance and the completion rate distribution diagram, it can be seen that the completion rate of most suppliers is relatively stable. The change of completion rate has little impact on the cost of the optimal scheme.

3. Model Evaluation

In this paper, the average supply level of suppliers is determined in weeks. The determination method makes full use of the data, evenly distributes it to construct samples, and makes prediction according to the samples, which has higher reliability. However, the loss rate in transportation is ignored in the selection of the least supplier. And when selecting the index weight, it has a certain subjectivity.

We can take into account the supplier's supply frequency, periodicity and other characteristics, further accurately predict the supplier's weekly supply through time series analysis, and flexibly select different types of suppliers based on the company's demand urgency for goods. It also plays a good guiding role in the selection of suppliers by actual enterprises.

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PHAST Based Influence Range Analysis of Ice Methanol Storage Tank Explosion

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Abstract: With the continuous development of alkali process to produce VC, methanol is an important raw material of the production process. Methanol is a dangerous chemical, and when mixed with air, it is easy to explode when met with heat source and open fire. Therefore, the storage of methanol is an important part of production safety. Therefore, based on the explosion accident of a company's ice methanol storage tank, this paper uses PHAST software of DNV GL in Norway to simulate the impact of the explosion of ice methanol storage tank on its nearest office building.

Keywords: Methanol; Explosion overpressure; Impulse; Explosion overpressure time

The introduction

Methanol is flammable, and its fire risk is class A, which is a dangerous chemical under key supervision. Its vapor and air can form explosive mixtures. In case of open fire, high heat energy cause combustion explosion. Chemical reaction or combustion in contact with an oxidizer. In a fire, the heated container is in danger of exploding. Its vapor is heavier than air and can be diffused to a considerable distance at a lower place, which will be ignited by an open fire.

1. Project background

The crystallization centrifuge plant is located in the south of the plant, about 17.5 meters high. Several equipment are arranged on the top floor plane, including an ice methanol storage tank with a volume of 5m³. Methanol is the main substance with explosive risk in the operation of the project. The northwest side of the crystallization centrifugal plant is the office building, the north side is the workshop control room, and the northeast side is the alkali conversion workshop. Once the ice methanol storage tank leaks, fire and explosion accidents may be caused, which may damage the surrounding buildings and facilities.

This paper is mainly about the explosion load simulation analysis of the ice methanol storage tank on the top of the crystallization centrifugal plant, focusing on the impact of the explosion on the office building, and obtaining the explosion load results for subsequent transformation analysis.

2. Analysis Methods

2.1 Analysis Procedure

The work content of this paper is the simulation calculation of explosion load, and the accident consequences are obtained. The analysis process is shown in Figure 1.

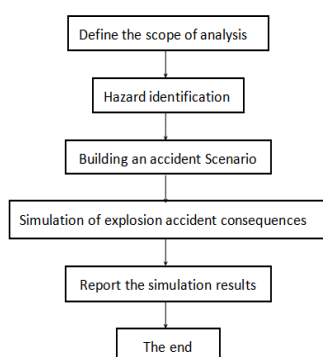


Figure 1 Analysis flow chart

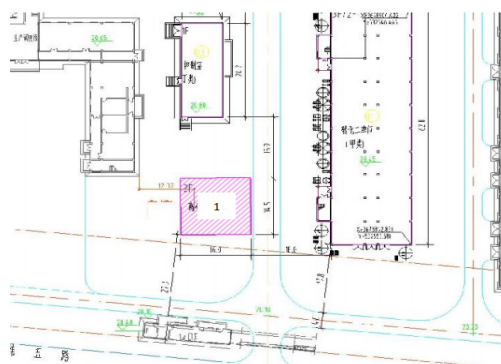


FIG. 2 Block area diagram (numbers are block area numbers)

2.2 Analysis Objectives

The analysis objective of this paper is to identify the damage and determine the failure event of the ice methanol storage tank of

alkali transformation project. The accident consequence (explosion) caused by failure event is simulated and analyzed to determine the accident load of surrounding buildings.

2.3 Hazard Identification

Hazard identification refers to the identification of the initial event and the evolution process of the event that can lead to the serious consequences of the explosion, including the identification of the explosion event and the identification of the consequences of the explosion accident, according to the plane layout, process, operation conditions and material characteristics of the process device.

2.4 Evaluation criterion of explosion load damage to ordinary buildings

Table 1 below lists the damage effects of different overpressure values on ordinary buildings. The data in the table are engineering experience data, relatively rough, and the detailed failure effect needs to be analyzed and calculated in combination with load details and building structure details. Through the data in Table 1, the destructive effect of explosion load on ordinary buildings can be directly observed and qualitatively understood.

Table 1 Destructive effect of explosion overpressure on ordinary buildings

Pressure/kPa	impact
0.14	Disgusting noise (137dB, or low frequency 10 Hz~15 Hz)
0.21	Large glass, already in a state of fatigue, occasionally breaks
0.28	Produce large noise (143dB), glass breakage
0.69	Fracture of small glass under pressure strain
1.03	The typical pressure of glass breaking
2.07	“Safe distance” (below which the probability of not causing serious damage is 0.95); Ejection limit; Some damage to the roof; Ten percent of the Windows were broken
2.76	Limited minor structural damage
3.4-6.9	Large and small Windows are usually broken; Window frames were occasionally damaged
4.8	Buildings suffered minor damage
6.9	The house was partially destroyed and uninhabitable
6.9-13.8	Asbestos board crushing; Steel plate or aluminum plate wrinkle, fastening failure; Board fixed failure, blowing
9.0	The steel structure of the building is slightly deformed
13.8	The walls and roofs of houses partially collapsed
13.8-20.7	No reinforced concrete walls were destroyed
15.8	Low limit for severe structural failure
17.2	House brickwork 50% destroyed
20.7	Slight damage to heavy machinery (1362kg) in factory buildings; The steel structure of the building deforms and leaves the foundation
20.7-27.6	Failure of self-framed steel panel buildings; The oil storage tank ruptured
27.6	Cracking of cladding on light industrial buildings
34.5	Wooden support columns snapped; Building tall hydraulic press (18160kg) slight damage
34.5-48.2	Houses were almost completely destroyed
48.2	The freight train car tipped over
48.2-55.1	Unreinforced brick slabs of 203.2mm to 304.8mm thickness fail due to shearing or bending
62.0	The carriage of the freight train was completely destroyed
68.9	Buildings may be completely destroyed; Heavy machinery tools (3178kg) were displaced and severely damaged, while very heavy machinery tools (5448kg) were spared

3. Explosion Calculation

3.1 Constructing an Accident Scenario

3.1.1 Selection of typical accident scenarios

(1) Material leakage. Methanol is a kind of flammable and toxic dangerous chemical, which is mainly stored in the 5m³ ice methanol tank V0101 at the top of the crystallization centrifugal plant and transported to the crystallization centrifugal plant for use by pipeline.

(2) Source of leakage. The leakage source selected for the simulation analysis in this paper is ice methanol tank V0101, and its main parameters are shown in the following table

Table 2 Leakage source parameter table

equipment	specifications	Main operating conditions			Distance from office building/m
Cold methanol tank V0101	vertical DN1500×3000	medium	Operating temperature/°C	Operating pressure/MPa	15
		methanol	0	Atmospheric pressure	

(3) Leak scenario. Combined with the actual situation of the project and HAZOP analysis report, the leakage scenario is selected as follows: the operation of the ice methanol tank V0101 is abnormal, the temperature control fails, and the damage with an equivalent aperture greater than 150mm occurs on the tank body, that is, the complete rupture causes a large amount of methanol leakage in a short time

3.1.2 Identification of blocking space

The blocking space that can produce open space vapor cloud explosion in crystallization centrifugal plant is identified and marked with red box in Figure 2.

The crystallization centrifugal plant is a multi-storey building with the top floor plane height of 17.5m. The position of the ice methanol tank is near the middle of the top floor. The top platform is arranged with ice methanol tank, one mother temporary storage tank, two mother temporary storage tank, vacuum buffer tank and other containers, vacuum pump, candle filter and other equipment as well as a number of supporting pipes, surrounded by a cofferdam with a height of about 1.5m. These solid structures are conducive to the flow turbulence, and have a certain constraint on the expansion of gas cloud and dedetonation products, which will promote the acceleration of flame and cause the jump of dedetonation pressure.

3.1.3 Explosion source intensity

The explosion intensity of explosion source is divided into 10 grades by multi-energy method, and the grade of explosion intensity is related to ignition energy, obstacle degree of obstacle area and limitation degree of obstacle area. To determine the explosive intensity level of the explosion source, these three factors need to be considered comprehensively. The corresponding relationship between explosion intensity level of explosion source and combination of the three factors is shown in the table below.

Table 3 Determination of explosion intensity grade of explosion source

The ignition can		Degree of obstruction			Degree of constraint		Strength grade
weak	strong	strong	weak	No blocking	There is no constraint	There are constraints	
	X	X			X		7-10
	X	X				X	7-10
		X			X		5-7
	X		X		X		5-7
	X		X			X	4-6
	X			X	X		4-6
X		X				X	4-5
	X			X		X	4-5
			X		X		3-5
X			X			X	2-3
X				X	X		1-2
X				X		X	1

According to the actual situation of each unit, the multi-energy curve and volume blocking rate of each unit can be seen in the following table:

Table 4 List of blocking zone Settings

The serial number	Block area number	Multienergy curve	model.next
1	1	7	0.10

3.1.4 Meteorological conditions

According to the meteorological conditions where the company is located, bengbu City, Anhui Province has more than 10 years of breezes or no sustained wind direction, so the average wind speed is 2.41m/s. The average daily maximum temperature in summer was 31.5℃, and the average daily minimum temperature was 23.25℃. Considering the conservatism of risk analysis, temperature value of 31.5℃ was selected for simulation analysis. Neutral stability was selected for atmospheric stability. General conditions are selected for the height and lighting conditions of the mixed layer.

3.1.5 Time of leakage

The effective leakage time of hole leakage shall be the minimum of the following three values: a)60min. B) Ratio of maximum possible leakage to leakage rate; C) Leak time based on detection and interlocking cut-off system level. In this simulation, the complete rupture scenario, namely instantaneous leakage, is selected, so the selection of leakage time is not involved.

3.2 Model selection

In order to ensure that the simulation results meet the maximum impact of explosion consequences, the nearest distance between the ice methanol tank and the office building is selected for simulation according to the project layout, and the input parameter data is based on the equipment operating conditions, material parameters and equipment specifications provided by the enterprise.

3.3 Analysis of simulation results

The main protection target of the explosion simulation analysis in this paper is the office building. PHAST software is used to conduct explosion simulation calculation for the scenario of the complete rupture of the ice methanol tank V0101. The calculation results of the overpressure, duration and impulse data of the explosion shock wave generated are shown in the following table:

Table 5 Explosion simulation results in the scenario of complete rupture of ice methanol tank

system	object	The overpressure data/bar	Impulse/(N.s/m2)	Duration of overpressure/ms
Cold methanol tankV0101	Office building	0.15	60	8

Explosion overpressure, explosion impulse and their influence range are as follows:

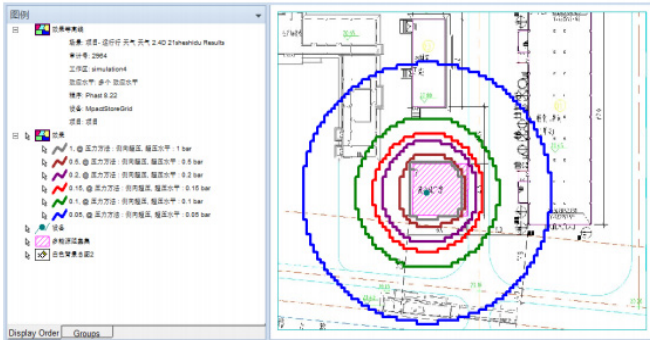


FIG. 3 Explosion overpressure radius of full rupture of ice methanol tank

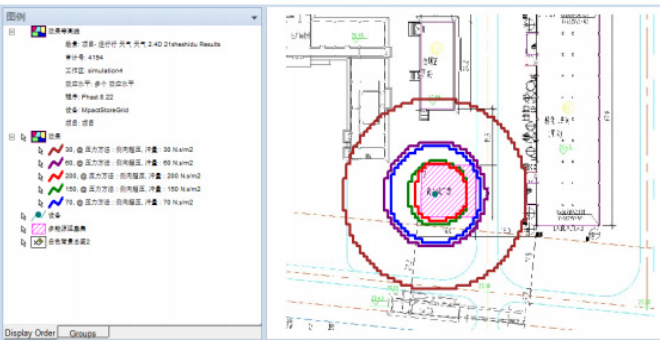


FIG. 4 Impulse radius of ice methanol tank full rupture explosion

4. Conclusion

To sum up: In this paper, PHAST software explosion calculation model is used to simulate the explosion consequences of the ice methanol tank V0101 in the crystallization separation workshop, and the maximum explosion accident load of the office building is obtained.(Next to page 87)

Application of Teacher Mediation Theory in Large Classes at Higher Vocational College

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Abstract: Higher vocational colleges see mostly large language classes in which the students are almost invariably heterogeneous. The study focuses on teacher assistance to learners' process of working, investigating how the mediation theory is applied in large classes to promoting English language teaching and helping learners move into and through their ZPD as well.

Keywords: Teacher mediation; Large classes; Higher Vocational College

1. Introduction

With emphasis being put on the vocational education, higher vocational colleges see a big rise in the enrollment of students. And there appears such a crisis that most classes are surprisingly large. The largest class the writer once taught consisted of 110 students. If classes are large, they are almost invariably heterogeneous, and heterogeneous classes are more problematical when they are also large. Reflecting on our own learning experiences in school, we will realize that teachers can affect learning in a range of ways that go far beyond the transmission of knowledge. Some of these ways would be likely to include teaching learners how to learn, boosting their confidence, motivating, displaying a personal interest, enhancing self-esteem and creating a favorable learning environment.

Mediation, a term used by psychologists of the social interactionist school, refers to the part played by other significant people in the learner's lives, who enhance their learning by selecting and shaping the learning experiences presented to them.^[1] Basically, the secret of effective learning lies in the nature of the social interaction between two or more people with different levels of skill and knowledge.

2. Mediation Theory and Its Importance

Reuven Feuerstein, the Israeli psychologist, suggests that a child's learning right from birth is shaped by the intervention of significant adults. He refers to these important figures in the child's learning as mediators or mediating adults, and the experience that they provide as mediated learning experiences.^[2] These adults, at first parents, but later teachers, select and organize stimuli that they consider most appropriate for the child, shape them and present them in the ways considered most suitable to promote learning. They also intervene in shaping the child's early attempts at responding to stimuli, directing and encouraging more appropriate responses while explaining why one response is more useful or appropriate than another. Thus in contrast to Piagetian theory where it is believed that children develop at their own pace through interaction with the environment, the way in which significant adults interact with children is considered to play a central part in the latter's cognitive development. This enables the child to construct a view of the world and his or her place within it. Cognitive, social and emotional developments are seen as inextricably linked, and the establishment of an appropriate climate in the home or classroom within which this can be effectively fostered is as important as the content of what is conveyed. So Feuerstein considers the role of the mediator a key factor in effective learning.

Mediation theory is of particular importance for mediators to help learners move into and through their *zone of proximal development*. ZPD is Vygotsky's most widely known concept, which refers to the layer of skill or knowledge beyond which the learner is currently just capable of coping with. Working together with another person, either an adult or a more competent peer at a level that is just above a learner's present capabilities is the best way for the learner to move into the next layer. ZPD has important implications for teachers with regard to what they can do to help children in their learning. It provides a particularly positive message about how to help learners when they are stuck at any stage in their learning. It suggests that the teacher should set tasks at a level beyond which the learners are currently just capable of functioning. Meanwhile, principles should be taught to enable them to make the next step unassisted. What mediation theory tells us is that it is the role of the teacher that help learners to find ways of moving into their next level of understanding of the language.

3. Problems in Large Classes

Since learners in large classes are different from one another in many different ways that may affect the way they learn and the way they are taught, they present special problems for both learners and the teacher. The following are a set of common teaching problems in large classes: 1) effective learning for all -- The teacher is not sure whether the students are all learning effectively; the

tasks the teacher provides are either too difficult or too easy for many of the students. 2) materials—the teacher can't find suitable material, the textbooks are “homogeneous”—rigidly aimed at one kind of learner, with no flexibility or no options from which the learner can make selection of the material he/she is interested in. 3) interest—students get bored: the teacher can't find topics and activities that keep them all interested. 4) participation—The teacher can't activate all the students: only a few students—the most proficient and confident ones—seem to respond actively to the teacher's questions.

4. Application of Mediation Theory

According to Vygotsky's concept of *zone of proximal development*, every learner has a layer of skill or knowledge which is beyond their current state.^[3] Though students in large classes are different in their layers of skill or knowledge, every student has his/her own layer even though he/she is a non-proficient or non-confident one. Though there exist various problems in large classes, usually most of them can be combated with the help of teacher's finding appropriate ways to mediate and thus students in such classes can be helped to get out of their current stage at which they are stuck and move into their next ZPD. In the following mini-sections, some possible ways are suggested in which teachers can mediate and solve the above problems in large classes.

(1) Since the teachers is not sure whether the students are all learning effectively because the tasks are either too difficult or too easy for many of them, he/she can mediate the recognition of students' own individuality and uniqueness, a sense of competence, and an internal need to challenges. In individualized activities, students learn at their own pace and sometimes choose their own tasks and materials. The teacher can use compulsory plus optional instructions to tell the class that everyone has to do a certain minimal part of the task and the rest is optional, that is available to those who understand / can do it / have time/ wish to do more. The strategy of compulsory plus optional task allows learners to decide for themselves what quantity of content and level of challenge to aim for. For example, in an exercise of consisting of, say, ten questions, learners may be told: “Do at least six; do all ten if you can or have time.” A similar instruction can be given in tests. In this strategy, the compulsory part makes students, especially the non-proficient or non-confident ones feel that they are capable of coping with the task, and the optional part caters for the better students' internal need to respond to challenges. All this helps to make procedures more flexible and enables the students to adapt to different materials and tasks in order to make them maximally effective and useful for each of them.

(2) Since most textbooks are homogeneous—rigidly aimed at one kind of learner, with no options or flexibility, the teacher can try to mediate in the students a sense of competence, awareness of the way in which the learning experience will have wider relevance to them beyond the immediate time and place, and goal-setting, to make the homogeneous textbooks flexible so that they can attract students' interest and get more participation. A suitable case in point is that I once taught Unit 3 in College English (Book 3) whose title is *Why I teach*. Since this title may seem a little boring to most students, first I didn't go into the text directly, instead, I varied the topic and gave them such an optional question: “What profession do you like most? Why?”. in this way most students were activated to feel that they are capable of coping with the task and thus they including the low-level students, could present their opinions. Of course some students said they liked teaching and also gave their reasons. At this moment I asked them to compare their reasons with those stated in this text and thus led them to the topic of this unit. By providing such a question, I made the students understand that what was to be discussed would not only be limited within the present topic of teaching but also be extended to other profession they like to engage in after graduation, which would help to form their view of life, and that they should set realistic goals for themselves in learning this text, say, how to write similar articles. Thus this homogeneous material became a more flexible tool which can be used as an encouragement for the lower students to cope with the present task, as a purpose beyond now, and as a guide of how to write similar composition. Thus the students got more interested in and participated more actively in this material.

(3) Why students get bored in class? One reason may be that they are not interested in the topic. Another may be that the activities in class are not attractive. The teacher can probably deal with the problem by developing and encouraging the students' individuality, a sense of competence, challenge, and awareness of change. Sometimes the topic in a class can not reflect some students' uniqueness and they get bored. The teacher should not limit the whole class within this topic and should provide more relative topics for the students to let them select the one that will reflect their individuality. For instance, in dealing with the topic *Why I Teach* some students may feel that this topic is not their favorite one which may lead to their sense of incapability. So the teacher should provide some other relative topics such as *My Favorite Sports*, *My Ideal Career*, etc. to encourage students' individual choice and thus enhance their sense of competence and lay foundation for their interest. The teacher can also use the strategy of open-ended cues to mediate challenge in students to arouse their interest. In this strategy the teacher invites the class to respond to stimulus tasks or questions that have a range of possible acceptable answers rather than a single right solution. Some non-proficient or non-confident students have no interest in class, probably because they think that they are inferior to the better students and that they can not change to cope with the superiors, and thus they give up any interest in class. Therefore, the teacher should mediate the awareness of change in students to make them understand that human beings are constantly changing and they can change from the low to the high level. In this case, the teacher can present models who succeeded in this respect before the whole class to encourage the ones who lack such awareness to promote the interest in language learning.

(4) All that can arouse interest in language learning can raise students' motivation to engage in language task provided by the teacher. In addition, the teacher can mediate sharing in students to promote their participation in language task by optimizing the use of pair work or/and group work to encourage collaboration, which can make some problems better solved. The teacher can also promote students' participation in learning by mediating a sense of belonging to make students feel a part of a learning community and are not just lost in the crowd. In a more concrete sense, for example, the teacher should not only ask high-leveled students questions while isolating the lower ones, instead, should interact with them more often than not.

5. Conclusion

In conclusion, teacher mediation theory has great significance in language teaching. When the concept of teacher intervention

is introduced to large classes, attempts can be made to personalize the curriculum and individual needs will definitely be satisfied, therefore helping language learners to move into their next ZPD, the primary goal of any education.

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(Continued from page 84)

(1) According to the calculation results, in the accident scenario of complete rupture of the ice methanol tank, the explosion overpressure in the nearest area of the office building is 0.15bar, impulse is 60N·s/m², and duration of overpressure is 8ms.

(2) can be reference for relevant construction failure criteria to assess the explosion overpressure damage of buildings, in order to ensure the building structure has enough antiknock strength and bearing capacity analysis, evaluation of structure, such as walls, doors and Windows, ventilation valve now bear ability of explosion load, according to the results of the analysis, the antiknock reinforced strengthening measures are taken.

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Research and Practice of Whole Process Writing Skills Training for College Students

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Abstracts: The writing skills is an important requirement of future job for college students. However, most Chinese universities only use writing courses to improve students' theoretical writing level, and don't train their writing skills from the perspective requirements of career development. This study starts from the requirements of employers for students' writing ability and looks for the entry point for improving students' writing ability from the whole process of students' growth and success. It forms a system for training writing ability during the whole process of university, which has a positive effect on improving the adaptability of students to social needs.

Keywords: Writing Ability; College Student; Training

Fund project: School-level key teaching and research projects of Qilu University of Technology (2019zd21).

The writing ability is an important part of the required skills and one of the requirements of future jobs for college students. For example, you need to write process flow and product descriptions for production, essays for job evaluation, and work reports in your daily work, all of which require strong writing skills. However, the phenomenon that college students are subjectively unwilling to write and objectively unable to write is very prominent. Their writing ability has not been improved during college. Some students write less than 1,000 words in a year. The problems such as poor logic, incoherent sentences, lack of clarity, indiscriminate use of punctuation, deliberate mixing of English and Chinese, and misuse of internet buzzwords are observed in their papers.

With the spread of computers, mobile phones and internet, reading has become a kind of fast food. Internet buzzwords are frequently used, making the misuse of language more prominent, especially among college students. At the same time, information is more easily accessible, and most students prefer to find ready-made resources from the internet for various writing assignments, some of which are submitted directly without revision. What's more, professional online writers have emerged. All these have led to a decline in the quality of students' writing. On the other hand, schools pay little attention to writing training. They offer a limited number of courses with writing training and the quality of the courses is not high. Most courses require students to submit only formulaic assignments and few review and research assignments are demanded. Students do not have the opportunity to express their professional ideas in a systematic and logical language, making them with no significant improvement in their writing skills.

At present, the employment situation is severe. On the one hand, many college graduates cannot find suitable jobs, on the other hand, employers are in urgent need of high-quality talents including "penmen". Many employers particularly welcome college graduates who are good at writing. Therefore, training students to be able to write is not only a basic requirement for the comprehensive quality of college students, but also a "shortcut" to enhance their employability.

1. Responses to enhance college students' writing skills

1.1 Domestic universities

In response to current situation of the weak writing ability of college students, many Chinese universities have made useful explorations to improve their writing ability from different angles.

Renmin University has increased the weight of basic writing courses to ensure their students master the writing basics. A writing test is administered upon entry and students are divided into two levels: universal and advanced. Tiered teaching were carried out for different levels^[1]. The students in Guilin University of Technology were cultivated their scientific and technical paper writing skills through college students' innovation and entrepreneurship projects. The students are often organized to study the relevant review literature, focusing on the national and international research progress of the project they are applying for before guiding them to apply for the projects. This enables students to understand the current state and develop their own ideas for writing a declaration, which helped them to enhance their awareness and competence in research-based learning^[2]. In Nanjing University of Aeronautics and Astronautics, in order to train engineering students to write scientific and technical papers, review papers have been used as a

way to test students' mastery of the course in public elective courses such as "New Developments in Machining". Active practice in improving essay writing skills was provided in the classroom^[3].

1.2 European and American universities

Outstanding universities abroad place great emphasis on dissertation writing skills^[4], with equally stringent requirements in science and technology disciplines. In the USA, for example, more than 123 universities have established dissertation writing courses and have strict assessment requirements. Columbia University and Princeton Engineering College have made thesis writing a compulsory course. Harvard University has explicitly stated the assessment requirements for writing. The situation is similar in countries such as Japan and Singapore.

Foreign universities often use classroom teaching models such as collaborative learning, problem-based discussion and lecture-based teaching. These methods demand students to have a high level of reading and writing skills. Students are required to read a large number of books and provide a considerable amount of independent writing assignments. The assignments carry a considerable weight in course assessment. If the assignments are not passed, they do not even qualify for the final exam. Around 90% of Chinese students (either from international classes or general high schools) say that the biggest challenge they encounter at university (especially in their first year) is reading and writing.

The flexibility of writing curriculum in leading foreign universities is also worthy of consideration. Given the diversity of science and technology majors, writing courses are flexible and varied. For example, writing courses are offered in the first year, writing theory courses and writing practice courses are added in the senior year, and postgraduate students have courses on writing scientific and technical papers. The rich courses provide students with a wide range of options. There are also many years of experience in the development of foreign teaching materials, which is currently unmatched by domestic universities.

In general, most research on writing skills training for Chinese university students is focused on improving students' theoretical level of writing by using relevant courses in the classroom. And the current situation of students being "reluctant to write and writing less" fail to address. It is impossible to develop writing skills from the perspective of students' career development requirements. Thus, there are positive lessons for domestic university to learn from foreign universities.^[5]

2. Practical exploration of whole process writing skills training system in Qilu University of Technology

The whole-process writing ability training has been launched among students from School of Energy and Power Engineering of Qilu University of Technology, which has stimulated students' intrinsic motivation and built a whole-process writing ability training system by carrying out writing training in various ways.

2.1 Composition and principles of the training system

The system analyzes the whole process of university life to find the entry point for cultivating students' writing ability. Through university curriculum, daily life of college students, extra-curricular practice, innovative and entrepreneurial activities to design ways to improve writing ability, so as to build a comprehensive writing ability training system, as shown in Figure 1.

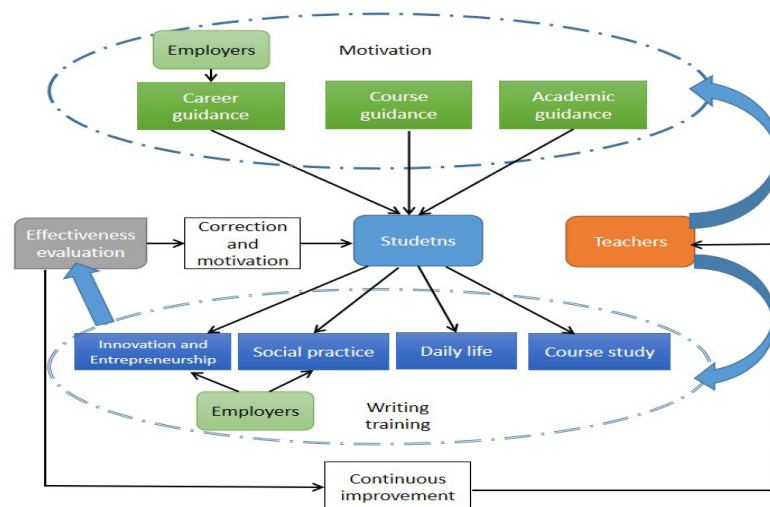


Figure 1 Model of writing skills training system for college students

The system is based on motivating students to consciously improve their writing skills. Firstly, the importance of writing in their academic growth is emphasized through specific guidance from tutors and academic advisors in sessions such as orientation at the beginning of the first year, which makes students consider writing as an important skill. Secondly, the writing ability of college students is required from the perspective of talent demands. The requirements from various positions are investigated through visits and data collection, and are analyzed in conjunction with the career planning of college students, so as to obtain the general and personalized requirements of different positions. The market demand is communicated to students in an effective way so that college students can closely link their future career choices to the development in writing skills. Writing skills are developed in an employment-oriented manner, thus stimulating an endogenous motivation to actively develop them. Thirdly, the writing requirement is embedded in the

curriculum. Some courses are selected and the weight of writing assignments is increased so that students can further understand the importance of writing in the process of completing their coursework.

2.2 Effectiveness in practice

This study was conducted with undergraduate students from 2018 and 2019 classes of energy and power specialists (80 students in total). Writing was integrated into the whole process of their university study and life, and they were trained in all aspects. During two years, a series of writing exercises were carried out (shown in Table 1).

Table 1 writing exercises for students

Training category	Training Contents	Percentage of student participation
Daily writing	Academic year program summary, Daily activity summary, Other daily writing exercises	100%
	Party civics assignment	40%
	Class and student council officer promotion training	20%
Practice reports	Winter and summer social practice	100%
	Professional internship reports	100%
Course	General studies electives “Environmental Protection and Sustainable Development” and “Learning to Run from Scratch”	20%
	Compulsory course “Career planning for university students”	100%
	Specialized courses such as “Engineering Thermodynamics” and “Fundamentals of Computer Culture”	100%
Innovation and entrepreneurship	Innovation and entrepreneurship activity report	20%

During the winter break in 2020, training in writing social practice reports was carried out, resulting in the compilation of winter break practice reports such as “My Winter Break” and “Walking through 2019”, respectively. In the first half of 2020, due to the impact of New Crown epidemic, all course writing was conducted online, and in the general elective course “Learning to Run from Scratch”, all 360 students, including 32 students from the College of Energy and Motion, participated in writing training. Their final assignments were compiled into “Running to 2020 from Zero”, which systematically summarized their gains and experiences from the course. With the cooperation of the course teachers, a pilot was conducted in the compulsory courses “Computer Basics” and “Engineering Thermodynamics”, and the students finished their course overviews. In the winter social practice “Village Environment Research”, all students completed their research work as required and formed a compilation of research reports.

Since the project was implemented, each student completed an average of 15,000 words of writing, which was more than five times that of the average amount. Because all kinds of assignments needed to be written basing on personal study and life, the plagiarism rate has dropped significantly and students’ writing ability has been greatly improved. For example, two sophomore students won the gold medal in province competition of Challenge Cup, and 17 students won the third prize in the national competition of social practice and technology for energy conservation and emission reduction.

3. Conclusion

This study starts from the requirements of employers for students’ writing ability, addresses the problem of weak writing ability of college students, finds the entry point for cultivating college students’ writing ability from the whole process of students’ growth, and forms a system for training writing ability throughout the college life, which has a positive promotion on improving the adaptability of talent training to social needs.

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The Analysis of Chinese International Students' Culture, Language, Identity and Difference: Mediation, Adaption and Expansion

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Abstract: China has continuously provided international students studying abroad, whose number has mounted to over 2 million in the past four years. While even-more people paid attention to their learning difficulties, seldom did they notice the issues such as identity loss. In this essay, the author discussed the concept about culture, language, identity and difference, the relationship between them on the basis of own experience as an international student in Australia. Facing the unfamiliar environment as well as the challenges, international students may accept the differences, adapt the attitudes and expand the horizon to embrace new culture.

Keywords: International students; Chinese cultural identity; Cultural identity change

1. Introduction

China's Ministry of Education (MOE) has addressed the data about the number of students studying abroad in Year 2019 (2020), in which the amount has rocketed to about 703,500 (see the data in Figure 1.1). The increasing number has also caught the researchers' attention and the scholars began to investigate the learning difficulties or language barriers the students had been through. However, as an international student before, the author would like to discuss another issue that bothered the international students similarly: the sense of identity. In this essay, the relationship of language, culture, identity and difference, the author's own story and the reflection will be presented.^[1]

To figure out the definition of language, we cannot neglect the connection between language with representation and meaning. Not only the dictionary, but earlier research regard language simply as a tool to communicate with counterparts in verbal or non-verbal pattern (Hall, 2013). People viewed the world in their unique "conceptual map" that constructs, organizes and sorts the feeling and understanding towards everything around, and language is another system of representation that interprets and expressed the concepts in mind. Generally speaking, language generates the meaning of two-dimension concepts to referable three-dimension items.^[2]

But culture is also an indispensable element when mentioning language. From sociocultural perspective, language is an individual tool at the same time a sociocultural resource that the "individual uses of language assume at those moments draw from their historical, conventional meanings in relation to their situated, immediate contexts of use" (Hall, 2012, p. 17). Hence, different language usages symbolize different meanings in different contexts, which are regarded as meaningful places to reside language—culture. Language enables people to negotiate the means and express feelings whilst culture helps convey our individual identities, build our interpersonal relationships, and construct the sense of belonging in our social groups and communities (Kramsch, 1998).^[3]

In Chinese dictionary, "culture" is "Wen Hua": "Wen" means characters and language; "Hua" means civilization and revolution. Kramsch concluded culture as a dynamic discourse community in which people share a common history, current society and future imaginings like the material heritages, national spirit or traditional habits, festivals and beliefs. Even if members left the community, they will keep same criteria to perceive, believe, evaluate and act.^[4]

Language and culture are inseparable (Marchand, 1975; Kramsch, 1998; Hall, 2012; Hall, 2013). We may have all faced up the situations that texted messages or book pages cannot convey the feelings thoroughly without certain cultural context. In the same vein, the relationship of language and culture is mutual. On the one hand, culture shapes and socializes spoken or written language, including what is proper to speak or write in what circumstances or which pattern is appropriate to use (the application form, the business letter), because they are authorized by cultural regulations (Kramsch, 1998; Hall, 2012). Members of a community not only exchange experience but create experience through language. Thus, language embodies cultural reality. On the other hand, language retains the continuation of culture, at the same time between a storage of culture and a tool by which culture is created (Hall, 1998). Any study of language is in essence a study of culture (Hall, 2012).^[5]

Culture cannot express meaning unless linguistic codes are possessed to interpret concepts into language, vice versa (Hall, 1998). Therefore, different people from different culture have different understanding of connotations based on the fixed denotations. If culture is such a transformable action that need to be understood, roles and identities of whom involved should be de-constructed and understood (Kim, 2003).^[6]

Hall (2013) once introduced “meaning is what gives us our sense of identity, of who we are and with whom we ‘belong’ - so it is tied up with questions of how culture is used to mark out and maintain identity within and difference between groups” (p. xix). “Identity” is complicated to define – it is not simply the answer of “Who am I?” but “a production which is never complete, always in process, and always constituted within, not outside, representation” (Hall, 1997, p.52). In other words, identity, instead of the tags such as nationality, gender or culture, becomes the production people perform through language and representation.^[7]

Identity is the individual’s concept of the “self”, including the understanding of the social definition of the “self”, within their inner mind or the wider society (Kramsch, 1998). Individuals can identify themselves and others through their use of language; they view the language as the mark of their social identity as they share the same understanding of the meaning (Woodward, 1997). Spindler and Spindler (1994) gave three dimensions to the “self”: the enduring self —is the social identity that one had in the past, an individual permanence in experience and meaning; the situated self—an instrumental concept that is continuously adjusted to the use of language in daily routines and to new settings in a new context; the endangered self — appears when the accommodation of the situated selves conflicts with the enduring self.^[8]

Culture can be regulated from one generation to another that culture is being re-created, re-defined and re-structured by identities (Spindler & Spindler,1990). Identity, therefore, is also one process of representation that linked with language, culture, and meaning: representation produces meaning; language and culture influence this production, exchange and share the meanings as a social practice; representation establishes identity and meaning produced the sense of identity; identity can be compared via cultural difference. The relationship of culture, language, identity, difference, representation and meaning can be presented in Figure 1.2^[9]

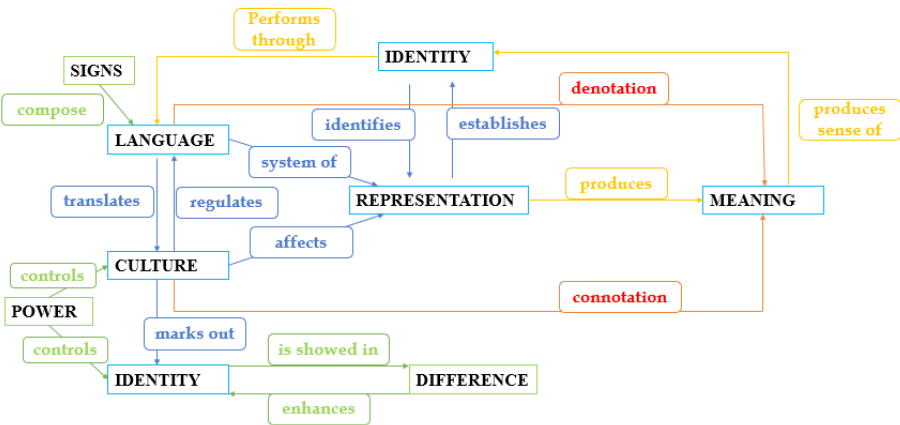


Figure 1.2 Relationship of language, culture, identity and difference

How meaning will be represented makes us (re)consider, question, agree or disagree with the different ways we understand ourselves and ways we are understood by others (Hall, 2013). The reason why difference matters in identity is that difference between cultural groups contributes to the construction of identity (Woodward, 1997). Hall (1997) addressed that identity is also dynamic, ongoing and not static as people are involved in the process of turning into the favored self in their social work.^[10]

In the next section, the author’s own story about culture and identity might give an inspiration.

2. A Personal case: “You are not like a Chinese as I think before.”

Studying in Australia forced me to face up with the struggle: whether to fit in or “keep it real”. At first, I found it unbearable to swallow pasta or bakery here comparing with China — “Paradise of Meals”. Besides, it was difficult for me to understand the assignments as I was more accustomed to reading in Mandarin. Poor English proficiency even made me fear of answering any phone calls. The transportation, payment method and even the opening hours of the shops were totally different, which bothered me a lot. For the first time in my life, I doubted the purpose and significance of being abroad and felt uncertain about the national pride. The uncertainty and insecurity rocketed to the highest level when I watched a video on YouTube named “The more I became un-Chinese, the more I got popular”. I asked myself: Should I abandon all Chinese habits and change myself to fit in Australian society?^[11]

The turning point occurred after I participated in a program organized by campus. Exchanging ideas within multicultural interactions and being encouraged by partners made me realize that my own culture is profound and unique in the Westernization trend. Alterations happened spontaneously: I invented my special menu with Australian ingredients but Chinese cuisine; I remembered the bus time and metro route map just to catch appropriate transportation; I invited foreign friends to have dumplings and Chinese dishes in my home; and I presented my friends with Chinese traditional items such as Panda doll or Peking Opera CDs.^[12]

One day, a friend from Bangladesh asked me: “I found an interesting thing about you. You are not like a Chinese people as I think before! From Chinese movies and newspaper reports, I thought Chinese people were kind of narrow-minded as some of them refused to admit they were from China to avoid being underestimated. But you are so proud to spread Chinese culture, and you get along well with the environment.” “Well”, I laughed, “Because I lived in Australia in a Chinese style.”

3. Reflection

In the story presented above, “I” had to solve the problem of settling down in a new cultural background. The dilemma of recognizing identity and whether to mediate led to the confusion. According to Kim (2013), if culture is dynamic and reconstructed, and culture establishes identity, furtherly identity is done through language, then learning a new language at least to some extent equals

getting a new identity.^[13]

Originally, “my” enduring self is a Chinese since “I” was born and raised in China. After studying in Australia, the situated self of adapting to Australia life entered and disagreed the enduring one from numerous aspects such as sense of value, habitual lifestyle or diets. But instead of adjusting “myself” to a brand-new identity, the enduring self and situated self-compromised with each other and expanded to a new identity—a sense of self-approval. And no matter how much I changed, in the core of my soul, I am still proud to be a Chinese.

The Spindlers (1994) stated that individuals respond to such conflicts with a re-affirmation of their social identity, adaptation, removal, and antagonistically actions, which are responses to avoid self-destruction. In this story, even confused and lost encountering differences from the beginning, “I” chose to cope with the exotic life and attuned to a more comfortable stage: self-reconciliation. Combining Chinese people’s attitude “Take the world as it is” with Australian popular and energetic society, “I” got inner peace and reaffirmation of the identity.

Culture and language habituates identity. Sapir-Whorf (as cited in Kramsch, 1998) yielded the hypothesis that “language decides thoughts”. To be more specific, the language and the culture behind it habitually influences one’s thinking manners. When “I” met the difficulties, “I” reflected the Chinese idiom “When in Rome, do as the Romans do” and then got involved in. And after learning English here for 2 years, the cognitive mind went through a new process. “I” can acknowledge English idioms, collocations, habitual sentence patterns and writing style to accommodate myself to professional learning. And “I” could think or talk in English smoothly and fluently as language more or less affected my cognitive development.

So as a current teacher, here comes the question: whether learning a second language reduces the sense of identity. From the emotional aspect, Bright (2017) worried that teachers and students’ representation produced through difference can entrap individuals as the identity reduced within a subtle gap of regularity and aberration, constrain and limit the possibilities of what students can think, do, or become. Some students may frustrate and give up when meeting the culture boundaries.

Trueba and Zou (1994) conducted a research in China among an ethnic group named “Miao”. They got the results that learning a second language and a new culture did not deviate from but on the contrary make they feel proud with their identity and strongly affiliate to their ethnic group. In “my” experience mentioned in the last section, learning English boosted my national pride as a “heir of dragon”, and somehow increased the sense of honor. Likewise, power and receptivity of the majority do something to identity. Kramsch (1998) and Cummins (1986) claimed that status and power relations could determine minority students’ failure of identifying. Imagining if “I” went to an exclusive country and found out that people there did not welcome my arrival, could I confront squarely to my identity? Learning a new language does not mean being able to be accepted by local speakers, but willingness to learn a new culture and get a development in certain life phases. Especially in Chinese EFL (English as Foreign Language) context, learning English becomes compulsory from primary school to senior high school. Young people absorbed western culture and gradually in English class, national identity comes across the “symbolically and emotionally charged views of English as a language of power” (Torres-Olave, 2011, p.318). How to keep the balance of western culture, English language and Chinese national identity became the hit in Chinese pedagogy field.

In conclusion, leaning a new language means learning a new culture, equivalently a new identity. Making mediation to get adaption to the new environment, finally can expand the sense of national identity. The teaching methods of how to teach English meanwhile triggering Chinese national identity will be my future research.

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An Analysis on the Importance of Habit-Forming Education

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Abstract: The Chinese nation is undergoing great changes, and all people are working together to achieve great rejuvenation and two centenary goals. Education bears the mission and the future. The opinions of the Central Committee of the Communist Party of China and the State Council on deepening the reform of education and teaching and improving the quality of compulsory education in an all-round way clearly requires “to establish a scientific outlook on education quality, deepen the reform, build an education system of all-round cultivation of morality, intelligence, physical education, beauty and labor, and improve the implementation mechanism of establishing morality and cultivating talents”. In order to carry out the national policy of education, we must attach importance to the cultivation of children’s habits in the process of growth, and attach importance to the cultivation of students by society, family, school and teachers.

Keywords: Habit-forming education; Knowledge; Building morality and cultivating people

Family education is the cradle of children’s habit education, and parents are the first teachers of children. Every family, before the birth of a child, should go to understand, learn the relevant knowledge and methods of educating children, participate in the relevant training, to avoid the confusion of education after the birth of a child. Whether as a parent or a teacher, we should learn the basic physical and mental characteristics of children in different stages of development, and use corresponding education methods and means in line with the age characteristics, in order to expect effective education effect.

1. Cultivation of habits in all stages of learning

1.1 Infant education (1-2 years old)

At this stage of infants, parents’ life and work habits have a direct impact on their children. “The parent-child relationship between the mother and the baby, the expression of communication, and the actions of habits are often printed in the baby’s mind.” The safety and comfort of a baby in his mother’s arms make him establish a social relationship of trust and attachment to people. This stage of education focuses on the cultivation of parent-child relationship and healthy eating habits. If conditions permit, breastfeeding should be the main way, and other liquid food or digestible food should be supplemented at the same time. Don’t form a child’s preference for a certain kind of food. To develop a normal work and rest, can not be contrary to the work and rest of adults. At this stage, infants should crawl and walk independently. Even if he falls, encourage him to get up. For babies with slow development of language and action, they should have enough patience, more company and encouragement. Never shout or blame loudly. At this stage, the harmonious relationship between husband and wife is very important for the growth of the baby. Because babies must be observing, imitating, and parents’ words and deeds will be branded in their hearts. Most babies have good memory at this stage. This period is also the period when the baby’s character is gradually developed. Many bad habits, such as willfulness, irritability, incessant crying, not sleeping at night, etc., start from this time.

1.2 The cultivation of preschool children’s habits (3-6 years old)

This stage is the Enlightenment period for all kinds of interests and habits. The main task is to cultivate children’s ability of concentration, independence, self-control and common sense of life.

(1) Cultivate children’s habit of concentration and ability of emotional communication. Control children’s time of watching TV and playing mobile phones, and keep children away from games. Don’t let children form the habit of reading while watching TV, feeding, playing and even chasing after food.

(2) To control children’s excessive play, as long as the limit is exceeded, resolutely stop and correct in time.

(3) Cultivate children to play with their neighbors actively, learn to be humble, learn to share, and not be self-centered in everything.

(4) Cultivate children’s normal eating habits, not picky, not partial to food, not to develop the bad habit of eating snacks.

(5) The cultivation of frugal habits. This can’t be solved by one or two sentences. For example, in the poem “weeding, weeding, dripping, weeding, who knows that every grain of Chinese food is hard. “How to let children experience it? This poem is easy to recite, but to understand and experience, parents need to practice it. Experience together with children in a specific environment, so that children can bear in mind and reflect in the line.

2. The importance of habit-forming education

Habits affect life, details determine fate. Good habits have a huge and long-term impact on health, learning, work, family and society. From a higher level, it is a symbol of a country and a nation's civilization and progress, an important gene of cultural self-confidence, and an important component of a country's prosperity. On the contrary, bad habits not only restrict the growth of individuals, but also restrict the progress of the country and the nation.

2.1 The bad effects of bad habits

There is a saying that "if you clean the snow in front of the door, you can't care for others' tiles and frost". This phenomenon is still caused by the lack of sympathy and care for others' education, the indifference and the deviation of the thought of "no matter who you are, no matter who you are". There is also a phenomenon that "no paper scraps are picked up on the road, no one stands up when the broom is down". This phenomenon is mainly due to the lack of labor education. It is caused by the thought of selfishness. Of course, there are many other phenomena, through which we can see the essence.

2.2 The educational view of ancient Greek philosophers

In Aristotle's politics, there is a saying: "all else is the work of education; we learn some things by bit and some by instruction". We learn knowledge through our own habits and teachers' guidance. "Here we also see the importance of habits.

2.3 The essence of Education

Education is not only to impart knowledge, but also to teach children how to behave. To be honest and upright all one's life, you can't do without good habits. The power of habit is huge. It can decide people's destiny. A few years ago, at a gathering of Nobel laureates, a reporter asked one of them, "which university do you learn the most important thing?" The scientist thought for a while and replied earnestly, "in kindergarten." "In kindergarten, the teacher taught us not to take other people's things; things should be sorted out; students should not be bullied; food should not be wasted; attention should be paid to observation and lessons should be taken seriously; wrong things should be apologized, etc. these good habits accompany my whole life," the scientist continued. So greatness comes from commonness, commonness comes from habit. A good habit makes a man's future, and a bad habit ruins his future. However, the formation of a good habit is not achieved overnight. It is gradually formed by the influence of his parents, elders, relatives, friends, teachers, classmates and growing environment in the process of human growth.

3. History calls for habit-forming education

In the face of education reform and new college entrance examination reform, we should pay more attention to the cultivation of habits. From the beginning of the habit of children, that is to determine the development of children's life-long acquisition of sex education.

3.1 Luzhou high school students of Grade 1959 return to their alma mater

In the spring of 2019, in the Lushan high school campus, where flowers are in full bloom and full of spring, the students of Luzhou high school from grade 1959 ushered in a unique reunion. They have been away from their alma mater for 60 years. Most of them are nearly 80 years old and have retired for many years. Among them, there are university professors, researchers, nuclear physics experts, marine research experts, and some have worked in the National Institute of physics, making immortal contributions to the development of high technology in China. With their dedication and perseverance in their whole lives, they have interpreted what is patriotism, what is the dream and ambition of striving for glory for our country and our alma mater. They agreed that success should be attributed to the following:

- (1) At the beginning of hard life, there was more time to exercise every semester;
 - (2) Have more time to participate in social labor. They have been involved in road construction, playground construction, ferry construction, coal picking, brick picking, coal pulling, rice picking, etc.
 - (3) Teachers and students work together and communicate harmoniously;
 - (4) Students have five days per semester to eat and do with poor farmers;
 - (5) Students help each other, teachers do not discriminate against poor students; (6) Students develop the character of gratitude.
- Let's sum up a little bit. Isn't their success "cultivating virtue and cultivating people simultaneously"?

3.2 Problems in current education

(1) The present education is a satisfying education, a spoiled education. Teachers should not punish students physically or criticize students excessively. Once there is any case, parents, society, media and public opinion all point to the teacher and the school. Under the influence of the one-sided view that "there are no bad students, only teachers who can't teach", the leading role of students and teachers can't be played effectively.

(2) The students can't bear hardship and lack of attribution.

At present, it is an indisputable reality that students are burdened with heavy schoolwork, but there is a factor of students' poor ability to bear hardships. Once the score drops, the students do not find the reason from themselves. The parents often blame the reason on the teachers and demand to replace the teachers. The parents often regard the children's class selection and teacher selection as the active cause of the children's growth, forget the root internal cause of the children's subjective initiative, forget that the parents are the first teachers and legal guardians of the children.^[1]

(3) Many children nowadays lack physical exercise

Nowadays, children's schoolwork is very heavy, and the whole education lacks a unified and coordinated mechanism to ensure that children can effectively carry out physical exercise, labor exercise and social practice. As a result, many of their physical indicators cannot be achieved, such as bounce, speed, endurance, throwing, horizontal bar and parallel bar. Some of the reasons for not reaching the standard are due to safety factors, and some of the sports are not carried out at all. Therefore, in the very short meeting in the school, it is often seen that children are difficult to support the phenomenon of falling to the ground; in junior high school, high school students with myopia are everywhere. Every year, there are several "seedlings" in the air flight physical examination, which are difficult to

protect.

(4) Nowadays, there are more and more children with psychological problems. Some children are introverted, poor at communication, low self-esteem, sensitive, easy to go to extremes, not good at getting along with others. Some said it was caused by mobile phones, computers, games and the Internet. To be fair, when the representatives of these advanced productive forces bring great benefits to people, if they can't control their use, they will be controlled instead. Who is to blame?

To sum up, education now faces serious challenges. As an educator, how can we take on the responsibility of “cultivating morality and cultivating people”? How to find the essence of education in reflection?

4. Develop education and create brilliance

Everyone wants to succeed, although everyone has different aspirations. But there is only one way to succeed, that is diligence. As the saying goes: “there is a way to study, and there is no end to learning.” There is no shortcut to study. Can you see a rainbow without going through wind and rain? We should educate the spirit of the Chinese nation's responsibility, according to the nature and laws of education, cultivate students' subject consciousness, and cultivate students' moral character and responsibility spirit.^[2]

(1) We should inherit and carry forward the traditional values of the Chinese nation and vigorously carry forward the “four self-confidence”. To carry forward the national spirit is to vigorously advocate thrift, diligence and kindness. It is a traditional virtue of the Chinese nation to educate students to be industrious and kind-hearted, and to let students know “to cultivate themselves diligently and to support virtue by frugality” The connotation of this sentence; let the students develop the character of indifference and tranquility, know that indifference can make their mind clear, tranquility can make them far away; let the students have a great mind and ambition, then they can “cultivate themselves, unify their families, govern the country, and level the world.” Only when students have a sense of responsibility and a sense of responsibility can they “establish their hearts for heaven and earth, make their lives for the people, continue to learn for the saints, and open peace for all the world.”

(2) Cultivate various habits by stages. For example, exercise habits, reading habits, study habits, discipline habits, respect for people's habits, get along with people harmoniously, protect nature, revere life, revere nature, plan career and live independently.

(3) Do a good job in the cultural course of “tourism, learning and research”. To travel ten thousand miles is to read ten thousand books. As long as there is a chance, we should let the children go out for a walk and have a look. Only when they are in the real situation, can they have different life feelings, contrast, reflection and summary. Book knowledge must be combined with social practice. Mr. Tao Xingzhi once said, “life is education, society is school, and teaching and learning are integrated.” Students' life experience will give them strong wings for future success.

(4) Learn to be tolerant, to get out of the closed self, not to be a frog in the well. The frog in the fable “frog at the bottom of the well” is self-confident because it does not touch the outside world. In inheriting our excellent culture, we should also learn from the excellent culture of other countries. “Shut up” will subjugate the country, and “close ourselves” will inevitably fall behind. Therefore, children should be actively integrated into the world and be baptized by the wind and waves to become the elite and pillar of the nation.^[3]

Education is an art that needs to wait. The country and the nation are waiting for the children's growth. As long as children are healthy in body and mind, strong in physique, firm in will and fully developed, they will surely lay the foundation for future happiness; as long as children have good habits, certain social practices and their own insights, they will surely succeed. Let's hold high the great banner of “Building Morality and cultivating people”, and train students to develop morally, intellectually, physically, aesthetically and laboriously in an all-round way. We should not only teach students to study, but also cultivate their good habits and good character. Let the brilliance of children's human nature illuminate the endless land of China. This is the person with family and country feelings we cultivate, and this is the person who dares to take responsibility for our education. Let us remember that it is more important to cultivate habits than to impart knowledge, which is the essence of education.

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Exploring Trade-off Between Complexity, Accuracy and Fluency in IELTS Speaking

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Abstract : This essay explains the rationale underpinning the phenomenon that it is difficult to simultaneously perform well in the dimension of complexity, accuracy and fluency in IELTS Speaking by the use of **Trade-off Hypothesis** and **Skill Acquisition Theory**, which gives implications for IELTS Speaking learning.

Keywords: IELTS Speaking; Trade-off Hypothesis; Skill Acquisition Theory; Complexity; Accuracy; Fluency

1. Introduction

In this essay, I would describe my EFL learning context and come up with my puzzle from my context about IELTS Speaking and then employ the skill acquisition theory to analyze my puzzle from a skill-based perspective and next generate new theory-based understandings. Lastly, conclude the assignment with some implications for IELTS Speaking learning.

2. Learning context and puzzle

I am an EFL learner from China. I have learned English for over 15 years since I was a primary school student. However, I was not able to normally communicate with native speakers under the exam-oriented English education, in which speaking test is very easy and accounts of a very small proportion in the exam, until I started to learn oral speaking on my own efforts in Chinese university due to the fact that I realized learning English is not only for passing the exams but also as a tool for international communication. From then on, I can communicate with native speakers in simple English. Although My major was not English in the phase of bachelor, English was still a compulsory subject for all undergraduates, and some pragmatic optional courses pertaining to English such as business English, English interpretation were provided to choose, thus I keep learning English and chose English literature as a complementary major to meet my requirement of having more educational resources and opportunities to enhance English proficiency under the tutors' help. These courses contribute to the results that I made great progress in reading and writing rather than listening and speaking, the same problems as most Chinese EFL learners since teachers always speak a large amount of Chinese instead of English in class, causing that students lack English learning environment. For enhancing my English-speaking proficiency and also preparing for my application of admission from UK university, I started to learn IELTS (The International English Language Testing System), which is widely recognized as "a reliable means of assessing whether candidates are ready to study or train in the medium of English" ^[1]. The test was classified into four parts: listening, reading, writing, and speaking. To assess my initial English level before much effort on the preparation of the test, I participated in the test and got the band of 6.5, 7, 6.5, and 6 in listening, reading, writing, and speaking respectively. Since I performed less proficient in speaking than other parts, I spent more time exploring speaking techniques and relative assessing criteria in speaking part and paying for a native speaker teacher to practice speaking with me 1.5 hours per week, aiming to get a higher score in the test. Regarding the IELTS Speaking assessment criteria, the speaking proficiency is judged by four aspects: fluency and coherence, lexical resource, grammatical range and accuracy, pronunciation according to the IELTS Speaking band descriptors (Public version) (as shown in Appendix) ^[2]. The descriptions generally reflect my actual situation. I can use a wide range of vocabulary and a mix of simple and complex structures to discuss the topic though with inappropriate pause, hesitation, repetition, or self-correction. Every time I practice topic speaking, I found that when I tended to accelerate the speed of speech to show my fluency to my tutor, some grammatical mistakes would appear and it seems that I would easily forget to use the advanced vocabulary and complex structures at that moment, which is also another dimension to show my speaking proficiency. On the other hand, when I tend to speak accurately without grammatical mistakes, use less common and idiomatic vocabulary and complex structures, my speed of speech would come down. It seems that it is difficult for me to simultaneously perform well in these dimensions and I wonder if there is any psychological theory to help me analyze this interesting phenomenon that appears in my IELTS Speaking and generate new understandings.

3. Theory and new understandings: *The Trade-off Hypothesis; The Skill Acquisition Theory*

3.1 The "Trade-off" Hypothesis

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Many scholars advocate the use of three notions of complexity, accuracy, and fluency to assess the second language performance and proficiency^[3]. The speaking, as an integral part of L2 learning is no exception. CAF has been commonly used to describe the L2 speaking performance. Actually, My IELTS Speaking proficiency is also assessed by the dimensions including complexity, accuracy, and fluency according to the IELTS Speaking band descriptors I mentioned above. Complexity was defined as “the extent to which the language produced in performing a task is elaborate and varied”, accuracy as the ability to produce “error-free” speech and fluency as the ability to speak L2 in a “native-like” speed^[4] or “the extent to which the language produced in performing a task manifests pausing, hesitation or reformulation”. Subsequently, Skehan brought the three dimensions of fluency, accuracy, and complexity together and proposed The Trade-off Hypothesis, which portrays the “tension” between them (complexity, accuracy, and fluency). The tension is attributed to the limited attentional resources and working memory that is required to the performance in each area of complexity, accuracy, and fluency^[5], which means allocating the limited attentional resources to one dimension will bring a negative impact on others. For example, one can use challenging, complex, and accurate second language at the expense of speed fluency or speaking fluently at the expense of accuracy and complexity. Looking back into my performance in IELTS Speaking, I understand my puzzle on the basis of the theory. Due to the limited attentional resources, I am not able to simultaneously perform well in every dimension. If I tend to allocate my attentional resources to the fluency (e.g., increase in rate; decrease in inappropriate pauses and repetitions), the attention for the accuracy (e.g., error-free in grammar, native-like expressions) and complexity (e.g., advanced lexis, complex syntax) will decrease while if I allocate my attentional resources to the accuracy and complexity, the attentional resources for the fluency will decrease thereby the fluency of my speech decreases. This phenomenon, just likened to the balance property of scales: an increase in one side will cause a decrease in another side, vice versa, is consequently defined as “trade-off”. To deepen the understandings of the “trade-off” phenomenon, I will analyze the puzzle from the skill-based perspective in the following part.

3.2 The skill acquisition theory

The basic claim of “Skill Acquisition Theory” is that “the learning of a wide variety of skills shows a remarkable similarity in development from the initial representation of knowledge through initial changes in behavior to eventual fluent, spontaneous, largely effortless, and highly skilled behavior, and that this set of phenomena can be account for by a set of basic principles common to the acquisition of all skills”. Anderson proposed the process of skill acquisition can be into three stages: declarative, procedural, and automatic. In the first stage, learners attain new knowledge related to a skill either from others’ (e.g., parents or teachers) oral instructions or observation of others’ behaviors or the combination of two. In this stage, declarative knowledge (e.g., mathematical formulas, historical facts) was stored or “encoded in memory”, which means the learners understand “what it is”. Besides, a large amount of attention is required to concentrate on acquiring the declarative knowledge because the initial stage of learning a new skill is relatively difficult. In the next stage, after knowing the declarative knowledge of a specific skill, the learners start to “act on” the knowledge into behavior, namely, turn declarative knowledge into procedural knowledge, the switched process of which is “proceduralization”. Procedural knowledge entails knowing “how to do”, namely, knowing how to execute the operations smoothly, rapidly with no or less effort and attention after lots of repetition and practice. Once the process of proceduralization is completed and the learners have successfully acquired the procedural knowledge, the learners are likely to reach the automatic stage, in which “the relevant behavior can be consistently displayed with complete fluency or spontaneity, rarely showing any errors”^[6] through a large amount of practice, despite not everyone can reach this stage.^[7] Actually, second language acquisition such as learning speaking also pertains to skill acquisition. The process of learning speaking contains the gradual transformation from effortful use to more automatic use. In the first stage of my speaking learning, I would read some IELTS Speaking instructive books for the topic-related information input. For instance, I would read and try to memorize some words, lexical chunks, sentence structures, and so forth related to the speaking topic before I practiced speaking with my tutor. The process of recognizing and memorizing these kinds of knowledge (declarative knowledge) is time-consuming and required lots of attention. In this stage, I know about the related lexical chunks or complex sentence structure but I have difficulties in coming up with the new linguistic resources stored in my memory and speak them out fluently, which accounts for the phenomenon that when I tend to increase fluency in my speech, the grammatical errors will appear and complexity of structure will decrease; when I tend to use advanced vocabulary and complex structures to produce less error speech, the inappropriate pauses and repetition will increase. I have already known the new linguistic knowledge but not able to perform them in an easy and effortless way. Consequently, aiming at transmitting the declarative knowledge to procedural knowledge, except for the continued knowledge input from either books or tutors, I spend much time repetitively practice the topics speaking with tutors according to the following routine. Firstly, I would make efforts to use some “risky language”^[8] such as complex lexis and sentence structure despite the possibilities of making mistakes and consuming more time. Next, I would strive for the avoidance of errors, possibly with the expense of advancement and complexity of language and fluency to provide more time to achieve higher accuracy. Thirdly, I would try to push the speed of speech on the basis of familiarity with advanced lexis, lexical chunks, and sentence structures. Through the repetition of the routine, including effective knowledge input and speaking practices, the complexity, accuracy, and fluency of my speech are enhanced to some extent by reducing the pauses, errors without much brain effort. In this stage, I successfully turn the declarative knowledge into the procedural knowledge, despite that some grammatical errors would still appear when I speak quickly. After all, to reach the automatic stage, I still have a long way to go.

4. Conclusion

In summary, the Trade-off” Hypothesis accounts for the unbalanced phenomenon between complexity, accuracy, and fluency. Allocation of the limited attentional resources to one dimension will result in a negative effect on other dimensions. And then the skill acquisition theory further explains why there is a trade-off phenomenon among CAF for me (an EFL learner). It helps me understand the process of learning IELTS Speaking is like learning skills (e.g., driving cars, learning swimming, make cakes), lots of repetition or rehearsal is required to help switch from declarative knowledge to declarative knowledge in speaking learning. In

other words, in the declarative stage, we know the related linguistic knowledge and speech techniques to achieve CAF in IELTS Speaking from teaching material and tutor's instruction, but we cannot successfully simultaneously perform them well to some extent until the proceduralization of declarative knowledge through speaking practice, thereby explain the reason why there is a trade-off phenomenon among CAF in the process of learning IELTS Speaking.

Last but not least, it gives me the implication that repeated performance of the same or almost similar tasks contributes to greater accuracy and fluency. Skehan and Foster (2007) also stated "dialogic tasks lead to greater accuracy and complexity" (p.4). These tasks can be manipulated to maximize the performance of complexity, accuracy, and fluency even though these three areas may be in competition with each other.

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Living the Sense of Subjectivity: Martin Buber's Philosophy of Dialogue and Its Enlightenment to Education

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Abstract: This paper attempts to reveal Buber's understanding of education through the interpretation of his dialogue philosophy. In order to understand Buber's educational philosophy, we need to examine it in the context of a meeting of "I and Thou". Through analysis, Buber's concept, the process of education is a "dialogue" between teachers and students, which allows students to participate with a sense of subject, and helps students to meet "Thou" and step into the "I-Thou" relationship. At this time, no matter how serious knowledge is, it will not be boring. Through discussion, the author shows that the sense of subject in Buber's philosophy will lead Thou into the reciprocal and independent "I-Thou" relationship, and the "meeting" between teachers and students is regarded as the manifestation of the true teacher-student relationship.

Keywords: Martin Buber; Dialogue; Education

Martin Buber's "I and Thou" opens our eyes to wisdom. This book has great respect for you, for you are the most precious of all. One is willing to open himself only if one is assured to live out one's sense of subjectivity; otherwise, one closes himself. The most important thing in education and teaching should be to let every participant have a sense of subject, and to teach and learn with real heart. Real teaching is to help students become better themselves, not to teach students to become or mold students to become better themselves, because the true self of each student is, in essence, the best. The real purpose of learning is to create a I and Thou environment, and to experience the existence of Thou.

It is of great significance to reexamine Martin Buber's philosophy of relations and reveal the enlightenment of his education. Buber's work was small in number but had an important influence. The primary words "I-it" in relational philosophy reflect a world of experience, while "I and Thou" shapes a world of relationships. The world is twofold, the perspective is twofold, and can be changed by the use of different primary words. Buber argues that no matter how noble and correct your aims and motives are, when you impose them on others, you create an "I and it" relationship. For example, "obedient education". Too much effort is not an "I and Thou" relation. In the world "I and Thou", you and I have not lost the subjectivity, each other can blossom.

1. The basic characteristics of Martin Buber's philosophy of dialogue.

First, directness. Buber's relations philosophy emphasizes the directness of the I-Thou relation. Buber points out that "Thou" does not have any contrast, and the relation to Thou is direct ^[1]. There is no conceptual system, no transcendental knowledge, no hallucinatory imagination between "I" and "Thou" ^[2]. The "I and Thou" relation is a real relationship, a social relationship in which Thou interact with others without any intention, with your whole being, and with your true self, also known as "meeting." Some people report and process the relationship between "I and it", and the barrier of ideas and experience not only makes people have obvious purpose and utilitarian but also cuts off the integrity of the other side, so that they cannot see the truth ^[3]. To reach a true immediacy, all intermediaries must be abandoned, lest we lose ourselves in intermediation and forget our original, pure and oneness of existence with the world.

Second, mutuality. "When the primary word 'Thou' is spoken the speaker enters the world and takes his stand in it ^[4]." According to Buber, the relation means being chosen and choosing, suffering and action in one ^[5]. Relations are mutual. My "thou" affects me, as I affect it. We are molded by our pupils and built up by our works ^[6]. In the "I and Thou" relation, both parties are free, equal and mutual.

Third, integrity. Buber ^[7] said that "The primary word I-Thou can be spoken only with the whole being. Concentration and fusion into the whole being can never take place through my agency, nor can it ever take place without me. I become through my relation to Thou; as I become I, I say thou. ^[8]...so long as it does not see a whole being, it is not truly under the sway of the primary word of relation ^[9]. People abandon egoism, break through limitations, open themselves to the world, enter the infinite world of relations, appreciate the true face of the complete essence, and then they will arrive at the true state of the "I and you" relation.

2. The enlightenment of Martin Buber's dialogue philosophy to education

2.1 Look at the students as a whole being

Under the control of scientific rationality, the focus of education lies in the quantity, quality, efficiency and benefit of knowledge

giving and receiving, as well as improvement and perfection of corresponding educational methods, means and contents. The meaning and value of life and spirit, which constitute the integrity of human beings, are obviously on the edge or neglected in education^[10]. An educational program that ignores the essential aspects of reason, or that eschews the allegorical and emotional aspects of life itself, is at best only half an education^[11]. Dilthey also hated the practice of only taking knowledge as a measure of talent in traditional education, which he thought was “the education that kills people’s lives”.

Both teachers and students take part in the teaching as real subjects. Responds with a bountiful sense, with the whole heart, as if the other were full being with flesh and blood, feelings and intentions. The “I and Thou” relation is the best, and cutting it off leads to darkness. Buber believes that as long as there is scrutiny and expectation, what is constructed is the “I and it” relation. When teachers no longer judge and estimate students by experience, they are not excessive pursuit of perfection and profound. Students also get rid of the illusion of knowledge and devote themselves to learning, focusing on the vivid and real life of the moment. At this time, the meetings between teachers and students, students and what they have learned will happen.

The teacher-student relation should live in the present, meet completely. When a true meeting occurs, both Thou and I will be illuminated. Therefore, students are the object of the teacher’s teaching. The teacher should treat the students as a whole, and should understand all aspects of them. He should not only be the guide of knowledge, but also focus on educating people.

2.2 The essence and process of education is “dialogue” between teachers and students

“The important thing in communication is to have a dialogue with the soul”^[12], “Without dialogue, there can be no communication; Without communication, there can be no real education”^[13]. If the teacher regards the student as a whole person, the student is a subject, and the learning between them should have a dialogue and realize the “I and Thou” relation. Therefore, the essence of education is dialogue. Because “dialogue is the way to explore truth and self-knowledge”^[14].

The process of education is to communicate in a loving language, full of words coming and going, telling and responding. Thou and I are bound together in a solid dialogue by that element that immerses both sides of the relation -- dialogue -- where we can come face to face with the fullness of “Thou” as we wade. The dialogue reflects respect for the subjectivity of both teachers and students; It means harmony between the subject and nature. It can be seen that in dialogue education, the relationship between teachers and students is no longer a one-way indoctrination relationship between the subject and the object mediated by knowledge, but a “I-Thou” dialogue relation^[15]. In dialogue education, knowledge is no longer static book content that the educator delivers to the educatees in the form of monolog, but is dynamic, open and generated. The value of knowledge does not lie in giving people ready-made things, but in providing a starting point for continuous creation^[16]. For students, learning is no longer passive acceptance, but rather knowledge generation that takes place in dialogue and cooperation^[17]. This means that education pays attention to people and embodies the humanized pursuit of education.

As Buber elaborates, what distinguishes a true dialogue or “meeting” with another is not only certain astonishment or surprise in the face of the other’s alterity but fundamental appreciation thereof: “that which is different in the other person, his otherness, is prized”^[18]. Buber consequently doesn’t conceive of dialogue as a simple exchange of words. Not only can dialogue also take the form of a non-linguistic interaction, e.g. an exchange of glances between strangers, but it specifically requires the recognition or acknowledgement of the other’s difference. From the perspective of social philosophy, Dialogue life is a kind of life that takes place in the world of interpersonal interaction and is oriented by the practical purpose of human interaction, communication and understanding.

2.3 The purpose of education is to help students meet “Thou” and awaken a sense of life and worth

The so-called “I”, is a person’s inner world, the so-called “Thou”, can be understood as the whole external world. It is a fundamental question whether a person’s perception of the external world is a spiritual “Thou” life that pays no attention to utilitarianism and pays attention to human life and value experience, or a utilitarian and rationalized “it” life at the material level. People without a secular life cannot go on, but only in secular life, it will lose the meaning of human. For Buber, it is only the I-Thou attitude that establishes a proper relation with entities in the world, whereas the I-It attitude only allows for an “experience”. Buber believes that people should be involved in the real world. But at some critical moments, it is necessary to look at the great events of life from a detached perspective. For example, when teaching students, it is necessary to abandon purpose and utility and build an “I and Thou” relation. According to the transcendence of education, improving the spiritual realm of students, so that students learn to look at the world in the way of ‘Thou’, learn to carry on communication and exchange with the universe on the life level.

“The essence of teacher-student communication is the meeting between teacher’s personality spirit and student’s personality spirit in education, and teacher’s personality spirit must have an enlightening influence on student’s spiritual development. Man receives, and he receives not a specific “content”, but a Presence, a Presence as power. It consists of three things, undivided, yet in such a way that we may consider them separately. First, there is the whole fulness of real mutual action, of the being raised and bound up in relation: the man can give no account at all of how the binding in relation is brought about, nor does it in any way lighten his life—it makes life heavier, but heavy with meaning. Secondly, there is an inexpressible confirmation of the meaning. Meaning is assured. Nothing can any longer be meaningless. ... It does not wish to be explained (not are we able to do that) but only to be done by us. Thirdly, this meaning is not that of “another life”, but that of this life of ours, ... This meaning can be received, but not experienced; it cannot be experienced but it can be done, and this is its purpose with us. The meaning that has been received can be proved true by each man only in the singleness of his being and the singleness of his life.

2.4 Teachers and students Relation

Attempting to overcome the traditional subject-object dichotomy, Buber and his fellow “dialogicians” sought to disclose a more fundamental dimension arising between beings. The teacher-student relationship not only refers to the educational objective of individual growth but also to the other important aim of education: to enable the individual to relate in a meaningful way to the social

world. According to Buber, teachers are responsible for free development and historical renewal of students' potential, enabling students to form the ability to establish a "dialogue" relationship, and transforming knowledge from "I and it" to "I and Thou". In the dialogue teaching, the teacher is the guide of the students' soul regeneration, and the whole existence of the body should be regarded as the norm of the students. Ontologically, teachers and students are independent individuals (equal). As for the teacher-student relation in dialogue teaching, Buber believes that trust is the basis for the existence of teacher-student relationships, "affirmation of others" is the attitude of teachers to students, and "Umfassung" is the essence of teacher-student relations.

Why can the relationship between teachers and student's reciprocity, reciprocity is based on the "unequal" relationship between teachers and students. This kind of inequality does not refer to the high and low social status, but the accumulation of knowledge and experience "inequality". The process of education is a process in which teachers and students learn from each other. The so-called "mutual cultivation" means that teachers and students meet as independent subjects and absorb the experience wisdom created by both sides in the dialogue. It seems that only students benefit from the interaction between teachers and students, but in fact, both sides are the common beneficiaries. As a person with educational status, teachers have more cultural achievements such as knowledge, thought, wisdom and experience than students. Teachers and students acquire new knowledge in the process of dialogue and improve together. Teachers and students create educational significance in the dialogue, and at the same time constantly enhance the meaning and value of their lives.

3. Conclusion

According to Buber, the teacher must know the student completely, or wants to know the student before teaching. The process of teaching is a process of understanding each other through dialogue. For Buber, real dialogue takes place in the presence, that is, in responding to the other person as a whole person and creating space where the other person can say his or her own words and meanings. When a person is open to the existence of another person, he will not attempt to speak for the other person, nor will he impose his own language, concepts and interpretive schemes on the other person. The other party will participate as a Subjectivity. When one steps out of the essential act of pure relation, one's life becomes more abundant.

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On the Translation of English and Chinese Idioms from the Perspective of Cultural Differences

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Abstract: As the elite of language and the crystallization of a nation's culture and wisdom, idioms are a kind of peculiar and fixed expressions formed in language use. The translation of English and Chinese idioms has been occupying a significant place in translation area. This paper aims to probe into the cultural differences influencing the translation of these two different language idioms from the perspective of living environment, traditional custom and material culture. Besides, some translation skills of English and Chinese idioms are covered in this paper.

Keywords: Idioms; Differences; English; Chinese; Translation skills

1. Introduction

As the quintessence of language and the crystallization of a nation's culture and wisdom, idioms are a kind of peculiar and fixed expressions formed in language use, including proverbs, colloquialisms, and slang expressions and so on. Possessing a vivid image and carrying local color or national features, most of the idioms are explicit; some are implicit which can trigger varieties of imagination or associations; some need judging from the context for they contain more than one meaning. If language is said to be the minor of culture, idioms, as the quintessence of language, can be respected as the elite of culture. Hence, the translation of idioms largely determines the quality of translation. Translation, in fact, is a rendering from one language into another. With the development of translation field, translation is no longer merely perceived as a conversion of language symbols, but as a cross-culture exchange. In other words, the switching of language symbols is just the surface level of translation while cultural diffusion is the essence of translation. Idiom translation has been considered the most typical in translation field. Eugene. A. Nida has ever grouped the character of language culture into five categories: Material Culture, Religious Culture, Ecological Culture, Linguistic Culture and Social Culture. In this sense, we can generalize the cultural differences of English and Chinese idioms into five facets: living environment, traditional customs, material cultures, religious beliefs and historical allusions. Accordingly, the author endeavors to take living environment, traditional customs and material cultures as three cases to illustrate cultural differences affecting the translation of English and Chinese idioms.^[1]

2. Cultural differences of English and Chinese idioms

2.1 Difference in living environment

The elements of geographical environment play an indispensable role in forming a country's culture. Human beings are incapable of changing the geography. Different geographical environment would directly give rise to differences in people's concept of life. In consequence, the idioms formed in different geographical features appear different.

It is known to all that Britain is an inland country surrounded by the sea and shares no land border with any other countries except the Republic of Ireland. The past glorious history of Britain witnessed that its navigation industry kept ranking first in the world for a long time. Therefore, British people have a strong love for water. In contrast, Chinese people cannot live without earth since most part of China belongs to inland place. As a result, Chinese people have a keen passion for earth. It is such different geographical condition that results in different idioms in these two languages. For example, there is a Chinese idiom called "hui jin ru tu" which represents the behavior of extravagance while in Britain people use the idiom "spend money like water" to designate such behavior. Take another example, the weather in southern China is pretty mild and moisture, so bamboo is a familiar plant for people living there. Consequently, they use the idiom "yu hou chun sun" to delineate the new things springing up in great numbers. Comparatively speaking, in order to convey such meaning, Britain people use the idiom "spring up like mushrooms" since in Britain when spring comes, mushrooms can be seen here and there. We still have a typical instance to illuminate the difference in idioms influenced by different geographical environment. In China, the west wind is the cold air from Siberia. Thereby, the west wind has been signifying a sense or a feeling of bleakness and dismal in Chinese culture. As a result, numerous prominent expressions have been produced, such as "xi feng jin, bei yan nan fei, xiao lai shui ran shuang lin zui, zong shi li ren lei", "lian juan xi feng, ren bi huang hua shou", "ren sheng ruo zhi ru chu jian, he shi xi feng bei hua shan",^[2] However, England boasts a maritime climate and the west wind is the symbol of spring for people there. Then there is a famous sentence produced by Shelley in his , Ode to West Wind, that "it's a warm

wind, the west wind, full of birds' cries".

2.2 Difference in traditional customs

Traditional custom is a kind of manifestation of cultural awareness formed in long-term practical experience of life of a nation. As a vital component of national culture, language inevitably manifests the nation's traditional custom.

In China, most of the idioms concerning dog denote an emotion of derogation. We have many derogatory idioms about dogs, such as "lang xin gou fei", "gou gai bu liao chi shi", "gou za zhong", "gou tui zi", "gou zhang ren shi", "gou ji tiao qiang" and so on. Nevertheless, in western countries people have been viewing dogs as their doorkeepers, friends, pets or companions. As a result, in English language, most idioms regarding dogs contain a dual sense, such as "you are a lucky dog—ni shi yi ge xing yun er", "to be a top dog—ju yu yao wei", "every dog has his day—ren ren dou you de yi shi" etc. "Dog tired" means "overwhelmingly tired". Its literal meaning is "tired like a dog". It is said that English people often observe their dogs coming back, then, out of exhaustion, lying on the ground as if they were dead. Consequently, this idiom has been used to embody human's weariness.^[3]

Chinese people have long been highlighting the concept that food is the first necessity of people and their diet structure is rich and colorful, which is vividly reflected by some Chinese idioms, such as "chao you yu", "jiang hai shi lao de la", "xiao cong ban dou fu—yi qing er bai", "lao you tiao" and so on. For westerners, their diets are more inclined to bread, cake, cheese, butter and so on. Accordingly, some idioms are produced, such as "earn one's bread—yang jia hu kou", "a piece of cake—xiao cai yi die", "have one's finger in the pie—duo guan xian shi".

2.3 Difference in material cultures

With the ever-increasing expansion of economic globalization and international exchange, western cultures have increasingly exerted great impact on every aspect of Chinese traditional culture. For instance, "coffee, chocolate, sofa" have been translated into "ka fei, qiao ke li, sha fa", which are commonly used in our daily life. In the meantime, Chinese culture has the similar effect on English language. For example, "gong fu, ma jiang, dou fu" have been translated into "kongfu, mahjong and toufu". Thus, with the development of translation field, translation is no longer merely perceived as a switching of language symbols, but as a cross-culture exchange.

There is a popular saying in China: "qiao fu nan wei wu mi zhi chui". It has once been translated by some one that "even a clever housewife fails to cook a meal with no rice." The translated version and the original one are equivalent in form, catering to Chinese readers who know much about Chinese diet habit. But for English readers, they may feel perplexed since they have little knowledge about Chinese diet habit. As rice is not the main diet for westerners, they would probably make this response: why not cook a meal with flour? As we all know, flour is more popular than rice for their diet habit.

3. Strategies in idiom translation

Translation, as a kind of language activity, aims to reproduce or reappear the original information with the closest and the most natural equivalence. As the famous translator Eugene A. Nida has ever noted, "the relationship between the target text receiver and the target information should be basically the same with the relationship between the original text receiver and the original information. The target text and the original one should be dynamically equivalent to each other." However, cultural background and rhetorical characteristics existing in idioms have brought in difficulties for translation. When doing translation, we need to ensure the efficiency of cultural transmission of idioms and meanwhile try to retain their national color and regional features, which has long been crucial in translation field.^[4]

3.1 Literal translation

Literary translation has been viewed as a complete representation of the original. It serves as a faithful conveyor of the meaning of the original and in the meantime retains the full flavor of idioms. This is an ideal solution. We may as well have a look at the example below:

She refused several offers of marriage, and then, at the age of forty, found herself left on the shelf.

Ta ju jue le duo ci qiu hun, dao si shi sui, fa xian zi ji mei you jie hun de xi wang le.

Ta ju jue le duo ci qiu hun, dao si shi sui, fa xian zi ji shu zhi gao ge le.

Here we can see that the phrase "on the shelf" was literally translated into "shu zhi gao ge", which not only faithfully and smoothly expresses the content of the meaning but also keeps the flavor of figure of speech. If it was liberally translated into "mei you jie hun de xi wang", though smoothly, yet losing the original form and figure of speech, such translation appears to be inferior.

3.2 Liberal translation

Liberal translation, also called free translation, is another translation tactic which does not pursue the form or word order of the original. If there are dissimilarities or great difference between English and Chinese in the sequence of vocabulary, in grammatical structure and art device, free translation should be employed. For example:

The teenagers do not invite Bob to their parties because he is a wet blanket.

A. Qing nian men bu yao qing Bao Bo can jia ta men de ju hui, yin wei ta shi ge sao xing de ren.

B. Qing nian men bu yao qing Bao Bo can jia ta men de ju hui, yin wei ta ge shi tan zi.

Comparing the two versions, we can find that A used liberal translation while B employed literal translation. From the perspective of sentence structure and grammar, both are all right, but according to the meaning of the original, a wet blanket is a reason why the teenagers do not invite Bob to their parties. The version of "shi tan zi" bears no relation with the reason. Although "sao xing de ren" conveys no meaning of "a wet blanket", it might reveal the logical reason and enable readers to apprehend why Bob was not invited to their party. Comparatively speaking, version B would trigger readers' confusion. Thus, here it is more advisable to employ the liberal strategy.

3.3 Literal plus liberal translation

Literal translation will sometimes reduce the readability of the version, making readers confused and bored. Liberal translation will break the faithfulness of the original. In order to tackle this problem, we ought to employ a tactical combination of liberal translation and literal translation. Such translation strategy can not only keep the figurative flavor of the idioms, but at the same time can express the meaning clearly. Let's take a look at several examples below:

Make hay while the sun shines- Chen zhe tian qing shai gan cao, mo shi liang ji.

Here we can see that "chen zhe tian qing shai gan cao" belongs to literal translation. Although it successfully conveys the original content and the flavor of the proverb, the reader would probably fail to fathom its implication. Therefore, the liberal version "mo shi liang ji" is added. The fine combination of these two strategies enhances the readability and meanwhile keeps the spirit of the original.

Until all is over, ambition never dies- Bu dao huang he xin bu si.

Here it can be seen that "xin bu si" belongs to literal translation while "bu dao huang he" is liberal. The integration of these two tactical methods successfully retains the flavor of the original, facilitating the comprehension of the reader.

Every family is said to have at least one skeleton in the cupboard-Su hua shuo, yi gui li cang ku lou, jian bu de ren de shi jia jia dou you.

It is not difficult to find that "ku lou" is literal version whereas "jian bu de ren de shi" belongs to liberal translation. This skillful combination can not only increase the efficiency, but also guarantee the reader's apprehension of its implication and its original feature.

4. Conclusion

From all that has been discussed above, we can come to a conclusion that idioms are an indispensable part of language and the quintessence of a nation's culture. Being concise and vivid, they are widely used in our daily life. However, different cultural background directly leads to different connotation of idioms, posing great difficulties to translation field. We need to acquire a better understanding of Chinese and English idioms based on their different culture. Only in this way can we fathom the profound connotation or implication of idioms in a better way. Poor translation would ultimately deter successful communication. In order to enable readers to have a good command of the flavor of different cultures, decrease readers' confusion and enrich their vision in the course of appreciating translated works, the author suggests three tactical methods above to handle the rendering of idioms, but they are, as he is convinced, far beyond enough. To be a capable translator, one needs to work hard at different languages and cultures and do adequate practices so as to generate faithful, expressive and elegant versions.

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Analysis on Risk Factors and Spatial Variation of Pollution Sources in Urban Areas

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Abstract: In this paper, two mathematical models are used to discuss the impact of urban pollutants on human living environment, and it is concluded that pollutants are the main cause of environmental pollution and have no direct relationship with pollution sources. Through the data of human health indicators and fitting the data sets of the two models, we want to investigate whether there are any variables related to the increase of skin cancer risk and whether the increase of cancer risk is related to the distance from coal-fired power stations in the Slovakian town of Novaky. In this work, we comparing two models, it indicates that environmental and urinary arsenic have significant impact on the cancer risk, but the spatial location cannot be consider as a direct factor on non-melanoma skin cancer. By comparing both models, it indicates that environmental and urinary arsenic have significant impact on the cancer risk, but the spatial location can not be consider as a direct factor on non-melanoma skin cancer. The project case, the specific planning and engineering design, should focus on strengthening the control of the pollution source, rather than merely considering spatial layout of pollutants.

Keywords: Analysis; Risk factors; Spatial Variation; Pollution Sources; Urban Areas.

1. Introduction

1.1 Background

Non-melanoma skin cancer (NMSCs) constitute more than one-third of all cancers in the U.S. NMSCs are the most common malignancies occurring in the white populations each year. Most cases are caused by over-exposure to UV rays from the sun or sun beds. NMSCs mainly refers to base cell carcinoma, followed by squamous cell carcinoma (L,D.T.& V,M., 2002).

A case-control study was set up from 1996 to 1999 in order to identify the associations between arsenic exposure and non-melanoma skin cancer incidence in the vicinity of a coal-burning power station in Slovakian town of Novaky. There were 257 cases of non-melanoma skin cancer were identified within the region of study, defined as a circle of radius 25 km, and 211 healthy controls living in the region were selected for control (Bodrud-doza,M.Islam,A.T.Ahmed,F. et al., 2016).

1.2 Dataset

The dataset that collected from this case-control records the following information: both access and study ID of the test population (ID and idn); case or control status (caco); sex and age of the test person (sex and age); distance category in the original analysis (distance) (Zhongmin,J., Siyue,L.& Li,W., 2018); smoking status (smoke2); environmental arsenic which based on power station emissions (ares1); the x y coordinates (x and y); name and ID of the study towns (sat place and ressta); soil arsenic at case r control address and total urinary arsenic (soilas and sumas)(Wen-cong,L., Ning-lu,C.& Wen-xin,Q., 2017).

N.B: all above factors are given in short names in the dataset as shown in the brackets.

1.3 Aim of this project

The dataset has include a measure of arsenic in the soil at the residential address of each individual, and a measure of urinary arsenic for each individual, this project will be interested in the identifications of any of the recorded variables are associated with increased risk of non-melanoma skin cancer and the investigation of whether increased cancer risk is associated with distance from the power station.

2. Methods

This section will introduce brief ideas of how to fit regression model and isotropic Gaussian model to the dataset , so that the association between cancer risk and the two arsenic measures can be investigated, and find possible confounders as appropriate (Chang,X.Waagepetersen,R.Yu,H. et al., 2015).

2.1 Fit generalised linear model to the data

Without considering the spatial locations, we can fit a generalised linear model to the dataset and deduce the associated risk factors to the non-melanoma skin cancer (Zhu,G., Ge,Y.& Wang,H., 2013). As we can see that each test subject either has got non-melanoma skin cancer or not, it is naturally consider each test subject as an iid Bernoulli trial, so the generalised linear model to fit this

dataset can be considered under binomial family, and the expression is:

$$\log \frac{p}{1-p} = \beta_0 + \beta_1 x_{i1} + \beta_2 x_{i2} + \dots \quad (1)$$

Where β_i , s are coefficients and $(x_{i1}, x_{i2}, x_{i3}, \dots)$ are the covariates, in this case, these covariates refers to the risk factors that associated to non-melanoma skin cancer.

From the dataset we notice that there are 7 covariates that we are going to consider (sex, age, distance, smoke2, ares1, soilas and sumas), it is possible that some of the factors do not link to the increase of the risk to get non-melanoma skin cancer, so that we will need to find out which factors will really contribute to the cancer risk and the association between cancer risk and the two arsenic measures (soilas and sumas). This model will help to identify the important risk factors of non-melanoma skin cancer, but we also like to investigate whether increased cancer risk is associated with distance from the power station. So the following model will be introduced (Ahmed, N.Bodrud-doza, M.Islam, A.R.M.T. et al., 2019).

2.2 Fit the isotropic Gaussian model to the dataset

In some researches, we have noticed there are some findings on the impact of location and the risk of getting a particular disease. Within these situations, the risk of getting a particular disease will be affected by the distance between the location of test subjects and a point source. Generally speaking, the risk of get a disease might vary with the distance to a point source, i.e. near or far. In this project, we like to find out that whether the coal-burning power station in Novaky is a point source that affect the risk of getting non-melanoma skin cancer of the people live around it. Unlike the above model, this model will have to take count of the spatial locations. As we know the test region is defined as a circle of radius 25km centred the coal-burning power station, with location (18.5334, 48.6993), we like to transfer the spatial variables to planar co-ordinates. Use the coordinates of the power station as the origin, the transformation equation is

$$(x_{i, \text{new}}, y_{i, \text{new}}) = \{(x_i - 18.5334) * 73.611, (y_i - 48.6993) * 111.204\}$$

This equation is obtained by the approximation method of National Geospatial Intelligence Agency [2].

So $s = \sqrt{x_{i, \text{new}}^2 + y_{i, \text{new}}^2}$ measures the distance between the individual's location and the coal-burning power station.

Now we consider ρ as a function represents spatial variation in risk, the spatial variation in risk of a distance d from a point source is then $\rho(d) = 1 + \beta \exp\left\{-\left(\frac{d}{\delta}\right)^2\right\}$

Where β is elevation in risk at source and δ is the rate of decay of risk with distance from source, as in the isotropic model.

3. Pre-step on data analysis

In this dataset, there are lots of missing values, table 1 and 2 give out the total number of missing values in rows and columns. From Table 1 we can conclude only 183 rows with no missing values, and table 2 show the columns of soilas and sumas also has lots of missing values. As these two columns contains important information that we need to test on, so with lots of missing values could lead to bias in the analysis.

Table 1: Counts of the NA's in each row of the dataset

No. of missing values	0	1	2	6
Count	183	262	15	8

Table 2: Counts of NA's in each row

Variable	caco	sex	age	distance	smoke2	ares1	soilas	sumas	x	y
No. of NAs	0	0	0	0	1	0	262	29	0	0

Figure 1, 2 & 3 give us a look of relations between risk factors, case, control and locations. From Figure 1, we can see that clearly patterns from both plots, which means that most test subjects have similar soil and urinary arsenic measurements even though varying with distance from the power station.

Figure 2 shows us cases and controls within the study region, we can see that the centre of both circles is the power station, and from the intensity of the points we can tell that the distance from the most recorded cases is not the shortest to the power station and similarly for control plot.

Figure 3 shows us the relative risk in both types of plots, and we can tell that around the power station, it is true that the relative risk to get non-melanoma skin cancer is higher, but the northeast part of our test region also have high relative risk to get skin cancer even though there are comparable far away from the power station. Both figure 2 and 3 might shows a result that the cancer risk might not tightly associated with the distance from the power station, and hypothesis will be tested later on by using Diggle-Rowlingson model.

4. Result

4.1 Fit dataset to generalised linear regression models

As we are aiming to investigate not only the association between cancer risk and the two arsenic measures but also adjusting for possible confounders, we will test all 7 variables together for the first time.

From the R output above, with AIC=254.62, we can tell that most of the covariates make this regression model become insu cient. If we are testing under 10% significant level, only ares1 with p-value 0.0751 and sumas with p-value 0.0970 which are less than 0.1, so other factors might not be considered as significant factors that associated to cancer risk. All these should suggest an improvement of the regression model with selected variable.

Now we conclude a new regression model with 3 variables: ares1, soilas and sumas. Still from the R output above, we can clearly see that both ares1 and sumas are risk factors that we are looking at, but still soilas does not shown to be an associated factor to cancer

risk, as it has high p-value=0.6221, so it could be a better idea to remove soilas and fit our final model with ares1 and sumas. Our final model becomes, from Equation (1): $\log \frac{P}{1-P} = -1.36674 + 0.65944 \cdot ares1 + 0.04662 \cdot sumas$

This better model is with p-value=0.073, it turns out that urinary arsenic is a factor that associated to cancer risk and the confounder is the environmental arsenic which is based on power station emissions. Our initial guess of one risk factor, soil arsenic is not a major factor that associated to the risk of getting non-melanoma skin cancer.

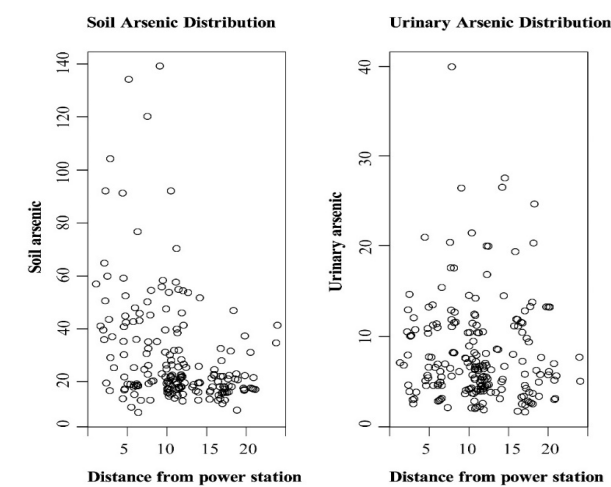


Figure 1: Plots of the two arsenic measurements against distance to the power station

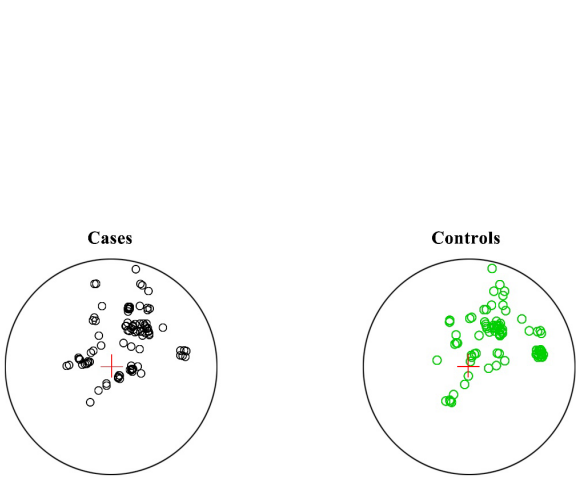


Figure 2: Location of cases and controls, centred with the power station

4.2 Fit dataset to Diggle-Rowlingson model

We have discover that soil arsenic does not count to be associated to the cancer risk, and from table 1 we see that it is the column which has most NA's, it could be a good idea if we remove this column from the original dataset. By dropping this significant variable,we will regain 247 complete observations which will make our further inference more reliable.Before we do the model fitting, we will apply K-function tests.

K-functions in figure 4 confirms our judgement on the clustering of both the cases and the controls. Then whether the cases of non-melanoma skin cancer are completely random among the population? Figure 4 compares the clustering between cases and controls in terms of K-functions(Cao,W., Li,Y., Cheng,J.& Millington,S., 2017). Since the majority of the solid line is in the shadow, see Figure 5, it is might be true that the cancer cases are completely random among population. In consideration of the obvious decreasing trend of the solid line, still an isotropic Gaussian model should be more reliable.

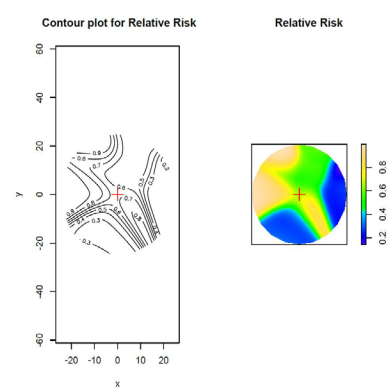


Figure 3: Plots of relative risk of skin cancer

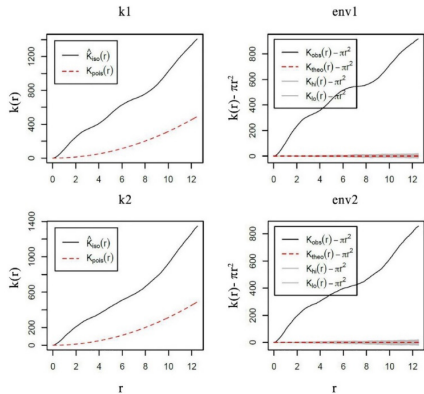


Figure 4: Spatial clustering of cases and controls

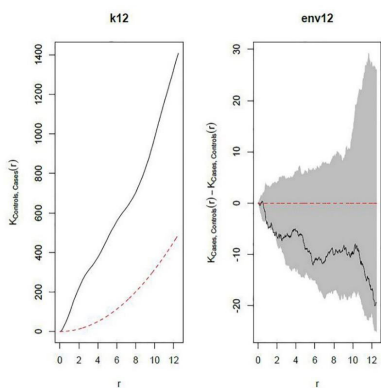


Figure 5: Spatial clustering comparison

5. Conclusion

By fitting the above two models to the dataset, we conclude that urinary arsenic is a factor that associated to the increased risk of non-melanoma skin cancer, also environmental arsenic which based on power station emission is a confounder that related to the increases of this skin cancer risk.

Also, we showed that the distance from the coal-burning power station does not a ects the increase of the cancer risk, but it directly a ects the environmental arsenic and thus a ect the cancer risk but this e ect will be easily masked during study.

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Languages, M&A Risks and Earnouts: A Global Perspective

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Abstract: Users of strong future time reference (FTR) languages (e.g., English) are grammatically required to distinguish between future and present events, while users of weak FTR languages (e.g., Chinese) are not. This study hypothesizes that firms using weak FTR languages as working languages are prone to believing that negative events (e.g., moral hazards) in M&A transactions are more imminent and therefore have a higher degree of motivation to hedge against M&A risks. Consistent with the baseline hypothesis, I find evidence that buyers with weak FTR languages as their working languages have a higher probability to use earnouts in M&A transactions to hedge against investment risks. Next, I conduct robustness checks by altering samples. I also find that the extent of trade globalization has a negative mediating effect on the FTR-earnout mechanism. This study provides a new perspective to study the factors affecting the usage of earnouts in M&A transactions and enriches the literature in linguistics.

Keywords: Languages; M&A risks; Earnouts

1. Introduction

Strong FTR languages require that speakers must use auxiliary verbs when depicting events which will happen in the future, while weak FTR languages do not have such compulsory rule. Speakers of weak FTR languages, in most cases, use the simple present tense to describe the events that will happen in the future. Dahl (2000) maintains that strong FTR languages' grammatical requirement of distinguishing between future and present events makes speakers postpone the time when future events happen on the cognition level, while weak FTR languages without the compulsory rule make speakers think that future events are more imminent.

Based on the theory above, Chen (2013) studies the effect of language FTR on individual economic behaviors. Chen (2013) discovers that because future events are more imminent on the cognition level, speakers of weak FTR languages have more future-oriented behaviors including receiving higher level of education to get better job opportunities, accumulating more personal savings to prepare for retirement and doing more physical exercise to prevent diseases compared with speakers of strong FTR languages.

Language FTR also has an impact on firms' economic behaviors. Liang et al. (2018) maintain that organizational behaviors can also be affected by language FTR through categorization and framing effects. Prior literature discovers that firms with weak FTR languages as their working languages have more future-oriented behaviors including undertaking more social responsibility (Liang et al., 2018) to improve reputation, holding more precautionary cash (Chen et al., 2015) to hedge against risks, reducing earnings management (Kim et al., 2017) to avoid potential legal risks and increasing R&D activities to enhance long-term profitability (Liang et al., 2018). In addition, Liang et al. (2018)'s study discovers that multi-lingual or internationalized business environment can curb the effect of language FTR on firms' economic behaviors.

On the basis of corporate-level studies, this paper studies the effect of language FTR on a kind of firms' M&A behavior, namely the probability to use earnouts for preventing transaction risks. Buyers in M&A may suffer from risks incurred by information asymmetry (Datar et al., 2001) and moral hazards (Cain et al., 2011). When buyers and sellers can't agree on the price due to the existence of transaction risks, buyers will choose to sign earnout contracts with sellers (Kohers et al., 2000). Payment of the part of the price on which both sides can't reach an agreement is contingent upon the performance of targets after deals. Earnouts are the main method for buyers to hedge against M&A risks, but signing earnout contracts generates extra transaction cost. Therefore, buyers need to compare the present cost of signing contracts to future gains of avoiding risks when deciding whether to use earnouts. The baseline hypothesis of this paper maintains that buyers using weak FTR languages tend to think that M&A risks are more imminent and that future gains of avoiding risks outweigh present cost of signing contracts, therefore have a higher probability to use earnouts.

To test the hypothesis above, I construct a Logit model using M&A data from 39 countries and regions to test the difference in probability of using earnouts among buyers with different language FTR. After controlling for country-level characteristics and transaction-level characteristics, I discover that buyers using weak FTR languages have a higher chance to use earnouts to hedge against M&A risks.

This study also conducts two robustness checks by excluding the observations with buyers in the US (a country with multi ethnic groups which may bias the result) and by excluding weak and strong FTR countries with the largest number of observations to avoid the influence of specific countries' features. The results are consistent with the baseline result.

Finally, I study the meditating effect of trade globalization of buyers' home countries on FTR-earnout mechanism. First of all, under the background of trade globalization companies need to cooperate with partners with various linguistic backgrounds, which changes the cognitive pattern in the single-linguistic environment. Next, globalization makes different languages adapt to each other's grammatical rules and expressions, which enables speakers of different languages to get used to each other's way of thinking. Taken together, buyers in the countries with higher level of trade globalization can adapt themselves to thinking patterns of different languages, which curbs the effect of the single language on their M&A behaviors.

The rest of the passage is arranged as follows. The second part contains sample selection and variable measurement. The third part contains the empirical model, robustness checks and further analysis. The fourth part concludes the paper.

Sample selection and variable measurement

Table 1 Variable measurement

Variable	Measurement
Earnout	Whether the buyer uses an earnout in the M&A, 1 if yes, 0 if no.
WeakFTR	Whether the working language of the buyer is a weak FTR language, 1 if yes, 0 if no.
Cross_Industry	Whether the deal is interindustry, 1 if yes, 0 if no. Industrial division standards are US SIC two-digit codes.
Cross_Border	Whether the deal is international, 1 if yes, 0 if no.
Public	Whether the buyer purchases a public firm, 1 if yes, 0 if no.
Services	Whether the target belongs to the service industry, 1 if yes, 0 if no.
RelativeSize	The relative size of the deal, calculated as the total price of the transaction/(the buyer's equity + the total price of the transaction).
meanTobinQ	The target industry's average Tobin's Q value, calculated based on the data of all the public firms in the target industry in the target country or region.
meanGrowth	The target industry's average sales growth rate, calculated based on the data of all the public firms in the target industry in the target country or region.
meanEmployeeRatio	The target industry's average ratio of the number of employees to the value of total assets, calculated based on the data of all the public firms in the target industry in the target country or region.
meanRDRatio	The target industry's average ratio of the value of R&D expenditure to the value of sales revenue, calculated based on the data of all the public firms in the target industry in the target country or region.
lnGDPPerCapita	The natural logarithm of GDP per capita in the buyer's home country or region.
GDPGrowth	The GDP growth rate of buyer's home country or region.
English	Whether the buyer's home country or region is with English legal origins, 1 if yes, 0 if no.
French	Whether the buyer's home country or region is with French legal origins, 1 if yes, 0 if no.
German	Whether the buyer's home country or region is with German legal origins, 1 if yes, 0 if no.
UncertaintyAvoidance	The buyer's home country or region's uncertainty avoidance, measured by Hofstede's cultural index.
LongTermOrientation	The buyer's home country or region's long-term orientation, measured by Hofstede's cultural index.
Catholic	Indicator variable that is 1 if >50% of the inhabitants in the buyer's home country or region are Catholics.
Buddhist	Indicator variable that is 1 if >50% of the inhabitants in the buyer's home country or region are Buddhists.
Muslim	Indicator variable that is 1 if >50% of the inhabitants in the buyer's home country or region are Muslims.
Protestant	Indicator variable that is 1 if >50% of the inhabitants in the buyer's home country or region are Protestants.
Globalization	The buyer's home country or region's KOF trade globalization index.

The main explanatory variable in this study is a dummy variable, namely whether buyers' working languages are weak FTR languages. This indicator is sourced from EUROTYP project of European Science Foundation. This study refers to Liang et al. (2018)'s and Chen et al. (2015)'s papers to use the official language of the buyer's home country as the working language of the buyer. For a country with two or more official languages, I refer to The World Factbook and use the language that is used by the largest part of population within a home country as the working language of the buyers in that country.

The M&A data in this paper are sourced from Zephyr database. The sample ranges from 1997 to 2020. Buyers are from 39 home countries and regions, among which countries and regions officially using weak FTRlanguages include Belgium, Brazil, Switzerland, Chinese mainland, Germany, Denmark, Finland, Chinese Hong Kong, Indonesia, Japan, Malaysia, Netherland, Norway and Singapore. Countries and regions officially using strong FTR languages include Australia, Canada, Chile, Spain, France, the UK, Greece, Ireland, India, Italy, Jordan, Korea, Mexico, New Zealand, Peru, Philippines, Pakistan, Poland, Portugal, Russia, Turkey, the US and South Africa. In M&A transactions of this study, buyers own less than 50% of targets' total shares before transactions and eventually control targets(owning more than 50% of shares) by M&A. Target firms include listed and private firms. Based on the studies of Kohers et al. (2000), Datar et al. (2001) and Cain et al. (2011), I control for the transaction-level characteristics influencing the probability of earnout usage. Part of the data used to construct the variables are sourced from Osiris database. This study also refers to the study of Chen et al. (2015) and controls for the country-level features including economy, culture, religion and legal source. The data are sourced from The World Bank database, Hofstede website and The World Factbook website. In addition, there might be omitted variables affecting language FTR and earnout usage. Dryer (1989) maintains that languages are a part of culture and they change with the development of culture. Cultural factors can also influence firms' economic behaviors. Therefore, this study refers to the study of Chen et al. (2015) and use the fixed effect of family language based on the data from the World Atlas of Language Structures. In further analysis part, I study the mediating effect of trade globalization, which is measured by KOF trade globalization index.Toavoid the influence of extreme values, I winsorize all continuous variables at 1th and 99th percentiles. Table 1 is the variable

Table 2 Descriptive statistics

Variable	Number of observations	Mean	Standard Deviation	Minimum	Maximum
Earnout	18425	0.145	0.352	0	1
WeakFTR	18425	0.351	0.477	0	1
Cross_Industry	18425	0.502	0.500	0	1
Cross_Border	18425	0.272	0.445	0	1
Public	18425	0.351	0.477	0	1
Services	18425	0.0627	0.242	0	1
RelativeSize	18425	0.250	0.277	-0.0176	1.149
meanTobinQ	18425	27.65	95.90	0.202	649.9
meanGrowth	18425	9.996	18.15	-50.92	78.77
meanEmployeeRatio	18425	2.14e-05	7.95e-05	2.17e-07	0.000644
meanRDRatio	18425	2.022	7.631	0	50.41
lnGDPPerCapita	18425	10.30	0.872	7.213	11.23
GDPGrowth	18425	3.359	7.446	-17.91	25.27
English	18425	0.585	0.493	0	1
French	18425	0.0872	0.282	0	1
German	18425	0.271	0.445	0	1
UncertaintyAvoidance	18425	0.489	0.204	0.0800	0.950
LongTermOrientation	18425	0.520	0.249	0.210	1
Catholic	18425	0.239	0.426	0	1
Buddhist	18425	0.0588	0.235	0	1
Muslim	18425	0.0333	0.179	0	1
Protestant	18425	0.269	0.443	0	1
Globalization	18425	60.60054	12.83685	34.50344	95.24313

measurement table and table 2 is the descriptive statistics table.

The empirical model, robustness checks and further analysis

This study refers to Kohers et al. (2000) and adopts a Logit model to study the probability of earnout usage.

$$P_d = E(Y_d = 1|x) = \frac{1}{e^{-(\theta_0 + \theta_1 X_d + \theta_2 Z_d + \varepsilon_d)}}$$

P_d is the probability of using an earnout in an M&A. Y_d is the indicator that is 1 if the deal involves an earnout, X_d is the main explanatory variable WeakFTR. Z_d represents a vector of control variables and fixed effects. Because this study is based on the transactions in different countries, I cluster robust standard errors on buyers' home country or region level and show them in the parentheses. *, **, *** indicate the significant levels of 10%, 5% and 1%. As is shown in the column (1) of table 3, the baseline result is consistent with FTR-earnout hypothesis. The column (2) and (3) are robustness checks. The results are consistent with the baseline result, which means the baseline result is not subject to the influence of cultures of multi ethnic groups within the country or to the features of two main countries in the sample. The result of the column (4) is

Table 3 Empirical results

	(1) Baseline result	(2) Excluding the US	(3) Excluding the largest weak FTR and strong FTR countries	(4) The mediating effect of trade globalization
Dependent variable	Earnout	Earnout	Earnout	Earnout
WeakFTR	0.7961** (0.3612)	0.7848** (0.0136)	0.8720** (0.3387)	2.8277** (1.1155)
Globalization				0.0331** (0.0136) -0.0320** (0.0155)
WeakFTR*Globalization				
Features of transactions	Yes	Yes	Yes	Yes
Features of home country or region	Yes	Yes	Yes	Yes
Industry fixed effect	Yes	Yes	Yes	Yes
Year fixed effect	Yes	Yes	Yes	Yes
Family language fixed effect				
N	18425	14453	11861	18425
R ²	0.1982	0.2443	0.2096	0.1988

consistent with the mediating hypothesis.

2. Conclusion

This paper studies the effect of languages on firms' probability of using earnouts in M&A transactions through controlling for a vector of variables and discovers that trade globalization has a negative mediating effect on the mechanism. The baseline result passes two robustness tests. This study has practical significance. Languages make buyers overestimate or underestimate M&A risks, which make buyers take unnecessary risk aversion methods or neglect risks. To mitigate the cognitive bias induced by languages, buyers can encourage managers to master foreign languages so that they can have various thinking patterns. Buyers can also internationalize organizations, employing staff with different linguistic backgrounds.

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Investment and Economic Situation Analysis of Germany

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Abstract: This article starts with the Preliminary Information of German investment and economic conditions, and then studies the financial markets at all levels in Germany, as well as government-ed fiscal issues, analyzes the German economic status through foreign debt, IMF programs and various indicators, and then introduces the status of German economic reforms. And the impact of the international situation on the German economy, and then through risk analysis, the development of the German economy and investment can be obtained.

Keywords: Investment; Economic Situation; Risks analysis, Germany

1. Preliminary Information

Germany is a highly developed capitalist country. One of the four largest economies in Europe, its social security system is perfect, and its citizens have a very high standard of living. The initial value of German gross national product in 2017 was 3.26 trillion euros, a year-on-year increase of 2.2 percent, and the average per capita was 44,594 dollars. High-end manufacturing, represented by automobiles and precision machine tools, is also an important symbol of Germany. At present, Germany is the largest economy in Europe and one of the founding members of the European Union. In 2002, Germany introduced the European common currency Euro. As a member of the Eurozone (with a total population of nearly 338 million), Germany's monetary policy was developed by the European Central Bank^[1], headquartered in the European continent financial center, Frankfurt. German inflation rate has continued to rise recently, but at the same time Germany has a very low budget deficit.

2. Financial markets in Germany

The four financial markets that make up the Frankfurt International Financial Centre are the Frankfurt Monetary Market, the Frankfurt Capital Market, the Frankfurt Foreign Exchange Market, and the Frankfurt Gold Market.

Frankfurt currency market. The financial power of Frankfurt forms a huge short-term capital loan market. Its business mainly includes interbank lending, open market business, discounted bills, deposits, and short-term loans. The interbank borrowing business is mainly to borrow short-term funds. Commercial banks have a demand deposit account in the Commonwealth Bank. When a bank borrows from another bank, the lending bank informs the federal bank to transfer the loan back to the bank. This kind of business allows banks to adjust the balance of their existing federal banks at any time to maintain the bank's liquidity. The commercial bank in Frankfurt is a comprehensive bank that operates a variety of banking businesses, absorbing both current and long-term deposits as well as short-term loans. Frankfurt Capital Markets. During the operation, long-term borrowing funds mainly based on Frankfurt's commercial banks and the Frankfurt Stock Exchange. In addition to issuing long-term loans, commercial banks also operate businesses that issue and trade securities, many of which are members of the Frankfurt Stock Exchange. The settlement of the Frankfurt Stock Exchange is highly efficient, mainly because Frankfurt has banks that directly deal with securities trading, such as the Frankfurt Stock Exchange and the German Foreign Reserve Bank, the former engaged in the transfer, custody and interest collection of German securities. The latter is responsible for keeping foreign securities.

Frankfurt foreign exchange market. The Frankfurt Stock Exchange is one of the top five foreign exchange exchanges in Germany. Because the Federal Bank only intervenes in the Frankfurt Foreign Exchange, the foreign exchange has taken the lead in four exchanges in Berlin, Düsseldorf, Hamburg, and Munich. effect. The more developed foreign exchange market enriches the content of the Frankfurt International Financial Center. The importance of the German foreign exchange market is actually second only to London in Europe. It consists of two parts, the first part is the formal pricing market every day, and the second part is the general market. Germany's general foreign exchange business activities have thousands of banks in Germany through telegraph and telex, but only about 100 are involved in the foreign exchange market. In addition to the general requirements for the cautiousness and liquidity of banking activities, the German Federal Bank usually has a freely convertible currency regardless of the foreign exchange market, because, in the view of the German Central Bank, it is quite difficult to control market forces. Relatively speaking, the German foreign exchange market has good flexibility, can adapt to trade and technology changes and unforeseen external emergencies, thus providing strong support for the Frankfurt International Financial Center.

Frankfurt gold market. The Frankfurt gold market is the European gold market after the London gold market, the Zurich gold

market, and the Paris gold market. Due to the high value-added tax imposed by the government, the business has developed slowly.

3. Government Involvement

External debt: Germany's External Debt accounted for 143.2 % of the country's Nominal GDP in 2018, compared with the ratio of 145.0 % in the previous year. Germany's External Debt: % of Nominal GDP data is updated yearly, available from Dec 1999 to Dec 2018. The data reached an all-time high of 165.1 % in Dec 2012 and a record low of 93.5 % in Dec 1999. In the latest reports of Germany, Current Account recorded a surplus of 25.9 USD bn in Jan 2019. Foreign Direct Investment (FDI) increased by 122.8 USD mn in Aug 2018. Germany's Direct Investment Abroad expanded by 14.5 USD bn in Feb 2019. Its Foreign Portfolio Investment increased by 9.4 USD bn in Mar 2018. The country's External Debt reached 5,533,437.8 in Dec 2018. The country's Nominal GDP was reported at 1,010.3 USD bn in June 2018. ^[2]Germany's external debt is around 5.36 trillion. Germany's external debt to GDP ratio decreased in the past 4 years. Its credit rating has been improving over the years as a result of falling debt. A ripple effect of that status is that Germany has become a more attractive country for investment^[3].

IMF programs: The IMF, backed by the U.S., has pressed Germany and others with budget surpluses to cut taxes or raise spending to prop up growth. Countries with a budget surplus "should certainly make use of it and have the space to invest and to participate in the economic development and growth," IMF Managing Director Christine Lagarde said, "but not enough has been done on that front." Germany now is under pressure from IMF and also in the stable finance situation. It's a good time for Germany to take actions to boost the economic growth and it will be a very good opportunity for foreign investors to invest in Germany^[4].

Inflation targeting: The Deutsche Bundesbank is the independent central bank of the Federal Republic of Germany. In cooperation with the European Central Bank (ECB, 2019) and the other euro-area central banks – which together form the Eurosystem – the Bundesbank has been given the mandate of maintaining price stability. Both of them do not have the inflation targeting. They clarified that "in the pursuit of price stability, it aims to maintain inflation rates below, but close to, 2% over the medium term". (Deutsche Bundesbank, 2019) They have the same goal to maintain the price stability and aims at inflation rates of below, but close to, 2% over the medium term. Both The Deutsche Bundesbank and the European Central Bank are among the most independent central banks in the world so the monetary economy is also independent^[5].

State-owned business: Germany have some state-owned business, The economically most significant ones are probably Deutsche Bahn (wholly owned by the Federal Republic) and Volkswagen (minority stake by the state of Lower Saxony in Germany).

Privatization: Several state-owned business in Germany went privatized.

Foreign exchange market intervention: The foreign exchange market intervention in Germany is led by European Central Bank. There are two types of FX market intervention, Unilateral or concerted action. In the absence of any formal agreements or general guidelines, the Eurosystem may decide, where necessary, to conduct foreign exchange interventions. The Eurosystem may conduct such interventions either on its own (i.e. unilaterally) or as part of a coordinated intervention involving other central banks (i.e. concerted action).

Centralised or decentralized: Interventions may be carried out either directly by the ECB (i.e. in a centralised manner) or by NCBs acting on behalf of the ECB on a "disclosed agency" basis (i.e. in a decentralised manner). Whether the intervention is conducted in a centralised or a decentralised manner is irrelevant from the point of view of the ultimate objective of the operation. Any intervention relating to another EU currency is performed without prejudice to the ECB's primary objective of maintaining price stability and is carried out by the Eurosystem in close cooperation with the relevant non-euro area NCB, particularly with regard to the financing of the intervention^[6].

Germany's economic freedom: Germany's economic freedom score is 73.5, making its economy the 24th freest in the 2019 Index. Its overall score has decreased by 0.7 point, with declines in monetary freedom and business freedom outpacing an increase in government integrity. Germany is ranked 14th among 44 countries in the Europe region, and its overall score is above the regional and world averages. Overall, as for government involvement, Germany is a promising market to invest.

4. International situation

Germany as the member of European Union, it is influenced by the international trade environment. As one of the most important members of European Union, Intra-EU trade accounts for 59% of Germany's exports (France 8%, United Kingdom 7% and the Netherlands 7%), while outside the EU 9% go to the United States and 6% to China. In terms of imports, 66% come from EU countries (the Netherlands 13%, France 7% and Belgium 6%), while outside the EU 7% come from China and 5% from the United States. Thus, the economy's development of EU has great influence on Germany. (Anonymous, 2019) In addition, IMF helps Germany manage the balance of payments difficulties and international financial crises. The International Monetary Fund (IMF) is an international organization, consisting of 189 countries working to foster global monetary cooperation, secure financial stability, facilitate international trade, promote high employment and sustainable economic growth, and reduce poverty around the world. For example, IMF encouraged Germany to spend more and should do so to boost economic growth and reduce its current account surplus in 2018-2019. The fall of the Berlin Wall in 1989 influenced not only the German economy, but also the economies of countries around the world. In the lead up to the collapse of the wall, Hungary and Czechoslovakia opened their borders and allowed East Germans to take refuge in Austria. (Drew, 2014) The influx of people meant the economies of neighboring countries took a hit.

After the Berlin wall fell, both East and West Germany economies had a big change. In early days, the West was taxed heavily in a bid to raise the funds to invest in the East, while the East German currency became worthless. West Germany had to put forward 10% of their GDP to rebuild the eastern area. After the wall fell in a short term, the GDR (German Democratic Republic) which was in power in the East stopped its governance of East Germany. In this case, the GDR economy collapsed because of the change of currency. Before the reunification of the two regions, 1 West German Deutsche Mark was the equivalent of 4.50 GDR Marks. After the collapse of the GDR, the currency was set at a rate of 1 to 1^[7]. In addition, the horrible increase of the number of refugees to German in 2015 still has a big effect to German. However, it is good news for direct investors. The increase in population gives more chances for direct investors to find workers here. Since most immigrants have strong motivations to work, it is easy for employee to find good workers with low costs. However, more chances always accompany with high risks, the German government also faced big political

crisis in 2015. However, the German government has proved its stability in recent years.

5. Risks analysis

Higher taxes and lower spending in Germany have led to the budget surplus and the contraction of more public debt (59.8% of GDP in 2018, 63.9% in 2017, according to IMF). But at the end of 2018, the economy of Germany contracted due to the decrease of export, in the face of the trade tensions between US and China, and a hard Brexit. In addition, the government's fiscal policies predict less revenue, tax cuts and more government spending in 2019, which may lead to the increase in deficit or fiscal deficit. Nevertheless, the country's public debt is expected to further decrease down to 56% of GDP, below the 60% target set by the European Union. Inflation – at 1.8% in 2018 – should remain stable in 2019. However, Unemployment is expected to fall to 3.4% and 3.3% respectively in 2019 and 2020, from 3.5% in 2018 (IMF). In this case, the economic situation would attract more investments in 2019 and the uncertainty of investment is relatively low.

Political risks: When it comes to political risks, the capacity of Germany to honor its payment obligation is high, so the political risk is relatively low. However, the results of the general elections of September 2017 forced the Chancellor Angela Merkel to form a grand coalition with the Social Democrats, after a failed attempt to assemble a government with the liberal Free Democrats and left-leaning Greens. The social democrats advocate the modernization of the economy to meet the demands of globalization, but they also stress the need to address the social needs of workers and society's disadvantaged. The change of government management might release a positive signal to the foreign investors.

Because Germany has a net export, we believe that Germany's local economy is developing better. At this time, the euro will appreciate and the relative foreign currency will depreciate. From this perspective, when foreign companies complete a trade with Germany, they export to Germany. German needs to use the local currency Euro to exchange foreign currency, and then use foreign currency to make the payment; if the foreign currency depreciates in the market on the future payment date and the euro appreciates, the German party can pay with less euros. At this time, foreign companies have to bear the risk of trading.

6. Conclusion

From the information above, we know the economy of Germany kept the stable and healthy development. Historically speaking, Germany is a highly developed capitalist country while Frankfurt is a city with a long-standing financial tradition, which means the financial system has developed. In other word, German financial market has good flexibility and can adapt to big changes in the market. Most indirect investors and bankers may be attracted because of its high credit and high reliance. In addition, as Britain fell out of the EU, the status of European financial center of Frankfurt has risen. The good financial environment, the economic strength and high sovereign rate of German give Frankfurt a chance to be the biggest financial center in Europe. As the Global financial center ranking index, Frankfurt has risen from the 20th to 10th in 2018 after Britain fell out of the EU. The quick development of Frankfurt is a signal of more investing chances which may attract more investors.

High taxes, low inflation rates and low government spending are the main characters of the German government, which led to budget surplus and low external debt in the past few years. Conversely, export occupies the main component of German economy. However, because of the sharp decrease in export in 2018 and the pressure from IMF, the government decided to increase government spending to stimulate the economy, which is a signal for Germany to use expansionary fiscal policy. Since the political risks of Germany are low in the past few years, the government bonds may be good choices for foreign investors. Although the export will have a trend of decrease in the future, export is still the most important part in German economy. In other word, the German economy is very sensitive to the change of exchange rate. Since Germany keeps the fixed exchange rate policy, investors can avoid exchange rate risk. Unifying the country national condition, Germany is the most populous country and the biggest economic entity in EU with a good location. Both the living standard of people and the level of economy development take the leading position in the world. Moreover, the refugees will not be a big problem for the German society. Instead, the increase of population gives direct investors more chances to make profits in Germany. Compared to other countries in EU, German's status of leader of EU has been strengthened after Britain fell out of the EU. On one hand, ECB is set in Frankfurt, which takes responsibility of the monetary policy of EU and currency regulation of the whole Eurozone. On the other hand, the recent increase of property price in Frankfurt and offshore RMB, which increases the foreign exchange reserve in Germany, give more investment opportunities for both domestic and foreign investors. Meanwhile, the high business and investment freedom in Germany provides an ideal environment to do business.

In conclusion, Germany is a good country to invest for both direct and indirect investors. Considering the high stability and high security of the financial markets, hedgers may prefer to invest here. Also, the possible change of export and government spending in the future and the influence of Brexit give investors more chances and greater development potential.

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A Theoretical Study on the Influence of a Strong State to a Weak State

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Abstract: The purpose of this article is to provide a theoretical foundation of influence process between a strong state and a weak state, which is, in some degree, meaningful for social observers to understand the phenomena of compliance and conflict in the international community. The influence process in this article is devised as starting from proposing the influence strategies to analyzing the influence results, pointing out when a strong state's influence would be successful and when their conflicts would happen.

Keywords: Influence strategy; Strong state; Weak state; Interaction

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1. Introduction

The ability of a powerful state to alter the foreign policy of a weaker state has long been recognized. The foreign policy orientation of a relatively weak state comes to reflect the interests of a more powerful state.^[1] An effective influence strategy is defined as avoiding of either a diplomatic defeat or war and ineffectiveness of an influence strategy would bring about a diplomatic defeat or even war.^[2] Exercise of influence between states may take place between two strong states or two weak states as well as a strong state and a weak state. The effective influence between a powerful state and a weak state is one of a usual situation, because the influence of them is usually constructed based on a dependent relationship. The purpose of this article is to provide a theoretical foundation of influence process between a strong state and a weak state, which is, in some degree, meaningful for social observers to understand the phenomena of compliance and conflict in the international community.

2. Influence Strategies

There are four influence strategies have been summarized through observing the practical influence attempts in the international community.^[3] These are bullying, reciprocity, appeasement and Trial-and-error.

Among these four strategies, the reciprocity has produced a high rate of success in crisis bargaining.^[4] The reciprocal strategy is an exchange process of compliance for positive inducement or noncompliance for negative inducement between the influencer and the influencee. In its purest form, state that uses it begins with a cooperative move through positive inducement and after that simply responds in kind to the types of reaction made by the target state on each successive exchange. Bullying is based on the use of negative inducements. In this form, any response without outright compliance encounters a more severe threat or punishment on each successive influence attempt- response sequence until the target has been induced to comply. The third one is Appeasement. Just as its name implies, it is virtually the opposite of the bullying strategy. Any response without outright compliance of the target state would result in the more positive inducement. Finally is Trial-and-error. It is a bit different from the preceding three strategies and is analogous to the reciprocity seemingly. The distinction of them can be comprehended as the three strategies mentioned above assume that the influencer holds definite assumptions about what is likely to motivate the target and has developed an influence strategy based on those assumptions. However, the trial-and-error influence strategy begins with no such assumptions. The influencer simply adjusts its choices of inducements based on the target's response to the previous influence attempts. Inducements which generates positive responses are repeated, otherwise are not.

3. The Specific Influence Process and the appraisal

The specific bargaining process of the influence between a strong state and a weak state is regarded as an influence-response sequence, and each influence-response sequence comprises three moves. First, state A attempts to influence the behavior of state B through a demand that may be associated with positive or negative inducements, and usually, it begins with a positive inducement but sometimes are not. At the Second move, state B responds to the previous influence attempt of state A. Thirdly, state A observes state B's response, and select the next best inducements based on state A's comprehending.^[5] If state B cooperates with state A's demand, state A would supply the next positive inducement; and if state B has not complied with the demand, and then state A would respond with negative inducement. One point must be pointed out regarding the purest form of an influence-response sequence. In

practice, not every influence-response sequence is strictly in the light of the order of the aforementioned three moves.^[6] Sometimes, state A's maiden inducement may be postponed after its demand as well as B's response, and which does not break the nature of the reciprocity. The credibility of inducement here needs to be mentioned, if state A does not cash the check based on state's response, A's creditworthiness would decrease, and B would start to distrust A's word.^[7]

An influence effort can be termed as the effective influence if state B complies with state A's requirement or adopts a policy which is favorable to state A as well as placates A with an alternative behavior or policy. Influence can be appraised as an ineffective influence if state B ignores the demand by not acting, rejecting A with a provocative act, or a mixed response combining defiance with a placating action or policy which is not an alternative to A's demand.

4. The Analysis of the Influence Results

The analysis of the influence results under diverse conditions needs to be clarified in order to figure out under what conditions the state B would be more likely vulnerable to the influence attempts from the state A, and in what conditions A's effort will be likely to be immune by B as well as the conditions with difficulty to predict. The research argues that the general parameter to check the influence results between a powerful state and a weak state is whether these two states share the national goals. In general, if they share the same ones, they would be united in policies and the influence would not be important. If not, another two parameters have to be introduced to examine the influence results, and which are the degrees of the influence intention of state A and the refusal intention of state B. Since the degrees of their intentions would determine their behaviors in each influence-response sequence. The specific analysis is listed as follows.

If the national goals of state A and state B are oriented to the same direction, they would be more likely to be united in the policies. Under this condition, they may maintain political mutual trust in each other. Also, the state A may supply the comprehensive foreign aids to B, and B is also willing to accept the assistance coupling with the bundled behavior. As a result, B may always follow A's step and is without the need to impose a sanction to force B.

If the national goals of state A and state B are not oriented to the same direction, normally the political trust in these two states begins to fall off, and the results of influence are depending on a case-by-case basis. In the first case, if A possesses a strong influence intention and B hold a weak refusal intention, then B may highly accept A's demand. On this occasion, A may be willing to offer foreign assistance and impose sanctions, or even expand the aids and upgrade the sanctions to induce and compel B to comply. And B may not be immune to the tempting assistance or take risks in incurring sanctions. In the second case, if A possesses a weak influence intension and B hold a strong refusal intention, then B may highly reject A's demand. Since A would not expand the aids or upgrade the sanctions if B has not cooperated, and B would not comply A's demand in spite of A's aids and sanctions. In the final case, it is difficult to predict the influence results if these two states share the similar degree of intentions.

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Vocabulary Teaching in Chinese EFL Reading Class in Universities--- A Case Study

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Abstract: Taking the reading course of English majors in Xingyi Normal University for Nationalities as an example, this study tries to identify the problems and effects of vocabulary teaching in reading class, analyzes the reasons for the poor effect of vocabulary instruction from the perspective of teachers and students, and puts forward practical suggestions to improve the teaching effect.

Keywords: Vocabulary instruction; The teaching of reading; Effectiveness

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1. Introduction

Reading course is a very important course for English majors in colleges. Reading comprehension requires students vocabulary foundation and reading strategies. Taking the reading course of English majors in Xingyi Normal University for Nationalities as an example, this study tries to find out the problems and solutions on vocabulary instruction. According to the teaching curriculum, students have two hours of classroom teaching each week; all teachers who teach the course are expected to follow the same teaching schedule and they use a textbook. It takes about five hours to finish one unit.

When talking about the importance of reading comprehension competence for language learners, Keith Folse (2010) cited Grabe (1991) and Johns (1981) by saying that ‘For academic success, many experts agree that the single most important skill is reading’ (p. 139). There is no doubt that reading ability is a major part that is to be tested for college English students. For English majors, their short-term goals in learning English is to pass exams like final exams for different courses, College English Test Band-4. In any of these tests, reading ability is an essential part that will be measured, and it often occupies a relatively large percentage of the total score.

Though the primitive aim of reading course is to develop or train students’ reading comprehension competence, vocabulary teaching should not be overlooked by reading teachers for obvious reasons. Firstly, to language learners, vocabulary knowledge is essential for any other skills like listening, speaking, and writing. Secondly, vocabulary knowledge is fundamental to reading comprehension. One can not understand a text without knowing what most of the words mean. Many scholars (for example, Nation, 2006; Grabe, 2009) have demonstrated that readers need to know about 95%–98% of the words in a passage in order to be able to comprehend it.

2. Problems

Like has been pointed out, it is important to teach vocabulary in reading classrooms; we are fully aware the necessity too. Therefore, much emphasis has been placed on vocabulary teaching in reading classrooms. Usually, among the five hours allotted to each unit, two of which will be devoted to direct vocabulary teaching or exercises on vocabulary. The problem is that though much time has been spent on the teaching of vocabulary, the results have been unsatisfactory, and outcomes have been poor. Evidence for this hasty conclusion mainly comes from the performance of students on final exams and CET-4. In designing papers for final exam, reading teachers have been ‘suggested’ by department leaders to make sure most students can get to the pass scores. And recent years, the rate on passing CET-4 among English majors has been very low.

It has been noticed that teaching methods in vocabulary instruction have been dull, tedious, and ineffective. The common practice for most teachers in the department is like this: Before come to the text, the teacher would first lead students to read the new words for the unit. Without explanations on any new words, they come to the passage itself and begin to teach the text. When encountering the new words in the text, teachers usually will stop reading activity and begin to explain the meaning and usage of the new words by translating them into their L1, or give sentence examples in which the new word is used, some teachers may even ask students to make sentences by using the new word. This method, according to some experts on teaching reading, is dangerous and undesirable because it changes a reading class to a vocabulary class; what’s more important is that this practice interrupts students’ understanding

on the text itself. Furthermore, after finishing one unit, teachers usually will continue to teach the next unit, with little assessment or other ways to strengthen students' understanding of the text and remembering of the new words.

It is shocking that we have been teaching our students like this year after year without knowing the dangerous effects of such methods. One of the reasons may be that we, as language teachers, are either not pedagogically trained on teaching reading, or do not receive adequate training.

On the students' part, it can be said safely that some of our students are not highly motivated in learning, and many of them are not strategic learners either. It is not surprising if you see many students in some corners of the campus, holding a mini dictionary or a textbook, murmuring out the spellings of words and memorizing them. It is also noticed that some students would turn to their electronic dictionaries whenever they come across a new word in reading. Obviously, students need to change their learning strategies too. But, here again, they need to notice first that their ways of learning are problematic, and it's their teachers' job to make this clear.

3. Solutions

There are many reasons for the ineffectiveness of vocabulary teaching in reading classrooms, but possible solutions may mainly come from two aspects: one is from the perspective of teachers and teaching strategies, the other is from the students.

From the teachers' perspective, some changes could be done.

Firstly, the present in-service teachers should update their knowledge on teaching methodologies. For many senior teachers, they have been teaching in almost the same way for many years; and their chances to go for any training to update their knowledge are slim. Therefore, teachers should get training regularly while in service.

Secondly, teachers should be aware of the importance of dynamic vocabulary instruction, adopting a combination of different teaching strategies to achieve good teaching results. For example, they can use different ways to deal with different words, or employ different teaching strategies according to different texts. To do so, teachers may refer to relevant literature, which is already well-established so far. For example, Nation (2004) provides ten ways of dealing with words in intensive reading with descriptions of the principles of how to decide what way is appropriate for a particular word. Many other researchers have also offered us very useful strategies and techniques for quality effective teaching of vocabulary in reading course (e.g. Nagy, 1988; Manyak, 2010), which can be mainly summarized to the following: encouraging wide reading, emphasizing learning from context, using morphological knowledge such as word parts, using graphic organizers, developing students' word consciousness, encouraging students' use of learned words, etc..

From students' perspective, they should realize the important role of vocabulary in their language learning, actively participate in classroom activities. They also should learn to adopt different learning strategies in steady of consulting new words in dictionaries and memorizing them.

The above solutions may be effective in improving the teaching of vocabulary in reading class for the following reasons:

Firstly, it is commonly recognized that training for in-service teachers in any institutes is necessary and important. It is a major way to update staff's professional knowledge.

Secondly, many scholars have advocated that effective teaching of any language skills should involve combination of several methods. No single teaching method can achieve successful teaching.

4. Conclusion

In a word, the problems observed in the teaching of vocabulary in reading classrooms are discussed; possible solutions are suggested to improve the situation of ineffective vocabulary instruction. But due to the limitation of the author's knowledge and perspective in language teaching, the solutions could be limited too. Nevertheless, in teaching reading, teachers should try to adopt different teaching strategies and find out ways that can work effectively.

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The Construction of Comprehensive Measurement Model for the Development Potential of Research Practice Education Base

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Abstract: With the rapid development of research and study travel, the demand for research and study practical education bases and the requirements for their quality are also expanding and improving. To fill the blank in the research of evaluation studies the development of education bases and avoid studies blind in the process of practice education base to create the phenomenon such as reporting, quality the good and bad are intermingled, many elements of regional development at home and abroad, this paper, and study the multi-index comprehensive measure, from the resource(R), marketing(M), security(S), environment(E) four dimensions selected 20 indicators, Combined with the AHP analytic hierarchy process to determine the weight, the fuzzy comprehensive evaluation method to quantitatively assign the value index, constructed the polygon method and weighted average sum method of comprehensive measurement of the development potential of research practice education base, and Lanxi as a case of empirical research on the comprehensive measurement of the development potential of research practice education base. Results show that the constructed studies practice education base and development potential of comprehensive measure evaluation model can better reflect the base of the studies traveling development potential, and is the base of the research study practice education base development provides a certain theoretical foundation and the basis, to studies the practice education base case area and even the whole country development has exemplary role and promote the creation of meaning.

Keywords: Research practice education base; Comprehensive measure; Polygon method; Weighted summation method; Jinhua lanxi

1. The introduction

As an important educational reform path to comprehensively improve quality-oriented education of primary and secondary school students and cultivate social responsibility and practical ability, study travel has been actively responded by all parts of the country and various fields since it was proposed in 2013. The number of people who take part in the research and study travel continues to increase every year, the demand for the research and study practical education base is gradually expanding, and the quality demand for the research and study practical education base is also constantly improving.

However, despite the hot development of research and study travel and the in-depth study by many experts and scholars, there is still a lack of theoretical research on research and study travel, especially the development and evaluation direction of research and study practical education base. Without scientific admittance threshold, the blind creation of research and practice education base is very serious. How to establish scientific research practice education base development evaluation index, in order to screen out suitable research practice education base in the early stage of construction, improve the efficiency of the base construction, and provide more accurate basis for the government support is the biggest problem to be solved in this paper. For regional development at home and abroad for reference, the multi-factor and multi-index comprehensive measure research, combining tourism resources, tourists to the three elements of tourism system, tourism and regional Mr PRED coordinated development theory, build from resource(R), marketing(M), capacity(C), environment(E) four dimensions of studies the development of education bases potential comprehensive measure model, It provides scientific theoretical basis and admittance threshold for the reasonable establishment of research practice education base, reduces the subjectivity in the establishment process of research practice education base, and avoids the blindness in the establishment of research practice education base, and has a certain practical significance.

2. Theoretical model construction

2.1 Theoretical Basis

2.1.1 Regional development-PRED coordinated development theory

Organic whole dynamic open complex system(Mr PRED coordination theory), consists of the system of population, resources, environment, mutual promotion and mutual coordinated development of the big four subsystems, formed by coordination-not harmonious coordination the changing process of dynamic reciprocating cycle, and the system have integrity, dynamic, regional, regulation of sex, long-term and multilayered.

2.1.2 Scenic Spot Development--basic support of resource market

The development of scenic spots needs four aspects: resource potential, market potential, infrastructure, and support system. The resource potential includes resource scale and resource quality. Market potential includes tourism location and source market; Infrastructure including the tourism industry and sanitation; The support system includes government support and villagers' willingness, and the development potential of the scenic spot is mainly reflected in the above points.

2.1.3 Educational Objectives-Bloom's Educational Objectives

From Bloom's refining of educational goals, his understanding of educational goals is mainly put forward in the fields of cognition, emotion and motor skills.

Establishment of comprehensive measure index of development potential of research practice education base

Selecting scientific and reasonable dimensions and index factors to create the comprehensive measurement index of the development potential of the research practice education base is an important quantitative standard for comprehensively evaluating whether the base has the research development potential or not and a scientific basis for evaluating the development potential of the base^[1].

Based RMSE analysis model, draw lessons from other related evaluation index system, follow the scientific nature and operability index construction principles, finalized with resources, market, security, environment dimension, from two aspects of basic condition and development potential, build four indicators, and eight criteria layer and index factor of 20 studies index system of practice education base and development potential.

3. Estimation of the development potential of research and practice education bases

3.1 Comprehensive measurement index factor quantification of development potential of research and practice education base

In the comprehensive measurement index factors of the development potential of the research and learning practice education base constructed, some indexes can be determined quantitatively, but some indexes tend to be subjective and cannot be evaluated quantitatively. Combined with the fuzzy comprehensive evaluation method (10-point system), the paper carries out fuzzy scores on various indicators of the development potential evaluation of the research and learning practice education base constructed, and determines the evaluation and scoring standards, and quantifies the indicators^[2].

3.2 Determining the weight of index factors for comprehensive measurement of development potential of research and practice education bases

The determination of the weight of each index in the comprehensive measurement of the development potential of the research and practice education base is also extremely important for the scientificity and rationality of the construction of the index model.

The nine-level scale evaluation method proposed by Saaty et al. Correlates the numerical scale with the written narrative score. Experts and scholars compare and score the indexes on 1-9 scale to form the importance scoring matrix and finally determine the weight. Psychologically, it is shown that most people's ability to distinguish the differences between different things in the same attribute is 1-9. The scale of 1-9 can more accurately reflect the judgment ability of most people. The specific meanings of each numerical scale are as follows.

4. Evaluation on the development potential of Jinhua Lanxi Research Practice Education Base

Jinhua has a long history, flourishing culture and numerous celebrities. Known as "Little Zoulu" in history, Jinhua is known as "a land of history and culture, a place where celebrities are gathered, a city of flourishing literary style and a town of beautiful mountains and rivers". Lanxi has prospered in commerce since ancient times and is listed as one of the seven commercial ports in Zhejiang Province. It has magnificent architectural scale and unique artistic style, and meanwhile has rich research resources such as ancient villages, towns and cities.

5. The conclusion

Based on the RMCE analysis model based on construction, this study constructed the evaluation index system of the development potential of the research practice education base, and took Jinhua Lanxi City as the case area to make a comprehensive evaluation of the development potential of the base, and determined the list of the cultivation of research practice education base. This paper aims to improve the rationality and scientificity of the establishment of the research practice education base, provide some theoretical basis for the development of the research practice education base, and avoid the blind and inefficient construction of the research practice education base.

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A Brief Analysis of Gothic Culture

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Abstract: The Statue of Liberty, Barbie doll, American Gothic, buffalo and nickel, and Uncle Sam are known as the five cultural symbols of the United States. Originally, American Gothic is a 76.2x63.5cm oil painting created by Grant Wood who graduated from Art Institute of Chicago. The painting consists of a house, a farmer and his sister, conveying the author's deep understanding of Gothic art. However, in the late period, American Gothic gradually became a synonym of a thought, and also represented a group of people with common characteristics. This thesis mainly analyzes the definition, cultural connotation, existence value and derivatives of Gothic culture in The United States.

Keywords: Gothic culture; American gothic

1. The Definition of Gothic

The term "Gothic" first appeared in the late period of Renaissance. Gothic has many different meanings in modern English. It is not only a modern literary and artistic term, but also a social and historical term. Gothic can even be used as a specialized academic term in architecture and decorative art design.

As a literary word, it also has a variety of cultural meanings. It can refer to a new phenomenon of literary creation, a new kind of literary works, and a new artistic method of literary creation. Moreover, in different periods and different development stages of literature, the literary connotations of these literary creation phenomena, literary works and literary creation methods are different from each other.

In terms of architectural art, Gothic is also regarded as the architectural style of a specific period. Gothic architecture is a European architectural style which became flourishing between the Roman period and the Renaissance period. It originated in France around 1140. It developed from the building style of the Roman period and was an inheritance of Renaissance architecture.

Gothic churches, were mainly popular in Europe at the medium and end of the Middle Ages, originating in France in the 12th and 13th centuries and lasting until the 16th century. The overall gothic architecture features towering and sharp eaves. Typical gothic buildings are Notre Dame Cathedral in Paris, Cologne Cathedral, Milan Cathedral and other religious buildings. Gothic buildings fully express the mysterious, tragic and noble ancient artistic thoughts and feelings with its outstanding mural carving skills, and have a great historical and artistic value for other ancient architectural carving arts in later generations.

In terms of painting art, a 76.2x63.5cm oil painting named "American Gothic" was born in the United States in 1930, and had a huge impact on the society. Grant Wood, the painting's creator, graduated from the Art Institute of Chicago and became fascinated with the gothic art in Munich, Germany. In the painting, the man is looking at the front horizontally, and his lips are tightly closed.

The expression in his thin and yellow face is very serious, with his round glasses carefully set on the bridge of his nose. He holds a fork in his muddy hand, symbolizing the unquestionable male authority and power in the patriarchal society of the 19th century. Beside the man stood an unsmiling woman with her lip closed, eyes slightly looking toward the right man.

The woman dressed herself with a typical victorian woman dress, showing the rigorous and obedience of women in that era. The expression in her eyes embodies the "obedience" of woman for man, mapping out the thought and the trend of male supremacy in that era. Culture is an epitome of the historical development of an era. The excellent painting also fully shows the spirits and life style of farmers who worked hard in that prosperous era when the economy was agriculture-dominated.

2. The Cultural Connotation and Existence Value of Modern Gothic

However, gothic is not only a token for the culture and architectural style mentioned above. In modern times, gothic has mainly been developed into a thought and culture trend. It is unfortunate that, in modern society, many young people are at the mercy of a miserable life devoid of joy and feeling of fulfillment.

But gothic "rationalizes" and "personalizes" this kind of depressing life, and gradually develops it into a way of living and entertaining. In other words, pain is my choice of life style--it is also an "art." Everyone is an independent existence in the society. Of course, one can choose his own unique and different living state and mode. Optimism no longer uniformly dominates all people's life, and is also not an inherent survival mode advocated by the public. Pain and depression can also be the theme song of life.

Under the influence of such a thinking model, people can also live their own life in depression state, which is also an unique choice. Life is governed by oneself and determined by oneself. The value of life should also be defined by oneself. As long as you live in your

own way,you can realize your"value".In today's Chinese society,depression culture is popular on the network.A new generation of young people regard depression as a kind of beauty,and also enjoy this type of strange culture,which is also a kind of extension of the gothic culture.Under this kind of culture,one can release his negative emotions freely,and be brave to face them without shame.This is another"active"life.

Just as the word"Byzantine"suggests unnecessary complexity,gothic has become a new adjective.In this dimension,it is necessary to talk about the gothic novel.The gothic short story originated in the late 18th century in Britain,which was created by Horace Walpole,a famous novelist.In his novel named *The Castle of Otranto*,he established the writing model theory of the early classical gothic novel.In the 17th and 18th centuries,gothic horror stories began to become widely popular in Britain,whose contents were mainly about revenge or murder in spooky gothic buildings.

Besides,gothic may still be an effective treatment for human psychosis.If you carefully describe the true story of your last suicide attempt to an upper-class white collar,chances are they will look at you in a strange light and keep away from you.However□the goth doesn't see it in that way.A small cut on your wrist is greeted with a words—"You're handsome!"

It is actually a respect for the other person's past history,as well as their experience.There is more than one way to live a life.It is also meaningful to respect the uniqueness and difference of others.All those who can't adapt to modern society want to find their own place in gothic,where they will get others'respect,and never be laughed at due to their uniqueness and strange character.

3. The Derivative of Gothic Culture

Under the influence of various different gothic cultures,a new group appears—goth.The most typical and dominant personality traits of the Goths are:shy and unsociable.They usually have an interest for traditional arts,such as classical music,photography,painting,etc.In terms of human history,they are really interested in the literature,history and social philosophy of various countries.They dress permanently in black or other dark colors.

Goth usually has pale skin and long black hair.Their eyes often release sadness and desolation.They often dress themselves in a weird and morbid way,so many people stay away from them.However,for these goths,each of them has its own unique melancholy and sadness.And gothic is a way for them to express themselves,is a way of life they pursue,which is a kind of behavior art which could help to express their attitude towards life.Perhaps,due to their indifferent appearance,dark clothes,cold and sad eyes,some people will think that they tend to pursue violence,but the fact is that,they mostly advocate tolerance and peace,hate violence and war.

4. Conclusion

This paper mainly starts from the definition of gothic,analyzes the cultural connotation and architectural connotation of gothic,its modern and contemporary cultural connotation and its existence value,a new ideological trend formed in this process,and a derivative appearing under the influence of this kind of culture—goth.

And the emergence of the goth also gives people a profound enlightenment.People's way of life is not rigid and unique,it should be diverse.People should not be laughed at due to their strangeness and uniqueness.In the world with diverse culture,goths try their best to break people's stereotype thinking mode in their unique ways,create a new kind of unique survival mode and the attitude towards life,and make such people also can have their own unique place in society.

The definition of a noun is not invariable,and it will take on new meanings over time.Just like gothic,it was only a kind of architectural term at first,then was developed into a kind of literary form,and then produced deep cultural meanings,and derived its own derivative.Therefore,people should always treat every problem with a dialectical and developmental perspective,and respect others and things different from themselves at the same time.

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Research on Students-centered Teaching in Primary and Secondary School

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Abstract: With the development of education, many teaching methods have sprung up at home and abroad. In the traditional teaching mode, the teacher plays the main function, while students are always considered to learn passively, only learning knowledge from the lessons in the class, the textbooks, rather than learning with initiative. But in the real teaching process, no matter what stage the students are at, there are differences between different students in their interests, knowledge acquired, ability, logical thinking and so on. These differences are not immutable and they will change, which drives to the promotion of a new “Student-centered” teaching mode. This paper focuses on the new teaching mode of “Student-centered” in primary and secondary school, and probes into its effects on cultivating of students’ questioning ability, interest in study and their personality.

Keywords: Students-centered; Teaching mode; Teaching in Primary and Secondary school

1. Introduction of the student-centered teaching mode

The concept of “Student-centeredness” was first transformed by American child psychologist and educator Dewey’s concept of “child-centrism”. Dewey’s child centered philosophy has a great influence on the development of pedagogics. The traditional teaching is based on the spoon-feeding. In the teaching process, the teacher plays the main role and the students learn knowledge passively. Dewey is fiercely opposed to this kind of teacher-centred teaching. His new ideas have attracted the attention of the scholars and teachers and also played an important role in enlightening teachers. The theory has been further applied to the teaching mode of primary and middle schools and gradually developed into the mode of “Student-centered” teaching. It can be said that “Student-centered” is the opposite of “Teacher-centered”.

The main characteristics of student-centered teaching lies on that students take charge of their own learning and teachers mainly work to guide and lead. In the process of teaching, it is more important for teachers to stimulate and guide students’ initiative, not only imparting knowledge but also guiding students to know how to learn.

The teaching modes in class combines group activities, cooperation, designing, individual participation as so on. It should also take advantage of the internet, multimedia and other teaching aids to make a better teaching design planning. The key of “Student-centered” teaching mode lies on whether the main role of students in the class can be shown on the one hand. On the other hand, whether students’ initiative is promoted should be considered. The emotion and motivation that students put into the classroom, and whether the students are their own managers in the class, are playing important roles. If students are in charge of controlling and managing learning activities and are actively involved in classroom construction and activity planning, this teaching mode is considered to be student-centered and should be advocated and actively studied at present.

2. The cultivation of students’ questioning ability

All kinds of teaching is to develop and cultivate students’ abilities and skills, so the aims of teaching should lies on “no-teaching”. The so-called “No teaching” is to achieve “Freedom” in learning. Education in the society should develop into “Free education”. In this process, there should not be limited in “giving” or just “receiving”. Teacher’s teaching responsibility should be related to inspiring, guiding the student, which is to play an auxiliary role. It is a better education for students to acquire the skills to absorb knowledge autonomously and to think critically so that they can have their own unique views on the knowledge.

Therefore, teachers should set up the problem situation and create an atmosphere of questioning. The cultivation of students’ questioning ability depends not on the imparting the knowledge, but on the setting of the situation to make students raise questions. Therefore, teachers should be good at creating unique problem situations based on students characteristics so as to arouse students’ thirst for knowledge. Questions make students’ in a proactive state of acquiring knowledge. For example, in the teaching of a science course related to Environmental Conditions for Seed Germination, teachers can sow radish seeds in moist soil before class. The seed grows up into seedlings a few days later. During class, teachers can ask the students to observe the seedling. In the classroom, the students can ask questions in an enthusiastic atmosphere. They may ask a wide range of questions: Do seeds need water for germination? Does seed germination need air? Does seed germination need temperature? Does seed germination require soil? Does seed germination need sunlight? Do seeds need nutrition for germination? By creating a good situation, it can prompt students to have

questions and ask valuable questions, creating a good questioning atmosphere.

In view of this, in the classroom teachers should not really stick to the knowledge in textbooks and teach it mechanically. Teachers should have their own innovative ability to train and guide students in diversified and innovative teaching methods, stressing on students' questioning abilities, so as to create an efficient class.

3. The cultivation of students' learning interest

Comenius believes that "Interest is one of the main ways to create a happy and bright teaching environment". Interest is of vital importance for students to study. Teachers should change the way of teaching and let students take the lead in the class. In the classroom, teachers play the role of enlightening and inspiring, mobilizing students to find their own way of thinking, to actively acquire knowledge. Only when students have a passion for knowledge can they motivate themselves to think, rather than regard learning as a task assigned by a teacher. If a teacher is too rigid in imparting knowledge, and does not know how to make students fall in love with learning, students will not regard learning as a fun and beneficial thing for themselves.

Therefore, teachers should focus on the cultivating students' interest in learning. Teacher can combine multiple learning methods such as interactive learning, inquiry learning, independent learning and innovative learning, so as to make the class interesting and the knowledge vivid, to provide more resources and platforms for students' learning, encouraging students to learn independently, think independently. And students should have the right to choose and take the initiative to accept knowledge. And they are also responsible for their own learning and assessment.

In the process of participation, students play an indispensable role and experience a sense of respect and satisfaction. Extracurricular activity groups and interest groups also play important roles in cultivating learning interest and enhancing learning motivation.

The timely feedback can also stimulate students' learning motivation. Teachers can use feedback to let students know their own learning results in time, ensuring students that they have great potentials and if they continue to work hard, it will be better, thus making a good effect on stimulating students' learning enthusiasm.

4. The cultivation of students' individuality

The ability to learn and to think individually is the most valuable skill in a student's life. Teaching students according to their aptitude is an educational idea put forward since ancient times. Students have their own unique talent, some suitable for the study of literature, some for physics. And what the teacher should do is by no means let the student to develop in one single way. In the whole process of students' learning, teachers should be student-centered. Every student should be involved in the class, and the rhythm of the class should be adjusted according to the students' learning. According to the students' personality, students have their own ideas. Different students can make their own judgments, express in their own way, solve practical problems by themselves, and acquire knowledge in their own way. So teachers should make the classroom become the platform of their own independent learning development.

The role of teachers is not limited to impart skills, but to inspire, arouse and inspire. Education should help students find what they want, what they are good at, what they are suitable for. Everyone has their own personality. And the teacher can find that students have different talents and hobbies. Therefore, teachers should give them appropriate advice and encourage them when they are in their confusion. Achievement is the only standard to measure students, and the fundamental purpose of school education is to promote the growth and all-round development of students. Education, is to let a person to grow in health and positively.

5. Conclusion

With the development of the society, learning is not just a means for people to obtain a diploma and find a job, but a necessity in life. Therefore, in open education, students are the conscious subject of self-reproduction. Therefore, the new teaching mode of "Student-centered" should be promoted in primary and secondary school. The new teaching mode of "Student-centered" is effective in the cultivation of students' questioning ability, interest in study and their personality, which can help the students in primary and secondary school develop in a healthy and positive way and can release their own potential to a greatest extent.

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Reflection and Reform of Genetics Experiment Teaching in Colleges and Universities

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Abstract: Genetics is a relatively basic course in college biology major. In response to the requirements of the new era of teaching, we should pay attention to cultivating students' innovative consciousness and practical ability in the teaching process of genetics. With the continuous development and progress of biology field, new professional knowledge theory and new biological technology appear constantly, genetics course teaching also ushered in new opportunities and challenges. This paper analyzes and discusses the improvement of the contents, forms and examination methods of genetics teaching in colleges and universities.

Keywords: University; Genetics; The experimental teaching

1. Preface

Genetics experiment is an important basic course for biology specialty and a teaching system to cultivate students' innovative spirit and practical ability. ^[1] We conduct research on genetics in order to discover the laws of heredity and gene variation of living things, and continue to explore and study the origin and essence of life. Nowadays, with the development of biological science, experts have developed new theories and technologies in this field, and the teaching of genetics in colleges and universities has been improved accordingly. We should not only pay attention to the teaching of theoretical knowledge for students of this major, but also pay attention to the experimental teaching, and further improve the quality of experimental teaching. This article will put forward the way of optimizing experimental teaching from the aspects of content, form and examination method.

2. Further optimize the experimental teaching content

Genetic experiment is an important basic course for biology major, which plays a very important role in cultivating students' innovative spirit and practical ability. ^[2] Genetics involves a wide range of experimental teaching content, which is similar to microbiology, cell biology, biochemistry and other disciplines, and has certain repetitive content. The duration of college genetics experiment teaching is relatively limited. In order to improve the effectiveness of experiment teaching within the limited time and enable students to make practical progress in theoretical knowledge and experimental practice, we must first optimize the experimental teaching content.

2.1 Optimize the comprehensive experimental teaching content of cytogenetics

Cytogenetics is an important part of genetics. The purpose of this experiment teaching is to improve the operation skills of students in related chromosome experiments and make students understand the principle of genetic chromosomes more thoroughly. In order to improve the effectiveness of teaching, we can optimize the experimental content of this part. For example, we can effectively integrate the chromosome karyotype analysis experiment of human peripheral blood with the chromosome analysis experiment of drosophila salivary gland to save experimental time and improve experimental efficiency.

2.2 Optimize the comprehensive experiment content of linkage genetics

In genetics experiment teaching, there are many repetitious experiments. In order to improve teaching efficiency, we will integrate similar experiments and carry out teaching. For example, there are many repetitions in maize genetic traits separation, observation of hybrid progeny of *Streptospora crassi* and genetic analysis of hybrid progeny of fruit fly. Therefore, we can organically combine the three into a comprehensive experimental teaching. The experimental teaching includes free combination, gene separation and chain exchange, etc. We can find that there is a certain logical relationship between the above three experiments, and the experimental teaching after the integration of the content is beneficial to save time and improve efficiency.

2.3 Optimize the content of population genetic comprehensive experiment

ABO blood group gene population analysis, RFLP molecular markers and olfacialblindness gene structure observation and analysis have a lot of repetition, and the internal principle has a certain similarity, so the above three can be combined experimental teaching. The comprehensive experimental teaching content mainly includes the study and analysis of population gene types and the study of gene frequency gap of population middle allele genes. Teachers should encourage students to participate in experimental

design and experimental data statistics in the teaching process, so as to effectively improve students' ability of genetic experiment design, stimulate their innovation in the study and operation of genetic experiment, and pave the way for students to participate in genetic research in the future.

3. Change teachers' ideas and enrich teaching methods

3.1 We will further develop the ranks of teachers

The reform of genetics teaching system has made great achievements since it was carried out according to the plan of the Ministry of Education at the end of the 20th century, which has effectively promoted the improvement of genetics teaching level in China and cultivated a large number of useful talents.^[3] In order to improve the overall teaching level, colleges and universities should insist on the construction and optimization of teachers. Experimental teaching requires higher practical ability of teachers, so it requires teachers to have certain practical ability and experience. Some teachers have been engaged in the research work related to genetics before teaching, so they have strong practical ability and sufficient experience. However, some teachers teach directly after graduation, so they are lacking in ability and experience. In this case, colleges and universities can organize internal genetics teachers to exchange experience and give full play to the advantages and abilities of excellent teachers to help young teachers improve their professionalism. In addition, in the teaching process, young and old teachers can be combined with teaching methods to carry out teaching. Young teachers have received more professional education, so they have advantages in theoretical teaching and can be responsible for the teaching of genetics theory. In the process of genetic experimental teaching, teachers with experimental teaching titles can be organized to lead young teachers to complete experimental teaching, so as to enhance the experimental teaching experience and ability of young teachers and improve the overall effect of experimental teaching.

3.2 Optimize experimental teaching equipment

As the saying goes, a good job must be done before it is done. Genetics experiment teaching has high requirements for experimental equipment, and colleges and universities should regularly maintain and overhaul relevant equipment to ensure the safety and functionality of equipment. Only with excellent experimental equipment can genetics experiment teaching be better carried out. For example, the traditional microscope does not have the function of storing images, but in many genetic experiment teaching, images need to be stored as subsequent teaching materials. In order to meet this demand, colleges and universities can increase digital microscopes with more functions such as image storage to improve the effect of experimental teaching. In addition, multimedia teaching can provide more convenience for teachers and students in genetics experiment teaching. Colleges and universities can introduce multimedia teaching system according to their own conditions. In experimental teaching, students can not only observe the characteristics of the research object by using microscope and other equipment, but also observe the characteristics of the research object by using multimedia. For example, when using digital desktop microscope for experimental teaching, we can observe the experimental results through the main monitoring computer. The tutor can comprehensively and intuitively observe the microscope observation status of all students, have a more adequate understanding of the actual operation status of students, and can also carry out the necessary picture storage. In a word, optimizing experimental teaching equipment is an effective way to improve the teaching effect, but it needs the university to invest some funds.

4. Conclusion

Genetics is a relatively basic course in modern biology research, which is closely related to human development, biological proximity and social livelihood. This subject has strong practicality, so the tutor should pay attention to the effectiveness of experimental teaching in the teaching process. Colleges and universities should actively improve the quality of teaching staff, optimize teaching equipment, teachers should enrich the content and form of experiments, and further optimize the assessment system, to promote students' practical progress.

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Abstract: *Luochi Temple Tablet* Written by Su Shi is now kept in Memorial Temple to Liu Zongyuan in Liuzhou City, Guangxi Zhuang Autonomous Region. To date, there are four editions of rubbings of the tablet. The first and the second are both old rubbings collected by Liu Quanfu and Wang Yirong respectively. The third edition is collected by Qin Qingzeng from Liangxi District of Wuxi City. The fourth edition is an complete rubbing collected by the Institute of Human Sciences of Kyoto University. This article compares the shape and location of the same Chinese characters chosen from the four editions and determines that the edition collected by Liu Quanfu is an earlier one.

Keywords: Su Shi; *Luochi Temple Tablet*; Rubbing

Luochi Temple Tablet was written by Su Shi after around the first year of Shaosheng (1094)^[1]. The tablet is 231 cm in length, 129 cm in width. The inscription was written in standard script and has 10 lines with 16 words per line^[2]. The tablet is now kept in Memorial Temple to Liu Zongyuan in Liuzhou City, Guangxi Zhuang Autonomous Region. The content of the tablet used to be inscribed in *The Copybook from the Walls of Jingsu Garden*. It was re-engraved by Liu Zu, Sansu Temple, and Japan in the Qing Dynasty. This was recorded in many books, including Volume 151 of Wang Chang's *Collection of the writing on Gold and Stones*, Volume 6 of Yang Shouchang's *The Copybook from the Walls of Jingsu Garden* in Qing dynasty.

The four editions of rubbings of *Luochi Temple Tablet* Written by Su Shi can be divided into two types: cut-up and complete rubbings. Of all the rubbings, the optimum editions of *Luochi Temple Tablet* should be as follows: the two old rubbings collected by Liu Quanfu and Wang Yirong respectively, one collected by Qin Qingzeng from Liangxi District of Wuxi City (the collo-type during the Republic of China) and the other one collected by the Institute of Human Sciences of Kyoto University (an complete rubbing). These are authentic origins of the numerous re-engraved edition. The calligraphy on the tablet is so excellent that Wang Shizhen commented on it as "the first place in all the calligraphy."^[3] When appreciating the calligraphy of the rubbings, we see elegant and heavy Chinese characters, feeling great respect for them. There are four editions of rubbings of the tablet, and I list them as follows:

(1) An old rubbing collected by Wang Yirong at home. Wang Yirong, also Wang Wenmin kept this rubbing from Ming dynasty in his house, which is now kept by the Palace Museum.^[4] The copybook is 26.5 cm in length and 14 cm in width. The cover says "Luochi Temple Tablet from Liuzhou City, composed by Han Yu, also Han Changli, written by Su Shi, also Su Changgong. The rubbing from Ming dynasty was kept by Wang Wenmin at home in Fushan." It has 76 pages and contains two or three characters on a single page.

(2) An old rubbing collected by Liu Quanfu, also Liu Zichong, from Daxing. It has 27 pages, with 6 or 7 characters on a single page, collected by Sansu Temple Museum.

(3) *Luochi Temple Tablet Written by Su Wenzhong in Song Dynasty*^[5], collected by Qin Qingzeng from Liangxi District of Wuxi City (the collo-type during the Republic of China). It has 25 pages, with 6 or 7 characters on a single page.

(4) An complete rubbing collected by the Institute of Human Sciences of Kyoto University. It is 231 cm in length, 129 cm in width. The inscription was written in standard script and has 10 lines with 16 words per line.

The three rubbings mentioned above are all "cut-up editions", and their broken marks are roughly the same as the original tablet's after restoration. Their sequences are determined through broken marks of the tablet, because "stone grain" is constant, like human fingerprints. If the stone surface is slightly bumpy, the rubbing will immediately show the boundary of the ink color. The shape and location of the boundary will be checked to compare the similarities and differences. And this "stone grain" cannot be forged.^[6] Because the rubbing collected by the Institute of Human Sciences of Kyoto University is an complete rubbing, its "stone grain" is clearer. Now we are going to compare the four editions of rubbings. The old rubbing collected by Wang Yirong will be referred to as "the rubbing from Yirong," the old rubbing collected by Liu Quanfu will be referred to as "the rubbing from Quanfu," the rubbing collected by Qin Qingzeng from Liangxi District of Wuxi City will be referred to as "the rubbing from Qingzeng" and the one collected by the Institute of Human Sciences of Kyoto University will be referred to as "the rubbing from Kyoto." Here comes the result:

The Chinese character "显": In the rubbings from Yirong, Qingzeng and Kyoto, the lower part of the second stroke on the left side of the character is disrupted by the grain, and the last stroke on the upper side of the character is disrupted wholly, while all the strokes

of this character in the rubbing from Quanfu are very clear. The Chinese character “人”: In the rubbings from Yirong, Qingzeng and Kyoto, the lower part of both sides are disrupted by the grain, while the character is relatively clear in the rubbing from Quanfu.



Figure 1 the rubbing from Quanfu



Figure 2 the rubbing from Yirong



Figure 3 the rubbing from Qingzeng



Figure 4 the rubbing from Kyoto

The Chinese character “山”: The lower part of first stroke in the rubbing from Yirong is disrupted by the grain, the middle part of first stroke in the rubbings from Qingzeng and Kyoto is disrupted, while the character in the rubbing from Quanfu are quite clear. The Chinese character “流”: In the rubbings from Quanfu, Qingzeng and Kyoto, the lower part of second stroke is disrupted, while the middle part of all strokes of the character is disrupted in the rubbing from Yirong.

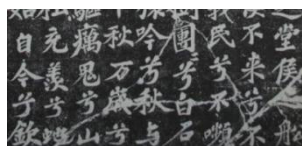


Figure 5 the rubbing from Quanfu



Figure 6 the rubbing from Qingzeng

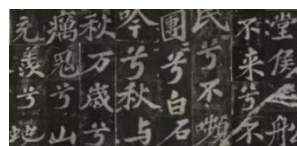


Figure 7 the rubbing from Yirong



Figure 8 the rubbing from Kyoto

The Chinese character “蛇”: In the rubbings from Yirong and Kyoto, the middle part of the last stroke is disrupted. The character presented in the rubbings from Quanfu and Qingzeng is clear and easy to identify. In the rubbing from Qingzeng, the grain of the last stroke of this character is narrower. The Chinese character “岁”: In the rubbings from Yirong and Kyoto, the lower part of this character is entirely disrupted, the last stroke in the rubbing from Quanfu is disrupted, and the middle part of this character in the rubbings from Qingzeng is disrupted. The Chinese character “侯”: In the rubbings from Quanfu and Kyoto, the grain of the middle part of the last stroke is wider. The latter part of the last stroke is severely out of joint with the rest of this character. And the character is quite clear in the rubbing from Yirong.

By comparing the “grain of the tablet” among the different rubbings of *Luochi Temple Tablet*, it can be roughly considered that the sequences of these rubbings should be as follows: the old rubbing collected by Liu Quanfu, the old rubbing collected by Wang Yirong, the complete rubbing collected by the Institute of Human Sciences of Kyoto University and the one collected by Qin Qingzeng from Liangxi District of Wuxi City (the collo-type during the Republic of China).

Conclusion

Luochi Temple Tablet, as a representative work of Su Shi’s writing on tablets in standard script, has been highly evaluated in the past dynasties. This article compares several rubbings, and we can see that the rubbing from Liu Quanfu kept in Sansu Temple is an earlier rubbing. Surely, there are still many aspects to discuss about the rubbings of *Luochi Temple Tablet*. For example, the commentary from the postscript in the inscription in the private collection, the passing of rubbings, the examination of the seals on the rubbings, etc., are all topics worthy of study.

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Research on China's Countermeasures for the Development of Cultural Trade in Countries Along the "One Belt and One Road"

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Abstract: The Belt and Road Initiative is an opportunity for my country's development in all aspects, and it is also my country's new concept of developing neighboring trade. However, the distribution of trade among various countries and regions is not even, the types of products are not balanced, and the development of cultural trade is relatively backward. Based on this, this article analyzes the current and development countermeasures of cultural trade between my country and the countries along the Belt and Road.

Keywords: One Belt One Road; Countries along the route; Cultural trade

With the continuous development of globalization and the continuous improvement of trade protectionism, the situation of my country's neighboring trade also needs to be paid more and more attention. President Xi proposed the "Belt and Road" cooperation concept, which has found a new rising opportunity for my country's trade development. Only by making cultural, economic and trade cooperation closer and achieving effective cultural exchanges and communication, can the economic and trade development of my country and surrounding countries be achieved. The economic potential of the countries along the Belt and Road is great, and the culture is also very vast. It has a very important influence on the export and development of my country's culture and economy.

1. Analysis of the status quo of cultural product trade between my country and the countries along the "Belt and Road"

With the continuous advancement of science and technology, my country's economy has also continued to develop. Export is an indispensable part of my country's economic development, and it is also a category that has an important impact on economic growth. my country is the number one exporter in the world, and my country's cultural products are expanding with the increase in trade. However, compared with some developed countries, the proportion of my country's cultural products trade is still relatively relative to the world's cultural products. less. Moreover, in recent years, my country's cultural product trade gap has been steadily decreasing.

1.1 Regional distribution

The countries along the One Belt One Road can be divided into six parts. my country has trade relations with 65 countries along the One Belt One Road. However, through the trade concept of the One Belt One Road, the proportion of my country's cultural products trade volume continues to rise. The national cultural product trade can still develop continuously. Summarizing and investigating some data, it can be seen that the cultural product trade volume of Southeast Asian countries is relatively higher than that of other countries. However, the cultural product trade between my country and Central Asia, Central and Eastern Europe, Mongolia and Russia is relatively small, and the regional development is uneven.

1.2 Product structure

In cultural trade transactions between my country and other countries along the Belt and Road, knitted fabrics, ceramic products, as well as some pearls, gems, etc., as well as sports equipment, have a relatively large proportion. According to some investigations, it can be seen that the structure of my country's cultural trade products requires scientific and reasonable discussion and optimization by professionals. The structure of most of my country's cultural trade products needs to be transformed, the development of the industry is uneven, and the gap needs to be adjusted relatively speaking.

1.3 Major trading partners

The bilateral trade volume of related cultural products and trade between my country and the countries along the Belt and Road can be seen. The trade volume of cultural products between my country and Southeast Asian countries such as Singapore and India is relatively high. It is not far from these countries and cultural differences. It is relatively easy to communicate with each other. The establishment of my country's ASEAN free trade area has improved the cultural product trade between my country and these countries, especially the establishment of the free trade area, has also made it more convenient and improved for my country and Southeast Asian countries to conduct various exchanges.

2. Countermeasures to promote my country's export of cultural products to countries

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along the “Belt and Road”

2.1 Increase support for cultural product trade in countries along the Belt and Road

The government needs to formulate a series of laws and regulations related to the trade of cultural products in a reasonable and scientific manner, and to promulgate some favorable policies for trade. Increase capital cost input, and encourage relevant cultural enterprises to actively participate in cultural trade along the Belt and Road. So that the excellent cultural products along the Belt and Road can be effectively introduced into our country. Not only can it be well received by a large number of audiences, but it can also allow my country's film industry to reflect on the excellent culture of other countries, which can stimulate the development of my country's cultural industry to a certain extent, and can also promote the improvement of my country's relevant culture. Because the cultural customs and backgrounds of my country and other countries are very different, the countries along the Belt and Road have different acceptance of the same cultural product. The government needs to arrange professional personnel to set up inspection teams to conduct detailed research, analysis and investigation on the specific cultural conditions and local customs of some countries along the route, so as to effectively innovate the products of Chinese cultural enterprises and formulate export policies. It is also a basic basis. It is also possible to actively carry out cultural exchange activities with foreign countries. For example, when recording some variety shows, it can be recorded in a trading country on the Belt and Road so that the local cultural customs can be transmitted to the people of our country through the program. To a certain extent, promote the trade of cultural products in countries with different cultures and cultural backgrounds in our country.

2.2 Enrich the connotation of cultural products

Among the cultural products exported by my country and countries along the Belt and Road, the product structure needs to be adjusted. Because most cultural enterprises in our country need to increase innovation in trade products, and the connotation of cultural products needs to be as deep as possible, and cultural enterprises also need to develop in terms of the external manifestations of cultural products. The advantage of China's cultural trade is its long history. Therefore, our country needs to further explore this aspect, and be able to invest cultural trade products with our national characteristics in bilateral trade, and use historical culture in handicrafts, film and television, etc. To be able to develop our country's cultural products with ethnic characteristics and to effectively promote them to countries along the route, not only that, but also need to increase the development and improvement of China's outstanding cultural products enterprises. The government can attend to introduce some policies to support, but at the same time It is necessary to increase quality management. The most important core of cultural products is their quality. The quality of cultural products not only affects exports to a large extent, but also changes the image and political exchanges of a country. When expanding exports, it is also necessary to increase the supervision of all aspects of quality, so as to allow trade to develop.

3. Concluding remarks

To sum up, the government and related units need to work together to conduct specific investigations on trade, and also to train more talents to promote the development of my country's trade along the Belt and Road. Not only that, but also need to select and cultivate cultural product designs. The talents in this field make our country's cultural product design more connotative and can also inherit our country's long history. Only in this way can our country develop in the cultural product trade market of countries along the Belt and Road.

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Intercultural Adaptation among African Master Students in Beijing

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Abstract: China is becoming more popular as a destination of overseas study. This empirical research, based on self-rated questionnaires and semi-open interviews, explores adaptation of African master students in Beijing. It finds that participants' life, academic and psychological adaptation are generally satisfactory though difficulties do exist. Personality and host society are main contributory factors.

Keywords: Intercultural adaptation; African master students; Beijing

1. Introduction

China has witnessed a major hike in the number of African students to get academic study. The average increase of African students in China reached 19.74% in 2015, topping all continents by large margin.¹

Ward and Kennedy^[4] indicated on the processes of socio-cultural and psychological adaptation, and holds that socio-cultural adaptation mainly refers to the ability to fit into local cultural environment and establish effective contacts with local people while psychological adaptation focuses on the psychological well-being and life satisfaction during intercultural interactions. Adaptation involves necessary adjustments in order to go about day-to-day business of living in a host society, which often means adopting certain host customs, and may reflect the psychological states of the person as well as the host socio-cultural aspect^[1]. A given environment facilitates the adaptation of the newly-settled when the native population welcomes and supports the newcomers while at the same time expecting the new ones to conform to local norms^[3].

Intercultural adaptation research has drawn increasing attention since 1980s, particularly in developed countries. Scholars adopted individual-level approach to explain and understand the re-socialization and coping process of the newcomer. Researches concerning intercultural adaptation in China started much later. In recent years, the publication of researches on international students is on a rise. However, there is few research on African master students' adaptation in Beijing.

2. Research Method

This quantitative research, consisted of questionnaires and interviews, was carried out in 2019 and 2020. The questionnaire was designed in measurement scale. After each statement, number 1-5 is given as rating choices. 1 means strong disagreement, 2 indicates disagreement, 3 shows partial agreement while 4 means fairly agreement while 5 suggests strong agreement with the statement. 66 valid anonymous questionnaires were collected from students originated in 27 African countries. 27 were males and 39 were females, aged 23 to 43, with the average age of 32.5 years old. The mean length of residence was 1.8 years. 56% participants had working experience. The mean length of residence in Beijing was 1.8 years. 8 students from 7 countries were interviewed separately on their impression of China, their academic performance and psychological adaptation.

3. Findings

3.1 Expectation and attitude

Five questionnaire questions and two interview questions reveal whether students have a favorable attitude towards China before arrival. The mean score of "I was interested in China before I came here" was 2.89. Over 62% of respondents agreed or strongly agreed that "I made preparations before coming to China". The average score for statements "I could live and enjoy my life in China" and "I enjoy relating to Chinese people" were 3.76 and 3.35 respectively. 80% respondents agreed that "life in China is better than I expected". There were also answers showing that the participants knew very little about China or their impression of Chinese people changed a lot since they came to Beijing.

A correlation is observed between interviewees' prior knowledge of China and their level of satisfaction. Most interviewees didn't interact with Chinese in their home country, but they had observation and perception of Chinese people. There were also impressions that proved to be partially incorrect upon arrival in Beijing.

3.2 Life Adaptation

Each participant answered six questionnaire questions and two interview questions. The satisfaction and adaptation towards

1 Statistics from official website of the Ministry of Education, PRC. http://www.moe.gov.cn/jyb_xwfb/gzdt_gzdt/s5987/201604/t20160414_238263.html

Beijing's infrastructure ranks highest, with 4.76 as the mean score. Accommodation is also appreciated. However, when asked about food, life style, language and the way of making friends, respondents tended to give lower scores. The rating of "food in Beijing" got the lowest score 2.15.

Technology advancement is global while lifestyle remains largely local. Both the questionnaires and the interviews suggested that African students adjust very quickly to the basic and technological infrastructure in Beijing, but changing their long-established personal habits to fit the host one is much more challenging, despite the fact that they try very hard.

3.3 Academic Study Adaptation

The questionnaire included five measurement questions to discover students' impression on learning experience in China, and two interview questions to reveal their relationship with Chinese teachers. Over 80% of the respondents thought the programs are beneficial, and more than half expressed their willingness to apply for PhD programs in China. The mean score of negative statements "learning in China is too hard and tired for me" and "I feel upset about my study or performance" were 1.63 and 2.37. The most frequently discussed topics with tutors were research methods and thesis writing (42%), lecture contents (26%), assignment requirement (19%) and career experience or planning (13%).

Half respondents thought that academic study pressure in China was slightly lower than their home country. While the majority think Chinese lecturers have more interaction with them after class than tutors in their home country. As one interviewee puts it "*The relationship with the lecturers is very informal (in China) compared with back home, where lecturers seldom communicate with students after class and it's very common.*"

3.4 Psychological Adaptation

The recuperation model posits that the recovery from cultural shock is the mechanism for a sojourner to successfully adapt to the new life in the host country^[2]. 'homesickness' is experienced by some respondents but it does not carry a significant psychological weight as it carries an average score of 2.23. Cultural shocks exhibit themselves in different ways, while the foreign identity remains a distinct psychological factor among the students (mean score 3.38 as to the statement "I enjoy being treated like a foreigner in China").

The initial cultural shocks hit the participants upon their arrivals in China, including food differences, language barrier, way of driving, and Chinese policies and culture. Language barrier or difficulty in communication was considered as one of the major obstacles to psychological adaptation, as mentioned by several interviewees.

4. Contributory factors

Despite the fact that the participants are of different gender, age, major, or length of stay, no significant differences in adaptation level is observed. Direct link between adaptation level and gender, age or major is not found. The participants who describe themselves as adaptive and open adapt better sociologically, academically and psychologically.

A host environment may be receptive to adaptation and may exert pressure for conformity by varying extent. The overall good adaptation of African students in Beijing has a lot to do with how the students perceive local people in Beijing. Adjectives used by research participants to describe people in Beijing are mostly positive, with the most used ones being hardworking, smart, honest, punctual and disciplined.

5. Conclusion

While humanity shares some universal values and practices, every culture has its own distinct features. This research concludes that the intercultural adaptation of African master students in Beijing is good. Most African students adopt active strategy to cope with the new environment so as to adapt to the new life in Beijing. It is worth noticing that both the sojourners and host society play a role in the adaptation process.

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Observation on the Effect of Minimally Invasive Technique in Clinical Treatment of Orthopaedic Trauma

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Abstract: Objective To observe, analyze and study the application and value of minimally invasive technique in orthopaedic trauma. Methods thirty-eight patients admitted to the Department of Orthopaedic Trauma of Jilin Provincial People's Hospital in the past one year were selected as observation objects, and they were divided into two groups: control group and observation group, with 19 patients in each group. The control group received conventional treatment, while the observation group received minimally invasive treatment. The control subjects included clinical treatment effect, pain score, quality of life score, incidence of clinical complications and treatment indicators. Results through observation, analysis and research we found that the comprehensive clinical effect and index to observe group was obviously superior to observe group ($p < 0.05$), and the observation group of intraoperative blood loss, operating time, postoperative wound healing, switching frequency effect is better than that in control group ($p < 0.05$), at the same time, the probability of complications to observation group was obviously lower than the control group.

Keywords: Minimally invasive technology; Orthopaedic trauma; Clinical treatment

Introduction:

Minimally invasive technology has been used in China's medical system for many years and has become a mature medical technology. Using minimally invasive technology to treat orthopedic trauma patients can significantly improve the therapeutic effect. Therefore, minimally invasive technology has great significance in the treatment of orthopedic trauma.^[1]

Data and Methods

1. General information

Thirty-eight patients admitted to orthopaedic trauma in our hospital in the past year were selected as observation objects, and they were divided into control group and observation group, with 19 patients in each group. The observation group was treated with minimally invasive technology, while the control group was treated with conventional technology. The observation group included 8 female patients and 11 male patients, aged between 20 and 76 years; The control group included 9 women and 10 men, aged 21 to 77 years.

The criteria we used to include patients were: (1) The patient is in a normal mental state, able to carry out normal communication and communication, without mental problems or violent tendencies; (2) To ensure the integrity of patients' clinical data; (3) Patients and their families have a correct and comprehensive understanding of the informed consent and have signed the informed consent.

Our exclusion criteria for inclusion of patients were: (1) patients with poor mental or emotional state; (2) patients who are breastfeeding or have other special conditions; (3) patients with other major diseases or obvious pathological changes of organs; (4) Patients with contraindications such as minimally invasive surgery and routine surgery.

The clinical data of the two groups of patients we selected were complete and the age difference was small, so the submission was comparable.

2. Method

After the patient was admitted to the department for diagnosis and treatment, we immediately examined the patient and had a detailed understanding of the patient's situation. After that, we performed minimally invasive surgery on the patients in the control group. First, we will shift the patients to surgery on the bed, and adjust the most comfortable and convenient for the position, then according to the actual situation of patients, with the help of anesthesia operation, the most appropriate way of anesthesia, and then adopt relevant imaging instrument of lesion in patients with meticulous observation and analysis on the actual situation, to more accurately determine the fracture position, The tissue around the lesion was analyzed, observed and judged. To understand the patient after thoroughly, under imaging instrument observation and guidance, make a small cut in the focal areas, attention should be paid to avoid in the process of incision in patients with major blood vessels, broken bones or foreign bodies by incision of clear, and cleaning, finishing in patients with bone, reset is completed, the disinfection and dressing work done in accordance with the relevant provisions,

Subsequently, the patient needs to change medication regularly;

For patients with conventional treatment, it is necessary to transfer their lesions to the operating table under the condition of full understanding, and select appropriate anesthesia for anesthesia. Anesthesia work is completed, the attending physician needs to cut patients lesions position, and will fully exposed, the affected area of trauma of bone and foreign body wash, after complete patient bone, restoration work is completed, actual situation should be based on patients use medical tools such as steel plate, screw to be fixed, after complete the suture surgery. After surgery, both groups received conventional sterilization, anti-inflammatory and anti-infection treatment.

3. Observation criteria

The treatment effect of the two groups of patients were observed and compared, the symptoms of patients after treatment were significantly reduced and improved compared with before treatment, and the ability of daily activities was restored, which we call remarkable effect; If the patient's symptoms are improved to a certain extent and the ability of daily activities is basically restored, it is called effective; If the patient has severe pain at the wound after the surgical treatment, and their daily life is troubled by the pain of the disease, we call it ineffective. The total effective rate was calculated as follows: Total effective rate = (significant effect + effective)/total number of columns *100%.^[2]

We compared the clinical indicators of patients in the two groups, including dressing change times, wound healing time, blood loss during operation time, quality of life score and pain score, etc. The higher the quality of life score, the better the patient's quality of life. The higher the pain score, the more intense the pain. In addition, the complications of the two groups were observed and compared, including incision infection, fever and swelling.

4. Statistical methods

In data collection, analysis and processing, we use SPSS 18.0, a processing software, to process the measurement data by t test, which is expressed as ($\bar{x} \pm S$); χ^2 is used to process the counting data in the form of (%) representation. The final statistical result is $P < 0.05$, which has practical significance in statistics.

Comparison of surgical indicators between the two groups

Group number of cases	Wound	healing time (d)	operative time (min)	intraoperative blood loss (mL)	dressing change times
Study group	19	20.2±1.38	85.71±5.15	171.35±19.5	12.13±1.25
Control group	19	33.07±1.34	117.42±7.03	344.32±18.55	20.33±1.50
T	--	35.125	17.718	33.767	0.768
P	--	0.000	0.000	0.000	0.000

Note: Compared with control group, $P < 0.05$

4.1 The results

(1)Therapeutic effect. In the clinical treatment of orthopaedic trauma, minimally invasive technology has a more prominent effect, which is conducive to improving patient satisfaction.^[3] From the results of surgical time, postoperative healing, intraoperative blood loss, dressing change times, complication incidence, pain score and life score, the treatment effect of the observation group is significantly better than that of the control group.

(2)Adverse reactions. The adverse reactions in the observation group were significantly lower than those in the control group.

(3) Clinical indicators. The clinical indexes of observation group were obviously better than control group.

4.2 The discussion

After the application of minimally invasive technology in orthopaedic trauma, we only need to make small incisions in the surgical summary to complete the subsequent surgery, and have achieved remarkable clinical results. The postoperative incision healing is faster, the risk of postoperative infection is reduced, and the scar after recovery is smaller, which meets the aesthetic needs of patients. Nowadays minimally invasive techniques are widely used in the clinical treatment of orthopaedic trauma. Through the observation and comparison of the two groups of patients, we found that minimally invasive treatment technology can significantly improve the clinical symptoms of patients, postoperative recovery faster, in clinical treatment is worth promoting and application.

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The Analysis of the Flexible Quality Training of Tai Chi Athletes

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Abstract: In order to improve the performance of Taijiquan athletes, the training methods of flexibility and quality of Jiangxi athletes are discussed and researched. Finally, the pnf flexibility training method and thermal effect training method are selected to match the traditions of Taijiquan athletes in the Jiangxi Wushu sports team. Comparing the flexibility training methods, it is finally concluded that the traditional flexibility training methods of the Jiangxi Wushu Team Taijiquan athletes have fewer parts that can have an effect, and the training methods are relatively simple. The athletes have already developed adaptability to the traditional training methods. Produce better training effect. Through experiments, it is known that the combination of pnf training method and thermal effect training method can help improve the flexibility of athletes, and more parts are practiced, and the performance is greatly improved. It is recommended that the flexibility training of Jiangxi Wushu Team Taijiquan athletes should be used. The pnf training method is used in combination with the thermal effect training method to better improve the athlete's competitive performance.

Keywords: Tai Chi; Flexibility; Training

1. Foreword

Judging from the training situation of the Wushu team in Jiangxi Province, there is no major problem in the technical training of athletes at present, and the flexibility training method still belongs to the traditional leg press and kick, which is contrary to the concept of scientific training. The author has many years of experience in Tai Chi practice, has a clear understanding of related training methods, and has personally experienced traditional training methods, so I have the urge to study flexibility training methods. Through reading a large number of Taijiquan-related literature, the author discovered the problems in the process of learning Taijiquan-related knowledge. At present, the training methods of Taijiquan in China are relatively standardized, but there is no systematic training method for flexibility training. A large amount of literature proves that if Tai Chi athletes do not have good flexibility to support their performance in competitive competitions, they will definitely be greatly reduced. Therefore, in training, it is necessary to strengthen flexibility training. This article takes Jiangxi Province as an example. The Wushu sports team was used as the experimental object to conduct comparative research on different flexibility training methods and draw relevant conclusions.

1.1 Research status

In the article "Improvement and Exploration of Wushu Flexibility Training Method", Yan Jun mentioned that flexibility is one of the most basic qualities in life, and it is also a quality that martial arts athletes must possess. If you don't have good flexibility and support, you can't do it. In this article, it is also mentioned that the traditional flexibility training method is very painful and fearful to athletes, and the pnf training method mentioned in this article is minimal to the students' pain. Athletes can basically accept it, and it is more suitable for athletes in related directions to use^[1]. With the development of the domestic sports industry and the gradual maturity of sports technology, sports circles at home and abroad have begun to attach importance to the practice of flexibility of athletes. In the article "Experimental Research on the PNF Method for Rhythmic Gymnasts from 5 to 6 Years Old to Carry out Flexibility Training," The current research status of pnf at home and abroad has a full explanation. At present, the foreign pnf training method has been fully applied, while the domestic is still in the exploratory stage. Although a large number of coaches have begun to try to use it, it has not yet been large-scale and high-level. The frequency is used in training^[2]. Zheng Chuanfeng and Yang Jing conducted experiments on three different flexibility training methods in the article "The Influence of PNF Stretching Method on the Flexibility of the Lower Limbs of Students Majoring in Wushu". By comparison, it is finally concluded that the effect of pnf training method is the most obvious^[3]. In the article "A New Method of Flexibility in Track and Field", the author also mentioned the pnf training method, which positively shows that the pnf training method has different effects on different events and different groups of people, but in the end it is positive^[4]. Domestic aerobics programs have developed training in recent years. A search on the knowledge network found that the current domestic aerobics training has a very high flexibility training method. Flexibility is a type of physical training, and the current physical training level of aerobics is relatively high. Wushu researchers can draw lessons from its training system to improve the relevant level of Wushu events^[5].

2. Research objects and methods

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2.1 Research object

This study takes 8 Taijiquan athletes from the Wushu Sports Team of Jiangxi Province as the research object

2.2 Experimental method

(1)Documentary data method. Through the library of Jiangxi Normal University and CNKI and other electronic resource databases, a large number of researches on the training methods of pliability of Taijiquan athletes as well as literature materials related to pliability have been searched and downloaded.

(2)Interview method. In order to better understand the conditions of the subjects and the conditions of usual training, we specially interviewed the expert coaches of the Jiangxi Wushu sports team, and interviewed the professors of Jiangxi Normal University in related majors, so as to determine the traditional training methods. Specific content.

(3)Experimental method. According to the related literature of Taijiquan flexibility training, the corresponding flexibility training method was determined. Eight professional Taijiquan athletes from the Jiangxi Wushu Sports Team were randomly divided into groups of four. The experimental group adopted pnf training method and thermal effect. The training method is a method of combining training. The control group used the same training method as the original flexibility exercises. The experiment period was 4 weeks, and special flexibility exercises were performed twice a week, each time for one hour. The experiment carried out pre-test and post-test. The sitting position body forward bending index, and the stretching degree of the athlete's legs, waist, and shoulders are measured to determine the effects and effects of different flexibility training methods on the athletes.

3. Research results and analysis

(1)Traditional martial arts flexibility training method. Through interviews and experiments, it is learned that the pliability training method used by the Jiangxi Wushu sports team is to perform pad presses after warming up, mainly to stretch the back muscles of the legs, and increase the athletes' leg presses by thickening the thickness of the mat. Difficulty, followed by rapid kicking to stretch the leg muscles and the back surface line. The fascia is opened, and finally the thong is used to increase the difficulty of the athlete's kick. It can be seen that the flexibility training method of the Jiangxi Wushu Sports Team is relatively simple and needs to be improved. Most of the training parts are the legs, and the flexibility of the waist and shoulders is rarely involved.

(2)Propriosensory neuromuscular promotion. Through reading related materials and literature, and conducting telephone interviews with relevant experts, I learned that this training method, proprioceptive neuromuscular facilitation, or pnf training for short, is currently a popular and popular flexibility training method at home and abroad. Its operation It is simple and effective, which has benefited a lot of sports events, but there are still few applications in martial arts. Therefore, this training method is used in this experiment. This technique is used before the muscles are stretched again. , Perform isometric contraction for a short time before stretching. The pnf training method will have different effects in different projects. As there are few related documents on martial arts, only a few words explain the training method. During this experiment, the author assisted an athlete with two people, stretched the waist by sitting and turning, stretched the iliopsoas muscle by lying down, and stretched by lying on the knees + cobra stretching. Spine and stretch rectus abdominis relieve back pain.

(3)Thermal effect training method. This training method is learned by the author by consulting relevant literature. Its definition is: before any stretching training, perform the corresponding thermal effect processing, so that the training effect is improved. In addition to the usual warm-up activities, there are also Massage, pushing and pulling, and vibration are all training methods within the thermal effect. In this experiment, the author used a fascia gun to shake and relax each member of the experimental group before training. The time was ten minutes, and then after the relaxation was completed Conduct training.

4. Conclusions and recommendations

(1)Suggestion. Through the experiment of Jiangxi Province Wushu Sports Team and the reading of related literature, the following conclusions are drawn: Taijiquan athletes in Jiangxi Province Wushu Sports Team usually have a single flexibility training method, and there are too few stretching parts, which can not fully improve the athletes. The pliability quality of the athletes can not provide support for better athletic performance, and when I understand the athletes, it is found that some students have adapted to the traditional practice methods and cannot continue to improve their related flexibility.

(2)Suggestions. According to the final conclusion of the experiment and the comparative analysis of different training methods, the following suggestions are put forward. It is recommended that the Taijiquan athletes of the Jiangxi Wushu Sports Team adjust the flexibility training method according to the sports quality required by the Taijiquan sports. It is recommended to adopt The combination of pnf training method and thermal effect training. Experiments have shown that the combination of these two training methods is good for improving the flexibility of athletes. Therefore, it is recommended that relevant coaches make appropriate adjustments according to this training method to improve flexibility. Training science This will improve the overall competitive level of the sports team, continue to add luster to our province and our country, and win more gold medals for our country.

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Construction, Implementation and Evaluation of a Smart Classroom Based on Teaching Resource Database for Vocational Schools

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Abstract: Vocational education resource pool is designed to integrate “Internet +” technology into vocational education, so that it can promote the reform of educational philosophy, educational methodology and educational mechanism of vocational colleges. The most important battlefield of this reform is the classrooms, where we can start the construction of smart classrooms with the goal of improving learners’ core competence by changing thinking perspectives, building technology platforms, ensuring implementation of new mechanism, etc. To do so, it is necessary to construct and facilitate intelligent classrooms based on resource database. which enables educators to gain accurate data and comprehensive teaching resource. This paper focuses on the research and analysis of the ideas and methods of building and developing smart classroom based on resource database and establishes the evaluation system.

Keywords: Vocational education; Resource library; Smart classroom; Construction; Implementation; Evaluation

Introduction:

the national professional teaching resource bank is an important project to deepen the comprehensive reform of vocational education. Based on majors, professional groups and job position groups, through the concept of group effort and sharing, the teaching resources provided for vocational education are abundant and high-quality. The resources of building the resource base should be closely linked to the requirements of vocational education in information age and rely on the means of informationization. It not only provides pieces of information, but also reflects systematic open courses online, providing innovative opportunities for the establishment of the “Internet plus education” environment, and integrating occupational information technology into instruction. This provides important support for the instructional reform for vocational education.

1. Steps and methods of constructing and implementing smart classrooms based on resource database

(1) Standard design. The basis of vocational education serving industrial development is to take the core competence of talents needed by enterprises as the training goal. A special team shall be set up in the resource library to accurately understand the actual needs of the industries, transform the needs into projects and tasks through data analysis, and design courses systematically. The relevant standards could be established from the macro, meso and micro levels.

At the macro level, the first step is to construct a logical framework. On this basis, the professional course design team, based on its specific industry field, constructs professional skill system, organizes and sorts out tasks and projects, comprehensive problem bank, so as to form professional teaching standards using information and resources gained from research and communication with the local industries and information that are already in the database.

From the meso level, we rely on the professional curriculum standards. The learning goal, detailed teaching contents and instructional methods, should align with learning objectives of the curriculum. In addition, the project system and task system of the course should be studied, analyzed, and confirmed by the teaching team, then the course could finally be presented in a modular way. Each project or task should have a corresponding module to organize teaching resources and materials according to the structure of the “before class, in the class and post class phases” of the classroom. The logical relationship between each module should not be too loose or too tight. The purpose is to enable subject teachers of various schools to independently select modules and apply courses. At the micro level, teacher should be able to deconstruct the objectives, design the class activities based on the curriculum standards, prepare teaching tools and materials, implement teaching strategies, and create a positive learning atmosphere.

(2) Change of perspectives. In this whole process, the point of view of teachers is particularly important. Therefore, to enhance instructional training, teachers should firstly study and understand the idea of smart education, so that It is possible to transform the traditional learning of knowledge into the cultivation of core competence as the most important goal.

To redesign and optimize the teaching effectiveness, We should clarify the function of teachers and improve their instructional skill and ability to apply resources ^[1].

(3) Resource preparation. The construction of high-quality teaching resources is an important task of the resource database project

team. The resource materials and tools jointly constructed by all resources from the government to the industry, from enterprises to schools can fully help students solve their difficulties in learning new knowledge, which should not only meet students' basic learning needs, but also satisfy their personal level of difficulty ; The curriculum can be constructed across levels and regions; Students' learning enthusiasm and creativity can be stimulated by virtual reality learning tools to better cultivate students' core competence.

(4) Teaching strategies. Promoting students' learning ability such as "application, analysis, evaluation and creation" is the highest principle for designing smart classroom teaching strategies. Therefore, teachers should do their best to cultivate the following activities: analyzing, comparing, summarizing, problem solving, investigating, experimenting, creating and other learning skills, and fully motivate students' original thinking in the teaching process, so as to improve students' creative thinking and problem-solving ability [2]. For example, taking the refrigeration automation major of a vocational college as an example, the department took the above contents as the guiding principle, the teaching resource project team organized an instructional method to promote learning by focusing on the combination of online and offline courses, and teaching in sections according to the three stages: before, during and after the classroom. Before class, to analyze the background, keeping the task accomplishment in mind, teachers organized and led students to make independent evaluation about their background situation and prepare for learning. The focus of the classroom was the interaction between teachers and students. This interaction was a combination of online and face-to-face, so that students could complete learning and projects in a way that suits their needs and schedule. Personalized counseling was the focus after class. Students' learning got teachers' evaluation and feedback, and students were directed to resources assisting their further learning, research, and establishment of their own values. Learning motivation, innovation and personality were gradually built up during the learning process.

(5) Technical support. The technical guarantee for the implementation of smart classroom lies in the micro knowledge database platform applied in the teaching resource database: the platform can classify and store resources, intelligently retrieve and promote resources. Based on cloud platform and intelligent big data, it facilitates cooperation, communication, and learner-to-learner interaction in the most convenient way. Therefore, by recording and analyzing big data, it is easier for teachers to conduct targeted intervention and accurate teaching for individual students. Electronic student files can be used as the basis to evaluate students' knowledge and learning effectiveness. Moreover, this enables comprehensive evaluation in combination of self, teacher, and peer evaluation.

2. Intelligent classroom implementation evaluation system based on Teaching Resource Database

Building and promoting smart classroom is not something that can be completed in a short time. A complete set of evaluation system is needed to promote its continuous improvement. The components of a smart classroom include learners, facilitators, resources, equipment, tools and learning activities. Therefore, the smart classroom evaluation system based on teaching resource database covers two aspects: learners and facilitators, four evaluation objects: resources, equipment, tools and learning activities, as well as three stages of a class: before, in the class and post class [3]. The core of developing smart classroom is to take learners as the center and cultivate their core competence. It is also very important for learners themselves to evaluate smart classroom.

3. Conclusion

To build the teaching resource database for vocational education, we can use the construction and development of intelligent classroom to implement the perspective of "learner centered under teacher guidance, enabled by resource bank system ". Moreover, the project construction of the resource bank also ensures the further promotions of the development of smart courses. Therefore, the relationship between teaching resource database and intelligent classroom is a kind of "symbiosis". This paper studies the general construction and application of teaching resource database, analyzes the ideas and methods of building and developing smart classroom based on the database, so as to promote the development of smart education and improve learners' core competence.

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Comparative Analysis of Egon Schiele's Inheritance and Innovation of Gustav Klimt's works

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Abstract: In their artistic career, Gustav Klimt and Egon Schiele kept the friendship as teachers and friends. Both of them are representatives of Vienna secession. This paper, through a comparative analysis of Gustav Klimt's and Egon Schiele's paintings of the same subject, explores Gustav Klimt's specific influence on Egon Schiele's works and Egon Schiele's inheritance and innovation. The study found that although Gustav Klimt had a strong influence on Egon Schiele's early decorative expressionist style of painting, Egon Schiele eventually developed his own painting language.

Keywords: Vienna Secession; Gustav Klimt; Egon Schiele; Inheritance and Innovation

1. Gustav Klimt acted as teacher and friend to Egon Schiele

In 1906, Egon Schiele studied traditional painting at the Academy of Fine Arts in Vienna. In 1907, he met Gustav Klimt, the long-admired leader of Vienna's secessionist faction. Gustav Klimt was already a star in art. His works were soft and colorful, and he used two-dimensional perspective in composition to make them flat. His decorative works successfully influenced Schiele. Gustav Klimt was also good at using materials such as metals and gems directly in his paintings to create a psychedelic atmosphere.

Gustav Klimt, 28 years older than Egon Schiele, played many roles in Egon Schiele's life. He not only provided substantial assistance to Egon Schiele's artistic development, but also served as his spiritual mentor. Because of Egon Schiele's financial difficulties, Gustav Klimt not only provided his own models to Egon Schiele, but also introduced him to works, contacted sponsors, and bought his works to subsidize Egon Schiele's daily living expenses. Sometimes they would exchange each other's work. His encouragement increased Egon Schiele's confidence and strengthened his determination to explore art.

2. Inheritance and development of Egon Schiele's works

Egon Schiele left the Vienna Academy of Art in 1907, abandoning the conservatively-academic way of painting to study with Gustav Klimt. The early Egon Schiele was simply imitating Gustav Klimt's painting style, but his imitation did not stop there. After 1910, Egon Schiele began to break away from Gustav Klimt's painting form and develop his own painting language. Next, we will compare the similarities and differences between Gustav Klimt's and Egon Schiele's works through specific works.

2.1 Comparative analysis of Gustav Klimt's *The Tree of Life* and Egon Schiele's *The Little Tree in Late Autumn*

Gustav Klimt exhibited "The Tree of Life" in 1909 and Egon Schiele painted "Little Tree in Late Autumn" in 1911. The two works are similar in composition, but give us completely different feelings.



Little Tree in Late Autumn Egon Schiele 1911



Tree of Life Gustav Klimt 1909

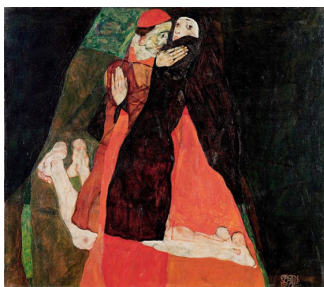
From Egon Schiele's 1911 little Tree in Late Autumn and Gustav Klimt's Tree of Life, we can see that both of them chose a tree

as their painting object and placed it in the center of the painting. The tree stretched to the sky, but its roots were always deep in the earth. The painting is divided into three parts: tree, background and earth. Both Egon Schiele and Gustav Klimt did not pursue the representation of three-dimensional space and the concrete shaping of things, but adopted the planar processing method to pursue the depiction of their inner emotions. But unlike Gustav Klimt, Egon Schiele depicts a tortuous withered tree pale from brown, yellow, red mixing of heaps of the black and the background is white and brown mixed the unification of the background, the whole tree is not a leaf, the painter summarized the shape of tree, "line" like carrier of the artists inner world, crisscross lines monotonous and varied, Withered branches give people a sense of death, as if a struggling and sad person's silent struggle against the world, stubborn and tenacious, twisted and abstract lines seem to inject emotion, building a Egon Schiele's spiritual world for us. And Gustav Klimt focuses on contrast of points, lines, planes, and create a harmonious picture effects. in the tree of life, the work is geometric processing, weaving and orderly triangle, circle appear as elements, Gustav Klimt used decorative swirls to form tree, and the snail's shell, feathers, gold foil and other materials directly used for painting, form a special "Mosaic" effect. Gustav Klimt's works are of great personal characteristics. The splendid accordatura, asymmetric composition and decorative painting language make the picture look splendid. The continuous tree of life is surrounded by mysterious and abstract atmosphere, and the embracing couple and the black bird symbolizing death are the artist's reflection on the cycle of life. The anthropomorphic treatment of plants in Egon Schiele's works seems to be the same as Gustav Klimt's, but in his works it is a different atmosphere.

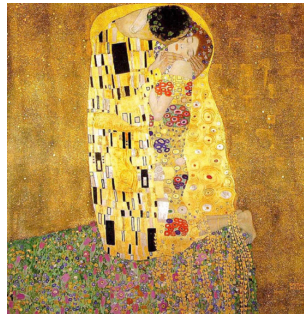
On his own artistic path, Egon Schiele no longer imitated nature, but borrowed The decorative art of Gustav Klimt to perfect himself and form his own painting style. In contrast to Gustav Klimt's opulence, Egon Schiele's work speaks to the heart.

2.2 A comparative analysis of Gustav Klimt's Kiss and Egon Schiele's Cardinal and Nun

Next, we compare and analyze the similarities and differences between Klimt's Kiss and Egon Schiele's Cardinal and Nun in figure painting.



Cardinal and Nun Egon Schiele 1912



Kiss Gustav Klimt 1907

In these two works, we can clearly see the influence of Gustav Klimt on Egon Schiele. The composition is very similar, but Gustav Klimt's work pay more attention to the decoration of the pictures and the gorgeous color than Egon Schiele's. As the title of Kiss, Gustav Klimt depicts a couple kneeling and kissing in a garden, hidden under a golden cloak, the man's face obscured, the woman held up by the man, her eyes closed, intoxicated, shy and passive, the floor stippled with red and yellow on the green grass. Embracing lovers are a metaphor for the union of the sexes, square, circular pattern reflects the differences between men and women, women are the gentle circular, man is the square of angular, let a person feel mysterious and full of contradiction, with a strong oppressive feeling, love is bitter and sweet, warm, passionate people as if from the real life, youth is short, love is unreal. Gustav Klimt was born in a family of craftsmen. As a representative work of Gustav Klimt's "Golden Period", The Kiss uses a large amount of gold and silver foil as decoration in addition to the face, hands, flower parts and some details. However, in Egon Schiele's Cardinal and Nun, the background and figures are mainly painted flat. The texture of the picture also comes from painting materials, and the treatment of figures tends to be flat, which is slightly less decorative. Egon Schiele contrasted red, orange, green with lots of black, nuns look to the audience, while the Cardinal looked at the nun, and nuns are summarized into triangle, the nuns facing the audience looked terrified, both were kneeling, exaggerated lines, distorted face and dreary melancholy color make pictures appear restless, depression and fear as the heart, The desire to live seems threatened by death. Gustav Klimt's work emphasize the creative and imaginative, and shows a bright future of the decadent beauty, and Egon Schiele's life in a turbulent environment, the characters in his work, thin body, some distortion even morbid, some unkempt, he depicted the characters are mostly the underprivileged people, show is the most real desire and pursuit, But it was also full of struggle and resistance.

3. Conclusion

In his early works, Egon Schiele imitated and learned Gustav Klimt's painting works in linear language, color composition segmentation, subject shaping and other aspects. Through inheritance and innovation, Egon Schiele eventually formed his own unique painting language. They have different emotional concerns and expressions. Egon Schiele's paintings do not simply pursue the picture effect brought by the surface schema, but more talk with his own heart and reverently seek for his own painting language. His advanced artistic thinking and personalized painting language provide us with reference for future study, thinking and creation.

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An Improved HS Type Spectral Conjugate Gradient Method

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Abstract: The spectral conjugate gradient (SCG) method was one of the most commonly used method to solve nonlinear unconstrained optimization problems. In this paper, an improved HS spectral conjugate gradient method is proposed. Under common assumptions, the descent and global convergence of this method are proved.

Keywords: Unconstrained optimization; Global convergence; Line search; Sufficient descend conditions

1. Introduction

We consider the unconstrained optimization problem: $\min f(x)$, where $f: R^n \rightarrow R$ is continuously differentiable and bounded, $X_0 \in R^n$ is an initial solution, give the iterative formula of spectral conjugate gradient method: $X_{k+1} = X_k + \alpha_k d_k$, $k \geq 1$, the step factor β_k is

a positive parameter, the search direction d_k is defined by $d_k = \begin{cases} -g_k, & k = 1, \\ -\theta_k g_k + \beta_k d_{k-1}, & k > 1. \end{cases}$

where g_k is the gradient of f at a point x_k , the scalar β_k is the conjugate direction control parameter. Different selection of β_k corresponds to different the conjugate gradient (CG) methods. Many scholars have studied the convergence of the CG method under different line search. Some authors use accurate line search to calculate the step size, and some authors use imprecise line search to calculate the step size, such as strong Wolfe line search, which is defined as follows.

$$d_k = \begin{cases} -g_k, & k = 1, \\ -\theta_k g_k + \beta_k d_{k-1}, & k > 1. \end{cases} \quad (1) \quad \alpha_k = \begin{cases} -\theta_k g_k + \beta_k d_{k-1}, & k = 1, \\ -\theta_k g_k + \beta_k d_{k-1}, & k > 1. \end{cases} \quad (2) \quad d_k = \begin{cases} -g_k, & k = 1, \\ -\theta_k g_k + \beta_k d_{k-1}, & k > 1. \end{cases} \quad (3)$$

Aiguo et al^[1] proposed an improved FR type spectral conjugate gradient method; Chen et al^[2] proposed a new PRP type spectral conjugate gradient method; Neculai^[3] proposed a three-term conjugate gradient algorithm; Wang et al^[4] proposed two new HS type spectral conjugate gradient methods; Fang et al^[5] proposed a modified DY spectrum conjugate gradient method; Jing et al^[6] constructed a new spectral conjugate gradient method by using Armijo line search; Li et al^[7] proposed an improved spectral conjugate gradient method, the search direction generated by iteration is fully reduced and globally convergent. Inspired by the literature^[8,9], a new conjugate parameters and spectral parameters are proposed, in which the search direction is usually as follows

$$\text{Multiply the left and right ends of equation (2) by } y_{k-1} \text{ to obtain } d_k^T y_{k-1} = -\theta_k g_k^T y_{k-1} + \beta_k^{LF} d_{k-1}^T y_{k-1} \quad (4)$$

We can get from^[10] $d_k = -B_k g_k$, $d_k^T y_{k-1} = -(B_k g_k)^T y_{k-1} = -g_k^T S_{k-1}$. The above relationship means that if the line search is accurate, the above formula holds. At this time, $g_k^T S_{k-1} = 0$, the actual numerical algorithm usually adopts imprecise line search instead of accurate line search. Therefore, use condition $d_k^T y_{k-1} = -\theta_k g_k^T S_{k-1}$. It seems more reasonable to replace the conjugate condition, substitute into formula (4) $d_k^T y_{k-1} = -\theta_k g_k^T y_{k-1} + \beta_k^{LF} d_{k-1}^T y_{k-1}$, Divide by $g_k^T y_{k-1}$,

$$\theta_k = \frac{g_k^T S_{k-1}}{g_k^T y_{k-1}} + \frac{d_{k-1}^T y_{k-1}}{|g_k^T d_{k-1}| - \mu d_{k-1}^T g_{k-1}} \quad \text{Because of } d_k^T y_{k-1} = -\theta_k g_k^T y_{k-1} + \beta_k^{LF} d_{k-1}^T y_{k-1}, \text{ so } \theta_k = \frac{g_k^T \alpha_k d_{k-1}}{g_k^T y_{k-1}} + \frac{d_{k-1}^T y_{k-1}}{|g_k^T d_{k-1}| - \mu d_{k-1}^T g_{k-1}} \quad (5)$$

2. New Algorithm and its descent

Algorithm 2.1

Step1. Given an initial value $x_0 \in R^n$, parameter $\varepsilon > 0$, $0 \leq \mu \leq 1$, $\tau > 0$. Step2. Set $k=0$, $d_0 = -g_0$. If $\|g_0\| < \varepsilon$, stop

Step3. Determine the step length α_k satisfying (1) Step4. Calculate x_{k+1} , if $\|g_0\| < \varepsilon$, stop.

Step5. Use (3), (2), and (5) to calculate θ_k and β_k respectively Step6. $k=k+1$ Turn Step3.

Lemma 2.1 Assuming that the search direction of the SCG method is (2), β_k^{LF} is defined by (3), and step α_k is obtained by (1), the

following sufficient descent conditions are satisfied $g_k^T d_k = -\eta \|g_k\|^2$ (6)

Proof: Using mathematical induction . If $k=0$, then the search direction d_k is given by $d_k = -g_k$, so there is $d_0 = -g_0$, $g_k^T d_k = g_0^T d_0 = -\|g_0\|^2$, Therefore, condition (6) is true, assuming that $k \geq 0$ is true, condition (6) is also true. By multiplying g_k^T

both sides of equation (2), we can get the following equation

$$g_k^T d_k = -\left(\frac{tg_k^T \alpha_k d_{k-1}}{g_k^T y_{k-1}} + \frac{d_{k-1}^T y_{k-1}}{|g_k^T d_{k-1}| - \mu d_{k-1}^T g_{k-1}} \right) \|g_k\|^2 + \frac{d_{k-1}^T y_{k-1}}{|g_k^T d_{k-1}| - \mu d_{k-1}^T g_{k-1}} \|g_k^T\|^2 = -\frac{tg_k^T \alpha_k d_{k-1}}{g_k^T y_{k-1}} \|g_k\|^2$$

Let $\eta = \frac{tg_k^T \alpha_k d_{k-1}}{g_k^T y_{k-1}}$, we can get $g_k^T d_k = -\eta \|g_k\|^2$. This method satisfies sufficient descent condition for any k .

Lemma 2.2 Let the sequences $\{d_k\}$ be generated by algorithm 2.1, then for any $k \geq 0$, the relation $\beta_k^{LF} \leq \frac{\|g_k\|^2}{|g_k^T d_{k-1}|}$ holds.

Proof: Because of $y_{k-1} = g_k - g_{k-1}$, we get the $g_k^T y_{k-1} = g_k^T (g_k - g_{k-1}) = \|g_k\|^2 - g_k^T g_{k-1}$, so we can get the formula

$$\beta_k^{LF} = \frac{g_k^T y_{k-1}}{|g_k^T d_{k-1}| - \mu d_{k-1}^T g_{k-1}} \leq \frac{g_k^T y_{k-1}}{|g_k^T d_{k-1}|} = \frac{g_k^T (g_k - g_{k-1})}{|g_k^T d_{k-1}|} \leq \frac{\|g_k\|^2}{|g_k^T d_{k-1}|}.$$

3. Global Convergence

Assumption (A)

1. $f(x)$ has a lower bound on the level set $S = \{x \in R^n \mid f(x) \leq f(x_0)\}$, where x_0 is the initial iteration point.

2. $f(x)$ is continuously differentiable in a certain neighborhood N of the level set S , and the gradient function $g(x)$ satisfies Lipschitz continuity, there is a constant $L > 0$ which makes $\|g(x) - g(y)\| \leq L\|x - y\|, \forall x, y \in N$ hold.

Lemma 3.1 If Assumption A holds, the search direction d_k satisfies $g_k^T d_k$, then sequences $\{g_k\}$ and $\{d_k\}$ generated by algorithm

2.1 satisfy Zoutendijk condition, then $\sum_{k=1}^{\infty} \frac{(g_k^T d_k)^2}{\|d_k\|^2} < +\infty$ holds.

Theorem 3.1 If Assumption A holds, the sequence $\{g_k\}$ generated by algorithm 2.1. Then $\liminf_{k \rightarrow \infty} \|g_k\| = 0$. (7)

Proof: Assume that (7) does not hold. There must be a constant $\gamma > 0$, make that $\|g_k\| \geq \gamma, k \geq 0$. Derived from formula (2),

$d_k + \theta_k g_k = \beta_k^{LF} d_{k-1}$, Square both sides at the same time, $(d_k + \theta_k g_k)^T (d_k + \theta_k g_k) = (\beta_k^{LF})^2 \|d_{k-1}\|^2$, Expanded

$\|d_k\|^2 + 2\theta_k d_k^T g_k + \theta_k^2 \|g_k\|^2 = (\beta_k^{LF})^2 \|d_{k-1}\|^2$, Transposition of terms $\|d_k\|^2 = (\beta_k^{LF})^2 \|d_{k-1}\|^2 - 2\theta_k d_k^T g_k - \theta_k^2 \|g_k\|^2$, divide

both sides by $(g_k^T d_k)^2$ at the same time. Because of $\beta_k^{LF} \leq \frac{\|g_k\|^2}{|g_k^T d_{k-1}|}$, $g_k^T d_{k-1} = y_{k-1}^T d_{k-1} + d_{k-1}^T g_{k-1}$ So

$$\frac{\|d_k\|^2}{(g_k^T d_k)^2} \leq \frac{\|g_k\|^4}{(g_k^T d_{k-1})^2} \cdot \frac{\|d_{k-1}\|^2}{\eta^2 \|g_k\|^4} - \frac{2\theta_k}{\eta \|g_k\|^2} - \frac{\theta_k^2}{\eta^2 \|g_k\|^2} \leq \frac{\|d_{k-1}\|^2}{\eta^2 (g_{k-1}^T d_{k-1})^2} + \frac{1}{\|g_k\|^2} = \frac{\|d_{k-1}\|^2}{\eta^4 \|g_{k-1}\|^4} + \frac{1}{\|g_k\|^2}, \text{ When } k = 0,$$

$$\|d_0\|^2 / (g_0^T d_0)^2 = 1 / \|g_0\|^2. \text{ It can be obtained the above inequality } \|d_k\|^2 / (g_k^T d_k)^2 \leq \sum_{i=1}^k 1 / \eta^4 \|g_i\|^2 \leq k / \eta^4 \gamma^2$$

Therefore $(g_k^T d_k)^2 / \|d_k\|^2 \geq \eta^4 \gamma^2 / k = +\infty$. Contradictions with lemma 3.1 above $\liminf_{k \rightarrow \infty} \|g_k\| = 0$.

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A Study of Overlapping Words in Shanxi Dialect—Take the Adjective Perspective as an Example

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Abstract: Many adjectives in Shanxi dialect are in overlapping forms. This is the biggest difference between it and Mandarin, because there are very few overlapping adjectives in Mandarin. These overlapping adjectives partially overlap as a whole, and some overlap partially, but many overlapping forms are integrated overlaps generated at one time, and only a small part is formed after multiple evolutions. We can understand the characteristics of word formation in the Western dialect of Wuxiang Mountain with the study of Shanxi's adjective overlap.

Keywords: Shanxi Dialect; Adjective; Overlapping Study

According to the current research, Shanxi's overlapping adjectives do not have phonetic overlap, nor do they have overlapping segments. Most of them are morpheme overlaps. The following analysis will be based on the two major parts of morpheme and segment overlap. The syllables in the text will be replaced by capital letters, where A and B represent morphemes, while the affixes are replaced by X and Y. When the letters overlap, the syllables also overlap.

1. Morpheme overlap

1.1 Lexical morpheme overlap

There are 8 overlapping forms of lexical morpheme overlap, which are as follows:

1.1.1 “AA的” style

The basic form “A” are all monosyllabic adjectives, and their characteristic is that they can be independently formed into words. Most monosyllabic adjectives in Shanxi can be overlapped, for example:

long /big /round /thin

If you want to overlap monosyllabic adjectives with “AA”, you need to use “的” as a suffix. The two cannot be distinguished. If there is no suffix “的”, some of “AA”'s part of speech will be transformed into a noun (most of “AA's” have no Corresponding noun “AA” formula), the following will also list this phenomenon, try to compare:

(1) Words whose part of speech is an adjective

粉粉的 (pink adj.) /白白的 (white adj.) /绿绿的 (green adj.) /黄黄的 (yellow adj.) 长长的 (long adj.) /高高的 (high adj.)

(2) Words whose part of speech is a noun

粉粉 (pink n.) /白白 (white n.) /绿绿 (green n.) 黄黄 (yellow n.) /长长 (long n.) /高高 (high n.)

1.1.2 “AA家” style

It can be seen that the suffix “的” of “AA” is related. According to Danqing Liu 's point of view, “AA” and “的” are generated at one time and can be included in the category of comprehensive overlap, that is, they are overlapping while combining additional means.

悄悄家 (soundlessly) /远远家 (far away) /少少家 (a little) /慢慢家 (slow)

In the above, “家” are all suffixes, which have the same meaning as “的” in the adjectives of status. This form is a one-time integrated overlap, that is, two types of means of overlap and subsequent addition are used at the same time.

1.1.3 “AABB” style

In a basic sense, this form is the same as Mandarin, but its overlapping range is obviously wider than that of Mandarin.

凑凑合合 (scratchy) /迷迷瞪瞪 (logy) /疯疯张张 (crazy)

This overlapping form is the same as the “scattered and overlapping” explained by Danqing Liu , and it can also be interpreted as combining the newly-added form with each part by attaching separately, making the basic form unable to maintain the original integrity.

1.1.4 “ABAB的” style

黢黑黢黑的 (black) /白亮白亮的 (bright white) /黑绿黑绿的 (black and green)

The overlap type is also a one-time integrated overlap, and the overlap and the suffix “的” will be generated at the same time.

1.1.5 “AAB” style

This form is relatively rare, so there is no basic form, and it is a whole. “AB” cannot form a vocabulary. Only one case has been found at this stage, which can be included in the category of word formation overlap: 小小哒 (young or small)

In this form, “小小” belongs to the word, and the overlapping part modifies the following syllable. The two major means of overlap and bias will act and be generated at the same time, and are formed after partial overlap and one generation. of.

1.1.6 “AAB(的)” style

In this form, “A” and “B” both have the role of undertaking the lexical meaning, and “BB” overlaps, but also reflects the image meaning. Based on the structural relationship, it can be divided into two categories: “(AB+B)+的” and “A+(BB+)”.

Words with the style of “(AB+B)+的” 灰蒙蒙的 (overcast) /亮闪闪的 (glittering) /水灵灵的 (watery)

“AB” in the above overlapping formula can also be a word if it exists alone, and “BB(的)” can also be a word, that is, a comprehensive overlap generated by overlapping and additional two types of means at the same time, “ABB的” can be interpreted as partial overlap.

Words with the style of “A+(BB的)”

老长长的 (quite long) /老粗粗的 (quite thick) /老深深的 (quite deep) /老厚厚的 (quite thick)

Regardless of the structural relationship, this form is partially overlapping. In the above overlapping formula, “BB的” can form a vocabulary, and “A” mainly modifies the overlapping component “BB的”, so it is also included in the category of partial overlap.

Both of the above structures need to add the suffix “的” to form a word.

1.1.7 “ABAC” style

In this type of form, “B” and “C” are of great significance, and the two are generally unable to form a word. Generally:

轻声轻气 (Softly) /虎头虎脑 (Strong and steady) /特低特拉 (Tè dī tè lā)

First, it should be noted that the formula is partial overlap, and secondly, the main feature of the formula is in parallel, there are overlapping dual characteristics, can be included in the quasi-overlap: based on the meaning level, the two are not much different, such as “和声”, “和气” is synonymous union^[1]

1.2 Overlapping of the affix

Shandong dialect has many state adjectives, which are accompanied by overlapping affixes probably have the following 6 styles:

1.2.1 “AXX” style

笨出出 (stupid adj.) /白寡寡 (snowy adj.) /黑黢黢 (dark adj.)

The root “A” is generally derived from adjective lexical lexicons, only a small number of which are derived from auto-lexical lexicons or from noun lexical lexicons. This form can be called partial overlap, or a combination of root and affix.

1.2.2 “AYXX” style

“Y” here is phenotypic, no practical meaning, added to the vocabulary, can form a degree of light, do not agree with and other grammatical significance based on subjective level, can be used to adjust the phoneme, create a relaxed tone effect.^[2]

灰不出出 (gray adj.) /白圪通通 (bright adj.) /甜圪生生 (honeyed adj.) /甜不滋滋 (sweet adj.)

2. The segments overlap

2.1 “A also A” type

In this overlapping formula, “also” represents the corresponding concoction of “one”, which belongs to a four-word phrase of a fixed overlapping class, such as:

寡了也寡 (Guǎle yě guǎ) /白了也白 (Báile yě bái) /楞了也楞 (Léngle yě léng)

2.2 “A 也不 A” style

“A nor A” can be interpreted as “not at all” in contrast to the above, this form is generally present in the opposite, the “A” in the equation is mostly antonyms, can be regarded as partial overlap. Like what:

冷也不冷 (Lěng yě bù lěng) /黑也不黑 (Hēi yě bù hēi) /淡也不淡 (Dàn yě bù dàn)

3. Conclusion

Shanxi dialect has a variety of overlapping adjectives, but there is no simple speech overlap, in which there are a total of 17 kinds of lexical, segment overlapping, most of the overlap is a survival, only a small number of affix repetition needs to be generated many times. Affix overlap is generally the suffix portion of an overlapping sound, and only a small number of it is an integral or decentralized overlap with the lexicon. Segment overlaps are all syntactic-related overlaps. It can be seen that only a comprehensive study of overlapping words in mountain western dialects based on typological framework can summarize their characteristics and form a more comprehensive understanding of such words.

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Empirical Analysis of Factors Impacting of Brain Drain and Turnover Intention Among SME Employees in Sichuan, China

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Abstract: The purpose of this study was to explore the reasons for the SME employee resignation and the cause issue, to analyze the mechanism of increasing employee retention rate through SME human resource strategy for the satisfaction of employee retention. The investigation of how dependent variable of turnover intention relates to independent variables of employee background, personal feeling, organizational commitment, job satisfaction, work embeddedness, and social influence among SMEs in Sichuan of China.

Keywords: Brain Drain; Turnover Intention; SME Employees

1. Introduction

According to the current development situation in China, the continuous and comprehensive development of SMEs is an inevitable trend. The reform of the economic system is also creating a good market environment for the development and growth of SMEs. Under such a background, SMEs should seize the opportunity and get the result it deserves. However, some small and medium-sized enterprises have gradually grown in the complex market competition, and some have steadily disappeared. The factors that cause this situation are many, not only in the society and the enterprise itself but more importantly in the management of talent strategy. The loss of talents and frequent personnel turnover significantly impact small and medium-sized enterprises and are sometimes even fatal. Along with the loss of talents, the company's intellectual property rights and labor training costs are also lost. Due to their limitations, the innate deficiencies in allocating and managing human resources have led to frequent brain drain in small and medium-sized enterprises due to their regulations.

2. Theoretical Basis

(1)The Price-Mueller model. The model is based on the theory of overall turnover. The core of the approach consists of three hypotheses. First, assume that employees enter the organization with certain expectations; second, believe that there is an exchange of interests between employees and the enterprise organization, that is, employees serve the enterprise and obtain returns from the enterprise; third, assume that employees pursue maximization of net income (Price 2001).^[1]

(2)Employee turnover decision process model. The model is verified and expects employees serving cognitive operating characteristics, the relationship between the leadership and the age of four variables considered satisfactory for mediating variable work and commitment which ultimately affect the organization so that employees generate turnover intention eventually lead to the loss of behavior, which turnover tendency is a predictor of quitting intention behavior (Kang and Sung 2019).^[2]

(3)Employee turnover decision process model. The model expects employees serving cognitive operating characteristics, the relationship between the leadership and the age of four variables considered satisfactory for mediating variable work and commitment which ultimately affect the organization so that employees generate turnover intention eventually lead to the loss of behavior, which turnover tendency is a predictor of quitting intention behavior (Kang and Sung. 2019).^[3]

3. Understanding the Influencing Factors of the SME Employee in Brain Drain and Turnover Intention

3.1 Explore the reasons for the employee resignation of SMEs in Sichuan:

Regarding employee backgrounds with employee qualifications and capability, if they do not get anything from the job that can satisfy their goals, it will affect their turnover intention at SME in Sichuan.

3.2 Analyze the theoretical mechanism of increasing employee retention rate in the operation of Sichuan SMEs

In terms of organizational commitment with employee performance and approved leadership, it will lead to employees' concept in turnover intention. In terms of job satisfaction with employee career and comfortability will increase their turnover intention if they do not associate with where they work.

3.3 To summarize the influencing factors for improving both SME human resource strategy and

satisfaction of employee retention

In terms of work embeddedness of employee attachment and sharing with organizational behavior, if they do not feel such a sense of being and work ethics, it will cause the concern of their leaving intention. Regarding the social influence of employee conformity, socialization, and peer pressure, if some of those elements are not met with employees' needs, it will increase their turnover intention of leaving their workplace.

4. The Conceptual Framework for the Research Study

First Relationship between influencing factors of employee background, personal feeling, organizational commitment, job satisfaction. Work embeddedness, social influence, and turnover intention.

second Using the correlation analysis test, all influencing factors are significantly correlated with SME employees' turnover intention in Sichuan of China.

5. The Countermeasures for the Improvement of the SME Employees' Brain Drain and Turnover Intention

5.1 Increase job satisfaction

There are six elements of job satisfaction: career length, salary, promotion opportunities, job participation, positive/negative emotions, and job autonomy. According to the analysis results, it is concluded that the professional growth of SME practitioners has a significant impact on job satisfaction.

5.2 Dealing with brain drain

Talent management practices must be executed perfectly to attract and retain highly skilled talent who may leave the company. If a company wants to compete and retain top local talent, it is essential to execute a talent management strategy to deal with the loss of talent. Work distribution and employee care will be significant (Anees 2021)^[4].

5.3 Reducing turnover intention

(1) Hire the right people. Retaining employees starts with hiring the right employees. You may hire employees with vital skills that match your vacant position. (2) Offer competitive remuneration and benefits. People want to be well compensated. They need to pay standard expenses such as housing, utilities, and food. Most people also want enough money to do extra things. If you don't pay your employees well, they will find a company that is willing. (3) Give encouragement and recognition. Employees need encouragement and praise. Express gratitude when employees do the right thing. When they finish a big and challenging project or submit a project before the deadline, congratulate them. Let them know that you have seen their hard work. (4) Express the career path. If employees are stuck in one job for too long, they may look for another job that can be promoted. Most employees want to improve their skills and knowledge and move up the career ladder. Showing the expected career path to employees will allow them to understand the direction and goals. (5) Allow Flexi-Work schedules. Flexible work schedules allow employees to adjust their working hours and locations. Employees can create a work-life balance for themselves. Employees can pursue things outside of work, attend appointments, and take care of their families.

5.4 Need more understanding of employee turnover impact in SME operation

(1) Organization performance. The high turnover affects organizational performance due to the loss of corporate and human knowledge, skills, and abilities that employees have developed through experience and period (Hilma 2020).^[5] (2) Organization culture. The high turnover disrupts employees' social ties and trust without a stable working environment (Lee and Kim 2011).^[6] (3) Human capital. The high turnover increases human capital in paying the compensation for new and leaving employees. (4) Organizational operation. High turnover creates difficulties in cooperation between different units and departments, potentially breaking group performance patterns.

6. Conclusion

This research aims to gain a deeper understanding of the turnover intentions of SME practitioners under different demographic variables. It examines the turnover and turnover intentions of SME practitioners, turnover intention and job satisfaction, job embedding, turnover intention and individual psychological factors, social factors, job satisfaction and career length, salary, promotion opportunities, job participation, positive/negative emotions, job autonomy, job embedding and organizational connection, corporate matching, organizational sacrifice, social connection, social matching, social sacrifice.

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Research on the Consumer Perception and Government Policies on Consumers' Purchase Intention of NEV in Sichuan, China

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Abstract: As a breakthrough in solving high carbon emissions from traditional fuel vehicles, new energy vehicles (NEV) showed great potential in reducing greenhouse gas emissions and improving air pollution. They could also be an important opportunity for China's automobile industry to transform its development direction. This study analyzed the Sichuan Government's policy on sales of new energy vehicles. It explored consumer perceived value and perceived risk factors related to new energy vehicle purchase intention. The results showed the government policy, all perceived values, and most perceived risks having significant impacts on buying intention on new energy vehicle, except time risk due to the expectation of development process of new energy vehicle for taking more extended time in the automobile industry.

Keywords: New Energy Vehicle; Purchase Intention; Government Policy

1. Introduction

Low-carbon development requirements under global climate change are urgent matters nowadays. Studies have shown that the high concentration of carbon dioxide in the air is the leading cause of the greenhouse effect. The importance of promoting new energy vehicles can be one of the considerations. Compared with traditional vehicles, new energy vehicles have the following advantages. First, new energy vehicles can reduce high dependence on energy; second, NEV can solve the problem of carbon dioxide emissions with low pollution; third, optimize the structure of China's automobile industry and accelerate the upgrading of the automobile industry.

2. Theoretical Basis

2.1 Consumer Behavior Model (Acevedo 2018)^[1]

Motivation - including basic needs, safety needs, social needs, respective needs, and self-actualized needs

Perception - the process by which individuals choose, organize, and perceive information to reach meaningful conclusions.

Learning - relying on skills, knowledge, and intentions; skills are cultivated through practice, while expertise and preferences are acquired through experience.

Attitudes and beliefs - reacting to a given product precisely and constituting a brand image that affects consumers' buying behavior.

2.2 Theory of Planned Behavior (Aditami and Soepatini 2016)^[2]

Attitude - a combination of consumers' (1) beliefs, (2) feelings, (3) and behavioral intentions of particular objects in the context of marketing.

Subjective norm - referring to beliefs about whether most people agree or disagree with the behavior. It is related to a person's thoughts, whether their peers and those important to him should participate in the behavior.

Perceived behavioral control - referring to people's perception of their capability to perform specific behaviors. An analogy to the expected value model of attitudes such as the act of conduct, assuming that perceived behavioral control is determined by the aggregate set of accessible control beliefs.

2.3 Model of Risk Perception (Slovic. 2016)^[3]

Cognitive factors - referring to the characteristics of consumers that affect performance and learning from certain situations. These factors are used to adjust performance to be improved or decreased in what they act. Affective factors - referring to emotional factors that affect learning. It can have negative or positive effects on what information consumers receive. Contextual factors refer to access, motivation, ability, design, training, and other factors affecting perceptions about ease of learning and influencing acceptance and rejection of technology. Individual factors - determining buying intention- are identified, including attitudes, knowledge, skills, genetics, and personal characteristics.

3. Understanding of Influence Mechanism of Consumer Perception on the Purchase Intention of NEV

3.1 Analyze the Sichuan government's policy on new energy vehicles for improving the concerns of the green environment:

The Sichuan government intends to encourage NEV sales coping with the national policy for improving the environment. But suitable policies will have significant substantial effects on consumers who may have concerns about vehicle safety and value over the environmental issue.

3.2 Explore the influence factors of consumer perception on purchase intention through perceived value and perceived risk:

Purchase intention is a customer's willingness to purchase a particular product or a specific service. Purchase intention is a dependent variable, which depends on several external and internal factors. Purchase intention measures respondents' attitudes towards purchasing products or using services.

3.3 Explore the perspective of automakers and consumers and provide suggestions for improving the promotion and awareness of buying new energy vehicles:

The customer perceived value of family vehicles divided its driving characteristics into price, service, brand, product quality, and green attribute perceived value, and proposed that consumption value should be increased in different strategic planning.

4. The Conceptual Framework for the Research Study

First Four different levels: the relationship between influencing factors of perceived value and perceived risk, and purchase intention; the relationship between influencing factors of emotional value and quality value, and perceived value; the relationship between influencing factors of functional risk, service risk, financial risk, and time risk, and perceived risk; the relationship between government policy and purchase intention.

second Using regression analysis testing, all influencing factors are significantly correlated with purchase intention, perceived value, and perceived risk, respectively, except time risk. This phenomenon may refer to consumers understanding that NEV will take time to develop in taking over the traditional version.

5. The Countermeasures for the Improvement of Purchase Intention on NEV

(1)Government policy. The government's preferential vehicle purchase subsidies, technical research and development support, and supporting facilities construction measures implemented by the government for new energy vehicles can directly provide consumers with economic subsidies and reduce the purchase price and subsequent use costs of new energy vehicles to a large extent (Chen 2020).^[4] (2)Perceived value and perceived risk. The higher the consumer's perceived value of new energy vehicles, the higher its willingness to buy.5.3 Reducing turnover intention. Therefore, automobile manufacturers and the government must strive to improve the overall competitiveness of their products and enhance customers' perceived value from different dimensions of customer perceived value to promote consumers' purchasing behavior (Wang 2019).^[5] (3)Emotional value and quality value. Emotional value - the more substantial the consumer's awareness of environmental protection, the more consumers preference NEV. Quality value - the key differentiators of NEV will be intelligent and connected functions and human-oriented design that improve the quality value over traditional fuel consumption vehicles (He 2018).^[6] (4)Consumer preference. NEVs are the product of the latest technology era, and users inevitably demand intelligent technology and connectivity. The features such as intelligent safety functions and multipurpose layouts will improve the interest of consumers in using NEV. (5)Demographic concern. Although this research found no significant difference between genders, ages, education background, and monthly income with the purchase intention of NEV, the above four measurements could serve as the improvement to general consumers in Sichuan to increase their confidence and buying intention as long as policy, value and risk, emotional and quality value, and consumer preference are working well as the influencing factors.

6. Conclusion

The promotion of new products is to understand consumer psychology. Internal influences on consumer behavior include personal perception, memory, learning, motivation, personality, emotions, and attitudes. In addition, the interpretation of the meaning of motivation varies from person to person and is influenced by individual biases, experiences, and needs. For marketers to effectively convey their brand information or products to consumers, they need to understand the nature of perception. Information processing is the process of visualizing the catalyst, transforming it into useful information, and then storing it. Motivation opportunities affect people's feelings, feelings, and behaviors, so it takes millions of dollars to buy many different goods and services. In addition, the purchase decision depends on the relationship between consumer behavior and decision-making behavior, including all psychological factors such as motivation, cognition, and learning.

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An Empirical Study on the Influence Mechanism of Charitable Donations of Small and Medium-sized Enterprises on Corporate Reputation in Sichuan, China

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Abstract: Corporate reputation would be an essential intangible asset of an enterprise. A good corporate reputation could bring many high-quality resources to the enterprise, thereby effectively improving its competitiveness. As a company, charitable donations, the most important manifestation of fulfilling social responsibilities, could receive more and more attention. Charitable contributions made by companies would affect the reputation of the company to a certain extent. In theory, corporate reputation as a signal could solve the problems faced by companies to a certain extent. A good reputation could usually bring higher performance to the company and could also be used as a signal to reflect corporate value. This study analyzed the Sichuan SMEs' policy on charitable donation. It investigated three significant objectives with challenges SMEs faced in coping with local corporate reputation, utilizing influencing factors of operational advantages, and suggesting improvement on corporate reputation.

Keywords: Small and Medium-Sized Enterprises; Corporate Charitable Donation; Corporate Reputation

1. Introduction

A comprehensive evaluation of the degree of satisfaction of the needs and expectations of the company and the company's future development plans. In the era of economic globalization, a company's reputation will primarily affect its development. Corporate reputation refers to the company's stakeholders, namely shareholders, managers, employees, consumers, suppliers, distributors, competitors, governments, media, local communities, and non-governmental organizations. Charitable donations of enterprises can reflect their social responsibility, demonstrate their responsible style, and win widespread praise from society. On the other hand, the generous contributions of enterprises will make the public feel that it is to increase exposure with driving the costs of social value.

2. Theoretical Basis

2.1 The Dimension of Affective Reputation (Esenyel & Emeagwali 2019).^[1]

Organizational commitment is an extensive debate in organizational behavior on the possible consequences and impacts on enterprises. Some of the results that make organizational commitments valuable are individuals' willingness to resign and employees with a high degree of organizational commitment. The five dimensions that cause the affective reputation of the emotional stage are product and service perception, corporate integrity performance perception, corporate social responsibility perception, perception of innovation, and perception of talent competitiveness.

2.2 Dimensions of Corporate Competitiveness (Harness 2018)^[2]

Corporate competitiveness is the output of the interaction between corporate resources and capabilities. Corporate resources are the foundation of corporate powers. Different organizational teams or individuals constituted by human resources are carriers with skills or knowledge and other conditions. On the other hand, we cannot talk about resources without ability. Even if resources are the basis for the survival and development of an enterprise, if the enterprise's resources cannot be used effectively, the compelling force that maintains the survival and growth of the enterprise will not be activated and amplified, nor can it be transformed into competitiveness. The five dimensions of corporate competitiveness are competitive talent advantage, financial operation advantage, marketing advantage, organizational management advantage, and project management advantage.

2.3 Model of Corporate Charitable Donation (Seifert 2004)^[3]

Strategic charity involves both charity and profitability. If corporate charity donation does not contribute to corporate performance, it cannot be determined whether corporate charity donation has real strategic value. Using traditional charity will affect a company's long-term corporate performance rather than short-term corporate performance in overall financial and reputed effects.

3. Understanding of Influence Mechanism of Charitable Donations of SME on Corporate Reputation

3.1 Analyze the challenges Sichuan small and medium-sized enterprises face in coping with local corporate

reputation and social philanthropy:

The cost of charitable donation can burden SMEs, and it is not accessible to determine its effectiveness and the right place for denotation. As more people are expecting corporate social responsibility to be part of any corporation's duties, SMEs should not take these activities lightly for the opportunity of company development.

3.2 Explore the influence factors of emotional reputation; corporate competitiveness; perception of corporate social responsibility; perception of innovation capability; factors that affect corporate reputation through financial, operational advantages, and competitive talent advantages:

This research focuses on the core concept of corporate reputation and proposes two dimensions of emotional reputation and corporate competitiveness for this concept. Emotional reputation has two dimensions: corporate social responsibility perception and innovation ability perception. There are two dimensions under the aspect of corporate competitiveness: financial operation advantage and talent competitive advantage. The moderating variable is corporate charitable donations.

3.3 Suggest improving the reputation of Sichuan small and medium-sized enterprises through corporate charitable donations:

The relationship between generous donation and corporate reputation has laid the foundation for the follow-up supplementary research theories in Sichuan of China. Charitable donation refers to the voluntary and free contribution of tangible or intangible assets to charitable organizations or beneficiaries.

4.The Conceptual Framework for the Research Study

First Three different levels: the relationship between influencing factors of emotional reputation and corporate competitiveness, and corporate reputation; the relationship between influencing factors of perception of corporate social responsibility and innovation capability, and emotional reputation; the relationship between influencing factors of financial operation advantage and talent competitive advantage, and corporate competitiveness; the relationship between corporate charity donation and corporate reputation.

second Using regression analysis testing, all influencing factors are shown with significantly correlated with corporate reputation, emotional reputation, and corporate competitiveness, respectively.

5. The Countermeasures for the Benefits of Charitable Donation Strategy for Sichuan SMEs

(1)Donation increase sales. Corporate social responsibility can make consumers believe that companies engaged in social responsibility activities perform better. A positive attitude helps companies develop positive beliefs about their operations for what they do in society (Lin 2020).^[4]

(2)Charitable activities enhancing customer loyalty. It is essential to note that the charitable donation supports the target audience with more loyalty to use company service in the long term, which helps businesses with sustainable growth (Huang 2019).^[5]

(3)Donations building loyal community and motivating employees. Various studies have shown that when employees view their company positively, they will be more efficient, motivated, and committed to its overall goals. (Liang and Renneboog 2017).^[6]

(4)Donating to charities boosting corporate brand reputation: ①Companies related to philanthropic views strengthened positive brand awareness and improved reputation within the community. The reasons are as follows: ②Supporting philanthropy is the most trustworthy activity, and it can have a significant impact on the perception of your business. ③Consumers believe that trustworthy brands are trustworthy and ethical, and they are more willing to donate to companies they trust. ④Feedback helps define the company's identity and distinguish it from competitors.

6. Conclusion

Corporate charitable donations have a significant impact on corporate reputation. Consumers believe that companies' philanthropic donations have a higher corporate reputation. Companies can plan according to their strategic requirements and raise awareness that participating in charitable donations is a long-term asset rather than a short-term cost. Before donating, understand the demands of the target group so that the company's performance meets consumer expectations; Be proactive when making charitable donations so that consumers can feel the enthusiasm and care of the company. Corporate competitiveness has a significant impact on corporate reputation. Consumers believe that the stronger the corporate competitiveness, the higher the corporate reputation.

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On the Application of Traditional Culture in the Establishment of Modern Brand

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Abstract: Chinese traditional culture has a long history, broad and profound. To promote the development of cultural branding, we must fully tap the excellent Chinese traditional culture. To integrate traditional culture into brand and form brand culture, enterprises should not only study traditional culture and its modern value, but also fully understand the real connotation of brand culture. In brand creation, only by correctly understanding and evaluating the fit between culture and brand, finding the entry point between culture and brand, excavating the connotation of traditional culture and understanding the differences between eastern and Western cultures, In order to better apply traditional culture to the establishment of modern brand and truly form the influence of cultural brand.

Keywords: Chinese Traditional Culture; Brand ; Strategy

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Introduction

Excavating the connotation of Chinese excellent traditional culture and endowing it with new era value in combination with the requirements of the times is one of the important ways to promote the development of cultural branding, increase the national cultural soft power and enhance the competitiveness of enterprises.

1. Traditional culture and its modern value

Chinese culture is the crystallization of the material and spiritual thoughts and wisdom created by the Chinese people from generation to generation. Chinese traditional culture has a long history, ranging from mountains and rivers, such as the Yangtze River, the Yellow River and Mount Tai, to patterns and colors, such as Chinese red and Chinese knot, to Confucianism, Legalism, Taoism and Mohism. Therefore, traditional culture has important value and practical significance in the establishment of modern brand.^[1]

1.1 Form brand personality

Culture is unique, brands form cultural personality, and competitive enterprises are difficult to imitate. Once a brand forms its own cultural characteristics, it injects unique cultural attributes into the product, and then forms marketing advantages and constitutes the soft power of enterprise competition. Therefore, the injection of culture not only improves the cultural taste of products, but also makes the brand form unique personality characteristics, which is both unique and exclusive, which greatly enhances the soft power of enterprise competition.

1.2 Effective communication and dissemination

Brand communication needs symbols, whether visual or connotative. The core value of a brand comes from its cultural connotation. The connotation of Chinese traditional culture is the carrier of high added value of “Chinese brand”. For example, “Great Wall”, “Panda”, “Taishan” and other Chinese brands, consumers naturally associate products with the connotation of these elements through these well-known Chinese culture and its connotation. It can also be said that “Chinese culture” is an image and symbol recognized by consumers and a “pass” for consumption in the international market, It is also an important symbol of effective communication and dissemination.

1.3 Enhance product value

From the perspective of marketing, the overall product includes at least three levels: core level, form level and additional level. The basic value of the product is determined by its core layer. When the core functions are close or similar, the formal layer and additional layer determine the product value. In particular, the brand is an important part of the formal layer. Injecting culture into the brand will sublimate the spirit of the product and enhance the value of the product.^[2]

2. Brand culture and its connotation

Brand is the most important intangible asset of an enterprise and the soft power of enterprise competition, and culture is the core and foundation to improve this soft power. Brand is the carrier of culture, and culture is the essence of enterprises in brand. Although there are many factors affecting customers' purchase of products, such as product brand, attribute, price, service, utility and culture, the most fundamental factor affecting customers' decision to purchase in the future will be brand culture.

2.1 The connotation of brand is culture

The brand is composed of "brand name" and "brand logo". It is the name, terminology, mark, symbol and design, or their combination. Its purpose is to provide identification and value judgment for consumers. However, the brand with real connotation is a brand implanted with culture.

2.2 Brand culture is the only embodiment of customers' spiritual consumption

In the era of material scarcity, people's consumption mainly focuses on the material attributes of products, that is, the demand at the material level. With the continuous improvement of income level, the focus of people's consumption has shifted from the satisfaction of material needs to the satisfaction of spiritual needs. At this time, people no longer care about the material attributes of a product, but pay more attention to the cultural and spiritual connotation of products or services. Therefore, brand culture is the only embodiment of customer spiritual consumption.

2.3 Brand culture transmits a kind of values and lifestyle

Brand culture first transmits a kind of values. For example, Nike represents the spirit of "just do it"; IBM means service; Jinliufu liquor represents Chinese traditional "Fu culture". Secondly, brand culture transmits a way of life. For example, Marlboro represents freedom and open personality; Huangshan cigarette pursues the artistic conception of "first grade Huangshan, high sky and light clouds".

3. Application of traditional culture in brand building

3.1 Fit: culture must fit with goods or services

In 1994, Weinberger, Campbell and Brody proposed product color matrix (PCM). This matrix divides the products into four categories according to the product risk and the purchase purpose of consumers: one is to buy for durable or expensive functions, such as houses, cars, etc. (white products); The second category is luxury goods purchased for showing off, such as high-grade clothing, bags, cosmetics, etc. (red products); The third category is non-durable goods or raw materials purchased for function, such as flour, detergent, etc. (blue products); The fourth category is non-durable goods with impulsive purchase behavior and emotional motivation, such as snacks, wine, cigarettes, etc. (yellow products). The products using "traditional culture" mainly meet the spiritual needs of consumers. Therefore, the second and fourth categories are more suitable to integrate Chinese traditional culture into the brand, and their brand culture plays a greater role; For the first and third types of products with complex processes and high technical content, cultural factors are usually only auxiliary.

3.2 Positioning: find the starting point of brand culture

Product positioning, brand positioning and enterprise positioning are the three levels of positioning. The cultural positioning in the brand, that is, the positioning of brand culture, is one of the strategies in enterprise marketing. Enterprises should import the traditional culture into the brand and look for the entry point of culture and brand according to their own reality, target market, consumer demand and competition situation. This entry point mainly has the following two points: first, the entry of culture and products; The second is the entry of culture and target market. The cut in of culture and products, that is, culture is not the label of products, but the integration of products. For example, Bank of China, the brand cultural symbol "China copper coin" is both a product attribute and a symbol of culture. The entry point of the two is accurate and perfect, which not only reveals the industry attribute, but also conforms to its industry positioning.^[3]

3.3 Differences: pay attention to the differences between eastern and Western cultures

There are great differences between eastern and Western cultures, so not all "Chinese culture" are suitable for going to the world. Therefore, this requires us to seriously study and truly realize that "Chinese culture" is not only Chinese, but also world. Some people say that the longitude of the 21st century is Chinese culture and Oriental spirit, and the latitude is western science and technology. This is best confirmed by the success of the film Kung Fu Panda. The film Kung Fu Panda successfully uses the two important elements of "Kung Fu" and "Panda" in Chinese culture. The Tai Chi, temple fair and calligraphy in the film, including noodles, steamed stuffed buns, tofu and chopsticks used by animals, are typical Chinese cultural symbols. Coupled with the powerful production technology of DreamWorks, the success of the film is in the imagination. In short, the arrival of the brand era, building a brand with the help of culture and injecting Chinese traditional culture into the process of brand creation is an important marketing strategy faced by Chinese enterprises (including other enterprises such as Coca Cola). Traditional culture is integrated into the brand to form brand culture. Enterprises should not only study traditional culture and its modern value, but also fully understand the real connotation of brand culture. In the process of brand creation, they should understand and evaluate the fit, positioning, connotation and difference between culture and brand, so as to truly form the influence of cultural brand.^[4]

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An Empirical Study on the Influence Mechanism of Internet Celebrity Problem on Consumers' Live Streaming Shopping Purchase Decision in Sichuan, China

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Abstract: With the development of the new Internet era, different changes occurred in consumer behavior and the competitive environment. The Internet economy, new media, and new technologies had been popularized, and shopping methods and e-commerce had been constantly updated. Marketing methods could have significantly been challenged. In the growing Internet celebrity economy, there were also some negatively problematic Internet celebrities participating in it.

Keywords: Internet Celebrity Problem; Live Streaming Shopping; Customer Buying Decision

1. Introduction

With the rapid development of the Internet, people's entertainment and lifestyles are undergoing subtle changes. Compared with traditional online shopping on PCs, mobile shopping is now more and more popular with people. It has also become a new driving force for online consumption growth. Under this circumstance, new technologies continue to emerge, such as social e-commerce and live-streaming e-commerce. As innovations in online consumption models, social e-commerce and live broadcast e-commerce have become essential supports for online consumption because they can effectively meet the diverse needs of consumers. "Internet celebrity" is originally a neutral term, which should be used as a disseminator of positive energy in society, but capital has a negative trend. Behind the booming Internet celebrity economy, there is frequent chaos. Various destructive behaviors flood the web live broadcast platform, touching our society's moral bottom line and legal red line.

2. Theoretical Basis

2.1 Consumer Decision Model (Vijayalakshmi and Gurumoorthy 2018).^[1]

(1)Information - Howard believes that information is a perception caused by stimuli. Information is a significant variable that drives the operation of the CDM model.

(2)Cognition - Cognition is the degree of consumer awareness of a particular product. It is usually related to and identified with the product itself or the product form, such as packaging, but it does not give a good or bad evaluation.

(3)Attitude - The consumer's expectation of demand is the degree to which the market can be met or the degree of consumer preference.

(4)Confidence - Confidence is the degree of certainty held by consumers after judgment and evaluation.

(5)Purchase Intention - Purchase intention refers to consumers' possibility to purchase a specific product within a certain period. Purchase intention is an essential indicator of purchase behavior. For products that are purchased frequently, predictability is better. However, for products purchased infrequently, the willingness to acquire will be interfered with by factors such as time gaps and issues, which will affect the purchase behavior.

(6)Purchase behavior - refers to purchasing a product during a specific period when consumers have paid or given certain financial commitments.

2.2 Model framework for the influence of online experiential interaction between consumers and merchants on their purchase intentions (Dong 2019)^[2]

Initially, the term willingness originated from psychology. It is usually used to express the subjective probability of a person being subjected to a specific stimulus, the internal state of the body changes, and then certain behaviors. Willingness is an individual's planned and conscious subjective thinking before making behavioral decisions, but this thinking differs from individual attitudes. The internal logic of the SOR theory forms a "storyline" around the core category and rationally arranges the various variables affecting consumers' online purchase intentions by the online experiential interaction between consumers and merchants.

2.3 Customer Perceived Value Model (Hamenda 2018)^[3]

The concept of customer perceived value reflects more subjective characteristics of customers and expresses customers' overall evaluation of the company's products and services. In the description of perceived value, a summary of the gains and losses of

perceived value is relatively widely supported for the discussion of perceived value.

3. Understanding on the Influence Mechanism of Internet Celebrity Problem on Consumers' Live Streaming Shopping Purchase Decision

(1) Analyze the phenomenon of “trouble” of the media image of Internet anchors and its impact on the Internet celebrity economy in Sichuan Province: The phenomenon of problematic impacts online consumer shopping purchase decisions in many ways. Consumers' trust in celebrities can be positively or negatively depending on the outcome of promotional activities, whether they are intentionally good for the consumers.

(2) Explore the influence mechanism between the variables of online purchase intention and customer perceived value and consumer buying decision with internet celebrity problem: There is also online purchase intention under the dimension of online purchase intention. There are three dimensions of physical existence, online social presence, and online self-existence. There are two dimensions under the customer perceived value dimension: total customer purchase value and total customer purchase cost. There are four elements in the dimensions of online physical presence, social presence, and self-presence: online sensory experience interaction, online emotional experience interaction, online entertainment experience interaction, and online behavior experience interaction.

(3) Combine the obtained data analysis results to observe whether the hypothesis is valid, explain the reasons, and make feasible suggestions for the better development of the Internet celebrity economy: Through the data analysis, there are significant impacts in online purchase intention and customer perceived value to the customer buying decision and internet celebrity problem. The analysis shows the importance of the Internet celebrity economy for marketing promotion.

4. The Conceptual Framework for the Research Study

First The relationship between influencing factors of online physical presence, online social presence, online self-presence, and online purchase intention; total customer purchase value and complete customer purchase cost, customer perceived value; internet celebrity problem and consumer buying decision.

Second Using correlation analysis testing, all influence factors significantly influence online purchase intention, customer perceived value, and consumer buying decision, respectively.

5. The Countermeasures on the Influence Mechanism of Internet Celebrity Problem on Consumers' Live Streaming Shopping Purchase Decision

(1) Chinese Internet celebrities influence consumers' attitudes towards e-commerce purchases (Yu 2017).^[4] The traditional sources of celebrities still apply to Chinese Internet celebrities, but the source of attraction is more important than credibility. Source attractiveness is the most critical force driving online celebrity e-commerce to buy different products in the Sichuan area. The source expertise and participation of celebrities also play a vital role in influencing consumers' attitudes and purchase behavior.

(2) Use of social media and the Internet nature of influencers (Geng 2020).^[5] Two vital elements of influencers: Perceive strong relevance, including role intimacy, product intimacy usually has a strong buying habit, such as weekly e-commerce purchases from Internet celebrities, and net celebrities' perception of authenticity will affect consumers' attitudes and buying behavior to a certain extent, and it is more likely to enhance consumers' credibility and intimacy.

(3) Controlling the problem of internet celebrities (Cheah 2019).^[6] The problem of Internet celebrities becomes a “label” of the product, and the positive value of the original product brand has a negative impact. Therefore, we need to use problematic internet celebrities in a range, limited, and scaled manner. However, under the long-term benefits, it is still necessary to increase the willingness to buy online and customers' perceived value to make the company and the brand continue for a long time.

6. Conclusion

In this era where everyone spends most of their day on social media, there is no doubt that celebrities impact our lives. Some people are more; some people are more diminutive. Over the years, marketing values have also changed. Once using the product's attributes as the key point of sales to involving celebrities, it is mainly about how the company educates consumers about its value, benefits, and quality. It's about reducing transnationality and being more personal. Brands need to provide tools to help consumers verify whether a product or service is suitable for their circumstances.

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Study of Job Satisfaction and Work Performance of Teacher Retention for Vocational Education in Sichuan of China

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Abstract: Education development in private higher vocational colleges had achieved remarkable results and became a significant force in promoting education and education in higher vocational colleges. However, due to subjective and objective reasons, the development of private vocational colleges would still not be optimistic. One of the main problems the development of education in private vocational colleges faced was the severe loss of teachers and the teachers' team's lack of stability and professionalism. For private vocational schools, teachers were the critical factor in their development. Job satisfaction and teachers' work performance would be the main reason that influences the rate of teacher turnover.

Keywords: Job Satisfaction; Work Performance; Teacher Retention

1. Introduction

In 1980 marked the beginning of the country's inception to reorganize technical education in secondary education, focusing on developing vocational education and adapting the high school education system to the needs of socialism. The education system clearly stated that China will adjust the structure of secondary education and vigorously develop vocational and technical education. It also proposes gradually establishing a multi-level framework from junior high school to higher education, reasonable structure, industry participation, vocational and technical education, and general education. The goal is to train hundreds of millions of experienced, skilled, and knowledgeable farmers and business people.

2. Theoretical Basis

2.1 Expectancy theory model for Motivation (Robbins 2005).^[1]

The expectancy theory states that individuals will act or act in a certain way because they have the motivation to choose certain behaviors over others because they expect the results of the selected behavior. Essentially, the motivation for behavioral choices depends on the desirability of the results. The typical situation is how to motivate employees to perform better, and employers will use incentives to encourage employees to perform better.

2.2 Theory of effective job performance (Boyatzis 2008)^[2]

(1)Individual factor. Individuals bring many qualities to their work performance. Some are functionally based on the job requirement, while others are dysfunctional based on different conditions. The "people" part of the model identifies eight fundamental factors that affect job performance: knowledge, experience, skills, abilities, awareness, values, motivation, and needs. (2)Job demand. Job demands are the conditions under which the person is expected to perform at the workplace. Unlike a job description, which lists tasks and duties from management, job demands define work in terms of past, present, and future expectations based on the specific evaluation. (3)Organizational environment. The school organizational environment can be classified into four elements: commitment, control, disengagement, and headless.

2.3 Model of teacher retention (Sinha 2012)^[3]

(1)External factors. Four important external factors contributing to retaining teachers: Compensation; Working conditions; Teaching requirement; Mentoring. (2)Work-related factors: School supports; Working pressure and relationship; Management recognition; Promotion and environment. (3)Personal factor: Working attitude; Career development; Communication skill; Self-motivation.

3. Understanding on Job Satisfaction and Work Performance of Teacher Retention for Vocational Education in Sichuan of China

3.1 Investigate the relationship of teachers' job satisfaction and performance to their retention attitude in the Sichuan schooling system's vocational education:

The teaching performance of teachers plays a crucial role in students' learning and academic performance. Many factors affect teachers' work performance, such as ability, attitude, subject mastery, teaching methods, personal characteristics, classroom environment, general psychological knowledge, personality, student relationships, etc. The teachers' positive attitude towards teaching

and a higher level of desire determines their positive view of the environment and teaching value.

3.2 Examine the strategy in dealing with the level of dedication and value for retaining teachers in the Sichuan vocational education system:

Job satisfaction plays an essential role in teaching commitment and the quality of the school organization. More job satisfaction from teaching staff will have a significant influence on their commitment to the school organization. Most vocational teachers who have intense pleasure at the workplace will have a better obligation based on their degree of participation and involvement. The happy and satisfied feeling of vocational teachers towards vocational school teaching will affect the overall process in carrying their work, affecting school quality and student participation. Work performance such as incentive, reputation, personal expectation, and supervisor would influence teachers' perception for developing their capability and work confidence in the long run.

3.3 Through research and analysis, suggest teaching attitudes and public strategies for improving teaching turnover and job stress:

With the continuous reform of China vocational education, the attitudes and expectations of vocational schoolteachers may give the school administrators to review existing motivational policies and practices to enhance and push teachers' performance and job satisfaction towards their work retention. Job satisfaction in organizational perception, motivation, social interaction, personal characteristic, and work performance in manager's attitude, corporate culture, subjective expectation, and financial reward significantly influenced vocational schoolteacher retention in Sichuan.

4. The Conceptual Framework for the Research Study

First The relationship between influencing factors of Organizational perception, motivation, social interaction, personal characteristics, managers' attitude, organizational culture, personal expectations and financial rewards, and teacher intention. second Using correlation analysis testing, all influence factors are correlated with teacher retention.

5. The Countermeasures on Job Satisfaction and Work Performance of Teacher Retention for Vocational Education

(1) Influences on teacher job satisfaction (Saks and Gruman 2014).^[4] Teacher job satisfaction is related to teachers' job performance, including teachers' participation in work, commitment, and motivation. Not only important to teachers, The overall impact of experience on students and the school. Delighted teachers, rather than dissatisfied, are more likely to stay in school and continue teaching. Therefore, understand the work of teachers Satisfaction helps but is not the only factor to retain teachers.

(2) School working conditions (Clark 2012).^[5] The quality of teaching and learning depends not only on the quality of teachers but also on teachers' working environment. Together with the inherent benefits of teaching and working conditions, these benefits are affected by factors such as salary ranges, salaries, bonuses, and rewards; working hours, teacher-student ratio, good school leadership, infrastructure, and facilities will affect teachers' Satisfaction with the task and nature of the work, as well as the teacher's ability to do a good job and interact with students.

(3) School composition (Sutriyantono and Rubin 2013).^[6] The school composition is an important environmental factor for teachers' job satisfaction and turnover intention. Combined with teachers' knowledge and skills, it shapes the school's academic and social atmosphere.

(4) Teacher characteristics. Research on job satisfaction and teacher retention usually uses teachers' attributes (age and gender), teachers' professional features (years of teaching experience, degree level and type, participation in professional development plans, and teacher motivational beliefs.

(5) Personal characteristics. The difference in job satisfaction in these studies is mainly attributed to the different views of teachers on working conditions. For example, it is found that women believe that students' behavioral problems and teaching workload are more stressful, so job satisfaction is lower.

6. Conclusion

Teacher satisfaction is crucial to their teaching performance. Teachers' high job satisfaction with the principal's supervision and job security is a factor that affects their job performance. Teachers' job performance is negatively affected by the principal's guidance and directly affected by teachers' job security. The study recommends that principals minimize the supervision of teachers' teaching performance but pay utmost attention to the welfare of teachers. Officials of the school's human resources department must include timely payment of salaries, teacher welfare benefits, and the provision of necessary amenities in their teacher retention strategy to ensure the safety of vocational schools.

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Research on the Enhancement of Guangxi Traditional High School to Smart Class for Improving Students' Learning Behaviors

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Abstract: The integration of information technology and teaching put forward new demands on the teaching environment of education in Guangxi, which further drove the reform. How to construct the intelligent teaching environment in high school scientifically and reasonably to provide high-quality resources, placed and facilitated for promoting the cultivation of innovative and compound talents? Based on the existing problems of teaching facilities and environment in high school as well as the need for transformation, this paper explored the smart classroom environment influencing Guangxi high school students, integrated precise strategic reference for smart class arrangements, and discovered the advantages of smart class coordination and outlook trends in future of Guangxi high school.

Keywords: Traditional High School ; Smart Class ; Student Learning Behaviour

1. Introduction

Guangxi Smart Education has made significant progress, but the development is still very uneven and insufficient. Compared with the new requirements of building a moderately prosperous society in all respects, the unique needs of national strategic deployment, and the people's new requirements for education, there is still a big gap, and it must be cracked through reform and innovation. It is necessary to consolidate the foundation of compulsory education, accelerate the popularization of higher education, promote the inclusive development of preschool education, vigorously develop characteristic vocational education, promote the construction of "double first-class," and comprehensively improve higher education.

2. Theoretical Basis

Teaching Progress Mode (Meng 2020).^[1]

2.1 Traditional face-to-face teaching

Before the advent of the Internet, the teaching method was mainly based on teacher lectures and students' listening. The primary teaching method was curriculum, and the learning content was based on subject knowledge systems, aiming to help students establish a stable knowledge structure.

2.2 Face-to-face teaching supported by web1.0 technology

Web1.0 was in the early stage of the Internet and characterized by editing. The content of the Internet was provided after editing by website editors.

2.3 Smart teaching mode supported by web3.0 technology

Web3.0 is built based on web2.0. The most significant development is characterized by networking and personalization, providing more artificial intelligence services.

Theory of Wisdom Education (Stenberg 2001)^[2]. Wisdom knowledge is that individuals stimulate the brain excitement center in experiencing existing expertise through practice and experimental activities and obtain creative ability beyond the norm. The essence of wisdom is freedom, and human knowledge can only be expanded in the preparation of understanding nature and understanding society. In addition, the generation of learning also requires the individual's internalization, through assimilation and adaptation, to realize the subject's cognitive model from quantitative change to qualitative change.

Blended Learning Model (Valiathan 2002)^[3]. Blended learning aims to achieve better teaching results, and the key is to integrate the elements involved in teaching and learning. The essence of reorganization to achieve the best results is to study the way of information transmission.

(1)Classroom; (2)Teacher; (3)Technology; (4)Student;

3. Understanding on the Enhancement of Guangxi Traditional High School to Smart Class for Improving Students' Learning Behaviors

(1)Analyze the relevant theories and connotations of the learning behavior of high school students in the smart classroom environment in Guangxi and the main factors that influence students to learn from the smart classes: The characteristics of the learning

behavior of high school students in the smart classroom environment and found out the reasons for the conduct so that the high school students are in a good direction. Learning behavior increased the utilization rate of smart classrooms and made smart classrooms better serve to teach. Promote high school students to join the smart classroom learning environment, increase learners' interest in the smart classroom learning environment, actively participate in the learning process, complete learning goals, and ultimately improve learners' learning efficiency.

(2)Integrate the results to obtain appropriate student behavior and provide a more accurate and precise strategic reference for the smart class arrangements in Guangxi: The introduction of smart classrooms will help reform the classroom teaching methods in schools, promote the deep integration of classroom teaching and informatization, help teachers' professional development, promote students' independent and personalized learning, and stimulate students' interest in participating in the classroom.

(3)Suggest through research and analysis, discover the advantages of smart class coordination and outlook trends for better education development in the future: The “+” in “Internet +” refers to the deep integration of the Internet with other traditional forms of industries, and “Internet + education” refers to the deep integration of the Internet and education. Deep integration refers to the integration of all aspects of the Internet and education. The open thinking of the Internet and new technologies, including big data, transform education. It contains various elements of the education system, such as teachers, students, and courses: impact and upgrade. The role of the Internet promotes changes and improvements in different aspects such as the process of talent training and evaluation mechanisms in the education field so that education can better adapt to the characteristics of the current era, and the meaning and value of people can be fully emphasized and developed.

4. The Conceptual Framework for the Research Study

First The relationship between influencing factors of knowledge absorption, interactive communication, reflective practice, learning attitude and effectiveness, and learning behavior.

second Using correlation analysis testing, all influence factors are correlated with student learning behavior.

5. The Countermeasures on the Enhancement of Guangxi Traditional High School to Smart Class for Improving Students' Learning Behaviors

(1)Carry out information leadership training for the school management team (Chen 2018).^[4] Through online and offline tracking and guidance, support the management team to implement the school's informatization development plan, organize application of teacher information technology training, and effectively improve the management team's ability to lead the school's teachers to use information technology to carry out teaching innovation. (2)Promote teacher research and training around school informatization teaching innovation (Yan and Yang 2021).^[5] According to the implementation path of “national demonstration, provincial and municipal coordination, district and county responsibility, school independence, and full participation,” the school is used to declare training topics and training needs. The ability to solve the key and challenging problems of education and teaching, meet the needs of students' individual development, and help the school's teaching innovation. (3)Promote the improvement of teachers' interdisciplinary teaching ability (Teo 2018).^[6] The school composition is an important environmental factor for teachers' job satisfaction and turnover intention. Combined with teachers' knowledge and skills, it shapes the school's academic and social atmosphere. (4)Promote the improvement of teachers' interdisciplinary teaching ability. Creating a group of critical teachers who carry out multidisciplinary teaching based on information technology, promote information education and teaching innovation, and comprehensively improve students' core literacy. (5)Innovative information literacy training resource construction mechanism. Establish a high-quality training resource selection mechanism through resource utilization and user evaluation, and promote the co-construction and sharing of resources.

6. Conclusion

Aiming at the problems of students' lack of independent thinking and low learning enthusiasm, task-driven can awaken students' awareness of autonomous learning, strengthen the guidance of teachers and parents, strengthen students' autonomous learning behavior, and enhance learning autonomy. In response to students' lack of problem awareness and insufficient reflective critical thinking, it needs to strengthen the interaction between teachers and students, cultivate students' understanding of questioning and questioning, strengthen the training of students' thinking, and cultivate students' ability to ask and question, to improve the deep level of learning school information.

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Empirical Research on Cosmetic Lipstick Sales under C2C E-Commerce Platform for Consumers' Buying Intention in Dazhou of China

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Abstract: With the development of e-commerce and the accelerating pace of work and life, more and more people accepted online shopping. The number of online users in China increased, and the mobile network platform had gradually matured with the acceleration of development in the C2C e-commerce transaction model. The paper mainly analyzed the challenges of developing cosmetic lipstick marketing in Dazhou City, then explored the influencing factors to purchase intention, and lastly suggested a promotional strategy regarding pre-and after-sales.

Keywords: Cosmetic Lipstick Sales; C2C E-Commerce; Consumer Buying Intention

1. Introduction

With the rapid development of the Internet, e-commerce has gradually become a new model of commodity transactions, changing people's lives, and more and more consumers have accepted the continuous improvement of online shopping e-commerce technology, making online shopping e-commerce an essential part of China, while highlighting its enormous economic and social benefits. With the rapid development of the C2C market, its shopping amount accounted for the vast majority of the entire online shopping market, showing its substantial development advantages and market potential. There are certain risks, followed by the cost of entering the C2C online market, and the competition is very fierce.

2. Theoretical Basis

Consumer-To-Customer Model (Leonard and Jones 2010).^[1]

The C2C e-commerce model is based on B2b, and Further expansion of B2C, C2C e-commerce provides a platform for publishing and obtaining information. Enable people to buy and sell items online. With the development of the Internet, the number of users in the C2C e-commerce trading platform is gradually increasing, and their identities are complicated. Since the C2C e-commerce platform is open to everyone and free, almost everyone can register at this stage.

Theory of Reasoned Action Model (Ajzen and Fishbein 1975)^[2]

The Theory of Reasoned Action (TRA) states that subjective norms and attitudes are associated with consumer beliefs, intentions, and behaviors. Behavioral intent serves as an excellent tool for predicting individual behavior. Although this theory originated from Western culture's guidance, more variables should be considered, and modifications should be made when using the TRA model to study consumers' intentions to purchase different products. All different factors that affect consumer behavior only work indirectly by influencing the attitude or subjective norms. The external variables can be the characteristics of the tasks, the interface or the user, the type of development through implementation, the effects of politics, and the organizational structure.

Planned Behavior Theory (Gu and Wu 2019)^[3]

Planned behavior theory was developed as an extension of the Theory of Reasoned Action that focuses on perceived control of the behavior, subjective norms, and intentions that impact the intention to follow the behavior. This theory explained that if consumers have the subjective model, proper attitude, and behavioral intention to purchase products online, they must have a behavioral intention of buying practically. On the other hand, it may not be necessary for consumers to buy online as they might not be aware of online payment and other different processes.

3. Understanding on Cosmetic Lipstick Sales under C2C E-Commerce Platform for Consumers' Buying Intention

3.1 Analyze the challenges of the development of the cosmetic lipstick market in Dazhou City:

The entire online process of developing, marketing, selling, delivering, servicing, and paying for products and services. Dazhou City has shown tremendous growth in the E-commerce segment along with most regions in China. E-commerce creates new opportunities for many different industries, especially in the cosmetic market for lipstick products.

3.2 Explore the influencing factors under variables such as perceived value, buying trust, and conceptual fluency affecting the purchase intention for cosmetic lipstick sales in Dazhou City:

Websites that follow the C2C business model help consumers sell real estate, cars, motorcycles, and other assets or rent rooms by publishing relative information on the website or social media. Depending on the website or social media type, the website may not charge consumers for its services. Another consumer can choose to buy the first customer's product by reviewing the post/advertising on the website through comments of the index of perceived value, buying trust, and fluency.

3.3 Suggest better pre-sales and after-sales service levels of e-commerce with the proper atmosphere of marketing activities and online business via various promotional strategies:

Ease of internet access, safe and secure payment, trust of quality, and use of platform coupled with aggressive marketing by e-commerce platforms have made the process more popular. With a substantial increase in the cosmetic market, C2C becomes more popular as personal selling will make brand selling and trust relationships much better than the normal B2C channel.

4. The Conceptual Framework for the Research Study

First The relationship between influencing factors of perceived value, buying trust and conceptual fluency, and customer buying intention: product quality and perceived risk, and perceived value; trust propensity, brand impression, product involvement, and brand reputation, and buying trust; brand image and nostalgic brand strategy, and conceptual fluency.

second Using correlation analysis testing, all influence factors are correlated with perceived value, buying trust, conceptual fluency, and consumer buying intention, respectively.

5. The Countermeasures on Cosmetic Lipstick Sales under C2C E-Commerce Platform for Consumers' Buying Intention

5.1 Improvement of Buying trust (Hasan and Hasreen 2012).^[4]

In the trust of buying, trust tendency, brand impression, product involvement, and popularity are positively related to cosmetics lipsticks' online shopping decision-making system; lipstick merchants can propose marketing strategies to improve brand awareness and recognition.

5.2 Improvement of perceived value (Leung 2019).^[5]

In the perceived value, product quality and perceived risk are positively correlated with the cosmetics lipstick online shopping decision-making system. It is possible to propose marketing strategies to improve the brand awareness and recognition of lipsticks and expand online sales channels.

5.3 Improvement of conceptual fluency (Pandey and Parmark 2019).^[6]

In conceptual fluency, brand image and nostalgic brand strategy positively relate to cosmetics lipsticks' online shopping decision-making system. Businesses can adopt complementary network marketing strategies for the needs of consumers when they purchase intentions, information search, reviews, and post-purchase evaluations.

5.4 Improvement of consumer buying intention

(1) Determine customer expectations. Interview customers and understand their expectations and driving factors from their perspective. This will help you educate and prepare your sales representatives to adapt to and address the changing behaviors of customers.

(2) Participate in the prospects. Establish a dialogue with aspiring customers and explore how much they value their relationship with competitors. Since you may only do small business, try to understand their ideal customer-supplier relationship and demonstrate your value proposition best to meet their needs, which will benefit you.

6. Conclusion

Technological development and the popularization of the Internet have introduced a new type of consumer called online customers. Online consumers have various characteristics and behave differently from traditional consumers. To understand online customer behavior and online purchase intentions, another analysis of consumer characteristics, environment, and technology trends are needed to compare with the different patterns of consumers in Dazhou City. The characteristics of online consumers are topics that have attracted much attention in the literature review. Most of this article focuses on demographic data and the influence of consumers' attitudes toward purchase intentions based on experience and expectations. Although most studies have found that men are more inclined to shop online than women, female consumers traditionally dominate lipstick sales.

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Sharing Economy: A Study on the Factors Influencing Consumption Decision to Use Farm Sharing in Guizhou of China

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Abstract: With the rapid development of mobile internet technology, the operator would be no longer a single operator but could participate in the sharing economy as a resource supplier. Shared farms were based on an economic organization that was fully covering the interests of farmers as the primary carrier, with mixed-ownership enterprises composed of various capitals as the leading construction and operation body, supported by information technologies such as mobile Internet and Internet of Things, and sharing farms and homestays as the main features—integrating circular agriculture, creative agriculture, agricultural experience, and service functions, allowing farmers to participate in fully and benefit from the comprehensive operation and development model of rural revitalization, which more and more consumers favor.

Keywords: Shared Economy; Consumption Decision; Farm Sharing

1. Introduction

According to the current development status of agricultural production, to solve a series of problems such as the current waste of farm machinery and machinery resources, the lack of agricultural technology services, the poor awareness of production safety and food safety, as well as the vicious competition caused by the lack of planting plans, the sluggish planting of cash crops, and the waste of land resources. , Combined with the current agricultural “Internet +,” finally realize the planned production according to demand, and establish an ecological platform system for resource sharing and information sharing. Through the shared farm project, the rural idle fields, mountains, woodlands, and abandoned farmhouses can be fully utilized, and the farm and the farm can share customer resources through a co-building platform.

2. Theoretical Basis

Push and pull theory (Greenwood 2019).^[1]

The theory believes that population mobility is the result of the interaction of two opposing forces. Among them, the force that promotes population movement is called thrust, which comes from the poverty of natural subsidies, the surge in production costs, the decline in income levels, and unemployment and underemployment. The force that hinders population flow is called the pull force, which comes from a better standard of living, more equal educational opportunities, higher employment rates, and a better natural environment.

Cognitive-emotion-intentional theory (Hillard 2020)^[2]: Cognition refers to the mental activity that the human brain receives, processes, converts, and absorbs external information; emotion refers to the subjective emotions or feelings that people produce based on cognitive information; intention refers to the behavioral tendencies that people may show the future or willingness to act. Cognition, emotion, and intention are interrelated. Cognition is the basis for the generation of emotion and intention.

The sharing economy model (Akande 2020)^[3]: With the invention of the Internet and big data, the sharing economy has become more convenient for asset owners to share assets to reach one another. The mechanism could also be expressed in the sharing economy, collaborative economy, shared consumption, or peer economy. In a general sense, the sharing economy has not been all about money, so sharing practices with goodwill intentions. Community building and emphasis on sustainability and environmental concerns are among the top priorities of participants.

3. Understanding on the Factors Influencing Consumption Decision to Use Farm Sharing

3.1 The information on the whole process of shared farm transactions on the leading platforms of shared farms in Guizhou:

However, the opposition is not more worrying. People lack a sense of positive security in the shared economy environment, and a supervisory system is needed to increase the sharing economy China’s purchase of goods. Supervision can lead to the loss of the right to self-determination and damage the relationship between members.

3.2 Integrate the results of qualitative and quantitative research to obtain relevant management enlightenment and provide a more accurate and precise strategic reference for the commercial practice

of the shared farm platform in Guizhou:

A new path for Guizhou shared farm platform offers high-quality products and services, improve the management system, and enhance the consumer experience, which is conducive to the shared farm platform to develop better business under the sharing economy model activities, attracting more consumers to participate, have more positive significance for the development of shared farms.

3.3 Suggest identifying the advantages of pull and push mobile e-commerce platforms and future development trends, and put forward feasible recommendations to provide better services to consumers' needs:

The multi-level cognitive phenomenon of consumers' shared farm consumption from two aspects: pull factor and push factor. Pulling factors include product service quality, platform capabilities, diversity, and social influence: Pushing elements to have true interests, safety interests, economic interests, and personal knowledge.

4. The Conceptual Framework for the Research Study

First The relationship between influencing factors of consumption enjoyment, perceived usefulness and quality trust, and consumption decision; push and pull factors, and consumption enjoyment, perceived usefulness, and quality trust.

second Using correlation analysis testing, all influence factors are correlated with consumption enjoyment, perceived usefulness, quality trust, and consumption decision, respectively.

5. The Countermeasures on the Factors Influencing Consumption Decision to Use Farm Sharing 5.1 Factors influencing consumers (Tang 2020).^[4]

The factors that influence consumers in China to choose shared farms include the quality of products and services, the ability of social influence platforms, diversity, genuine interests, security interests, economic interests, personal knowledge, enjoyment, usefulness, and trust. Among them, product service quality, social influence, platform capabilities, and diversity are the pulling factors that influence consumers to choose shared farms. Genuine interests, safety interests, economic benefits, and personal knowledge are the driving factors that influence consumers to choose shared farms trust.

5.1 Improvement of pulling and pushing factors of the shared farm (Ma and Zhang 2019).^[5]

The pulling and pushing factors of shared farms will affect consumers' subjective psychological feelings and thus determine consumers' willingness to consume on shared farms. Specifically, diversity, product and service quality, genuine interests, and personal knowledge will work together. Pleasure has a positive impact, among which actual benefits have the most substantial effect on pleasure. Platform capabilities, product service quality, authentic benefits, personal knowledge, economic benefits, and trust collectively impact perceived usefulness. Among them, economic benefits have the most substantial effect on perceived usefulness. Product service quality, economic benefits, and security benefits work together to positively affect trust, of which security benefits have the most substantial influence on trust.

5.2 Shared farm platform safety (Liu 2018).^[6]

The shared farm platform should strengthen the construction of the shared farm safety management system to protect consumers' safety and interests fully. In terms of personal safety management, the platform should enhance the application of smart hardware, use smart face recognition to verify the identity of the experienter and grant check-in permissions, and actively equip smart air detectors, smart smoke alarms, and other equipment through the data of these intelligent devices.

6. Conclusion

Perceived usefulness is positively affected by platform capabilities, service quality, genuine interests, personal knowledge, economic benefits, and quality trust. Therefore, when the shared farm platform strengthens consumers' perception of the usefulness of shared accommodation, in addition to enhancing its capabilities, improving product and service quality, and safeguarding consumers' true and economic interests, it also needs to strengthen consumer trust. Speeding up a credit guarantee system for shared farms is an important measure to enhance consumer trust. First of all, the shared farm platform can strengthen the identity verification of both the host and the guest and ensure the authenticity of the information between the host and the guest by verifying the ID card and other real-name authentication materials. Second, the platform can optimize the credit rating system for both the host and the guest and open the two-way mutual evaluation function between the host and the guest to track and analyze the consumer's evaluation data on the quality of the venue, service level, etc. The merchant's evaluation data on the consumer to achieve good credit ratings for both guests.

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The Empirical Study on Consumers' Perception Through B2C Mobile E-Commerce Platform for Brand Equity in Sichuan

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Abstract: The market scale of Internet users expanded rapidly, and Internet users had gradually become accustomed to obtaining all kinds of information and consumption, resulting in several Internet as the survival and development space of e-commerce platforms. Various brands provide consumers (Customer) with rich data, goods, and services through e-commerce platforms (Business), both B to C forms, to seek their development and growth.

Keywords: Customer Perception ; B2C ; Mobile E-Platform ; and Brand Equity

1. Introduction

With the rapid development of economic globalization, the network economy has become a significant feature of the Internet era. Nowadays, consumers are gradually accustomed to using the Internet to search for information and products that meet their needs and consume through the Internet. Internet consumption has become people's lives—an indispensable part of. With the enhancement of its penetration, the e-commerce platform has more and more influence on consumers. Its brand equity has become a kind of "portrait" in the minds of consumers so that consumers can always use this "portrait" when shopping needs. The symbol in mind eventually becomes a loyal consumer of the e-commerce platform. The growth and development of the e-commerce platform depend on the development of the Internet, the attention and use of netizens, and the improvement of its brand equity. Many online consumers encounter slow logistics, difficulty in refunds, and online fraud when shopping online. In the face of such a vast online market, the quality of mobile e-commerce platforms is uneven and mixed. Consumers pay more attention to their rights and interests.

2. Theoretical Basis

2.1 The influence of service quality on brand equity (Madhok 2017).^[1]

Trust contains two parts: structural factors and social factors. Structural elements include perceived risk to promote consumers to form a cooperative relationship, and social factors include rational recognition to make consumers have more good behaviors for the brand. A model of trust and brand equity, and the research demonstrated have a significant positive correlation between brand equity and brand performance. Some operations use advertising to implant reputation to prove the positive influence of brand trust on brand equity and use this law to construct a corporate brand equity development strategy.

2.2 Brand communication model (Chen 2002)^[2]

Regarding the connotation and essence of the brand, the world-renowned brand marketing made an in-depth discussion on the brand is an intricate symbol. It mentioned the brand attribute, name, packaging, price, historical reputation, and the intangible sum of advertising methods. Brands were also defined by consumers' impressions of their use and their own experience.

2.3 Perceived value formation model (Bolton and Drew 2011)^[3]

A multistage model of service quality and service value reflects the customer's evaluation of service value, mainly based on service quality and sacrifice (Including two factors, monetary cost and non-monetary cost). However, when customers evaluate the value of services, they may give different assignments and weights to the components of service quality. But the assessment of service evaluation value will be different due to the influence of customers' preferences and habits, so they believe that service value is service quality, sacrifice, and customer characteristics—the indeterminate number.

3. Understanding on Consumers' Perception Through B2C Mobile E-Commerce Platform for Brand Equity

3.1 Analyze the challenges of developing the electronic platform for improving brand-building through Sichuan's B2C mobile e-commerce platform:

Internet consumption has become people's lives—an indispensable part of. With the enhancement of its penetration, the e-commerce platform has more and more influence on consumers. Its brand equity has become a kind of "portrait" in the minds of consumers so that consumers can always use this "portrait" when shopping needs. The symbol in mind eventually becomes a loyal

consumer of the e-commerce platform. The growth and development of the e-commerce platform depend on the development of the Internet, the attention and use of netizens, and the improvement of its brand equity.

3.2 Explore the influencing factors under variables such as brand image, customer perception, brand trust, and customer involvement for the B2C mobile e-commerce platform for the formation mechanism of brand equity:

Eleven hypotheses were set for obtaining viewpoints from Sichuan residents by investigating their attitude, brand equity perception, brand influence, generally perceived value, brand trust, brand positioning, brand identity, brand personality, brand scarcity, perceived quality, customer satisfaction, economic value, e-commerce service quality, and customer involvement.

3.3 Suggest through research and analysis, discover the advantages of mobile e-commerce platforms, and put forward feasible recommendations to provide better services to consumers' needs.

Brand equity recognition becomes the true challenge for the e-commerce business since the online-based can only sell its product or service virtually. Hence, it is not easy to measure the level of brand equity perceived by customers. Before the research, brand perception, trust, and image dimensions can be used to determine brand equity recognition. Based on those explanations, the correlation among customer involvement, brand, customer perception, brand trust, and brand equity recognition.

4. The Conceptual Framework for the Research Study

First The relationship between influencing factors of brand, customer perception and brand trust, and brand equity recognition; customer involvement, and brand equity recognition.

second Using regression analysis testing, all influence factors influence the brand, customer perception, brand trust, and brand equity recognition, respectively.

5. The Countermeasures on Consumers' Perception Through B2C Mobile E-Commerce Platform for Brand Equity

5.1 Improve brand equity (Chen and Qasim 2020).^[4]

Brand equity is the customer relationship attached to the brand. It can bring additional benefits to the company and those memories, experiences, and impressions to increase consumer confidence in buying. There are also opinions and preferences formed based on brand, perceived value, and brand trust, essential for brand equity. The regression analysis shows that brand, perceived value, and brand trust positively and significantly impact brand equity.

5.2 Improvement of brand trust

Increasing brand trust and making the perceived quality of products exceed the perceived risks of customers is an effective way to win many customers and cultivate brand trust. Such as cost-effective products, shortening customer waiting time, etc., giving corresponding concessions to customers who often buy the company's brand, Is an effective way to retain loyal customers and increase brand trust. Many businesses often accumulate points for consumers, and there are discounts or rewards for reaching a certain point.

5.3 Improvement of relationship marketing

Brand equity relationship management aims to retain old consumers, open up new consumers, and maintain trust. Although companies have made great efforts for brand equity management relationships, the results are often not expected. The reason is that the brand relationship is very fragile. The relationship between consumers and brand equity will change over time to establish the brand relationship may be broken or terminated under various influences, or even terminated and withered away.

6. Conclusion

Modern consumers are going beyond products/services to meet their needs. They want an unforgettable experience as part of any product offered to them. This research provided sufficient empirical evidence to show that brand experience can effectively influence customer emotions and psychology. This ultimately leads to the establishment of brand equity in a highly competitive market. Marketers must build an experiential brand through various activities to attract positive responses from consumers. Brand experience can be an efficient and cost-effective way to achieve brand success in the online shopping Sichuan market.

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Research on Optimization of Compensation System for Employment Satisfaction of Henan CITIC Big Data Technology

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Abstract: With the progress and development of the times, human resource management has become more complex. A compensation system that could attract and retain talented people would be necessary for cultivating and effectively utilizing talents through human resource management to obtain the core competitiveness of the organization. It could also be an issue that every enterprise and its managers must pay attention to at present. Based on the concepts of the compensation system related to job-based compensation, performance-based compensation, skill-based compensation, market-based compensation, and annual merit-based compensation.

Keywords: Optimization System; Compensation System; Employment Satisfaction

1. Introduction

With the progress and development of the times, human resource management is becoming more and more complex. A compensation system that can attract and retain talented people is necessary for cultivating and effectively utilizing talents through human resource management to obtain the core competitiveness of the organization. It is also an issue that every enterprise and its managers must pay attention to at present. For employees, compensation is the protection of bare life and the embodiment of their value. A scientific and reasonable salary grade level setting can provide employees with good promotion opportunities; the introduction of performance pay can also effectively stimulate employees' job initiative. Therefore, the continuous optimization and improvement of the compensation system is not only the future of enterprises can be stable and rapid development of the protection, but also determine whether an enterprise can fight out their style in the fierce competition, in the strong hand such as the market environment to occupy a place.

2. Theoretical Basis

2.1 Model of Compensation Structure (Topa 2018).^[1]

Compensation also consists of four elements: (1)Fixed compensation: Fixed compensation does not change with performance or the degree of realization of changes in job results. (2)Floating compensation: A compensation item that changes the level of direct performance or the degree to which job results vary. (3)Short-term incentive compensation: Short-term incentive compensation is a compensation plan that provides a specific performance award for one year or less. (4)Long-term incentive compensation: A compensation program that rewards a specific performance of one year or more.

2.2 Model of Multidisciplinary Concept in Workplace Compensation (Ahmad and Shailendra 2018)^[2]

(1)External factors - Distribution of market labor: We all understand the rationale that things are scarce, so when there is an evident shortage in the labor market, overall pay levels will rise and vice versa for the characteristics of the region and industry in which the enterprise is located. (2)Employee factors - Job differences: there is a balance in the salary design of enterprises. For different positions, the requirements of the employee's ability, the burden on employees, etc., are not the same. Employees with higher commitments and high job responsibilities also need higher salaries to balance. (3)Employee performance - With the deepening of modern management theory, more and more enterprises have introduced the management concept of performance pay distribution. (4)Seniority level - Years of service and work experience directly affect the seniority of employees, most of whom also have more job skills and ways to deal with problems.

2.3 Practical Compensation System (Jiang 2019)^[3]

(1)The concept of compensation system - an essential part of an enterprise's overall human resource management system. There is a fundamental difference from the simple concept of compensation, which refers to the composition and distribution of compensation, that is, a person's work remuneration by which parts. (2)The classification of the compensation system - job compensation system, performance-based compensation system, skill-based compensation system, market-based compensation system, and annual merit-based compensation system.

2.4 Maslow of Need in Employee Compensation (Patnaik and Suar 2017)^[4]

Of these five categories of requirements, only low-level requirements are met before higher-level requirements can be pursued.

Employees are paid for their work, not just to meet their daily lives but also to meet different levels of needs. Therefore, the design of the compensation system must correctly understand the needs of employees to cure the problem and make employees' recognition of the compensation scheme increase.

3. Understanding on Optimization of Compensation System for Employment Satisfaction

First Improve the salary level of the CITIC Branch, enhance the external competitiveness of enterprises, attract and retain more high-quality personnel in information and communication as the backbone of the future development of enterprises:

second Strengthen the incentive role of compensation, establish a more in line with the current development of enterprises and scientific and reasonable performance pay distribution model:

third Optimize the compensation system, the company's overall strategic development goals to individuals strengthen the link between the company and individual employees in the guidance of enterprises, society, and employees to form a community of interests.

4. The Conceptual Framework for the Research Study

First The relationship between influencing factors of monetary compensation (operational understanding, operational motivation, operational structure, reward management, and incentive management), non-monetary compensation, and employee satisfaction.

second Using correlation analysis testing, only operational understanding and structure have shown a strong relationship with employee satisfaction.

5. The Countermeasures on Optimization of Compensation System for Employment Satisfaction

5.1 Discover the problem of salary system design

Based on the methods of questionnaire method, interview method, chart, and data analysis, the paper studies the original salary system of the CITIC Branch and finds that there are some problems such as excessive average salary, single grade design, unreasonable salary structure design, lack of dynamic adjustment, incentive and insufficient salary growth.

5.2 Increase the diversity of job design (Shang 2018).^[5]

In the job level design, the use of job evaluation methods, the company's various departments of the position of investigation, analysis, and research, following the responsibilities of each department and the nature of the post itself, to determine the relative value of each position in the company and the status of each work in the overall position design of the company. This post grade design is to make the current too single design method gradually diversified, according to the horizontal classification of all stages into integrated management categories, professional and technical categories and logistics services categories three categories, and then the three categories of the existence of grades by the value of the ranking, to carry out a new vertical classification combination. This design can stimulate employees' enthusiasm for work, open a new career promotion channel, facilitate the future development of employees, and increase the diversity of positions within the company for the future business and the company's size to pave the way ahead of the expansion.

5.3 Optimize the design of the compensation structure (Sheng 2017).^[6]

In the process of a salary structure optimization, the scheme of distinguishing the salary structure between the middle and senior management and the general staff are chosen, focusing on the transformation of the salary structure of middle and senior management to the annual salary system, so that its business objectives are consistent with the development goals of enterprises, the personal interests are better linked to the development of the company, and the management enthusiasm of middle and senior management is stimulated to a greater extent.

6. Conclusion

In the current context of economic globalization, the company's managers are faced with a variety of new problems and challenges. How to make their enterprises stand out in the fierce competitive environment and gain a place in the market, how to effectively integrate performance appraisal with the enterprise's compensation management system to make the effect of management more effective, how to reduce the operating costs of enterprises through compensation management, how to attract and retain more talent through better compensation management, how to better open up the promotion channels of employees through the design of compensation system, how to make the results of compensation management more directly reflected in employees.

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How to Cultivate the Struggling Spirit of College Students in the New Era

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Abstract: As a positive value attitude and value reflection, the spirit of struggle runs through human production and life. In the critical period of realizing the great rejuvenation of the Chinese nation, vigorously cultivating the struggle spirit of college students in the new era, guiding them to take “struggle” as the most beautiful background of youth, and promoting the relay struggle and permanent struggle of young people in the new era are not only the objective requirements for college students in the new era, but also the subjective needs for the healthy growth of college students.

Keywords: Struggle Spirit; New era; College Student

In the context of the new era, only by combining the cultivation of College Students’ personal ability with the “Chinese dream”, the combination of curriculum teaching and social practice, the inheritance of Chinese excellent traditional culture with the promotion of the spirit of the times, and the combination of example incentive and mortal enterprising, can contemporary college students better integrate with the times.^[1]

1. Combine the realization of “Chinese dream” with the realization of personal dream

At present, the cultivation of College Students’ struggle spirit in the new era is to serve and obey the construction of socialism with Chinese characteristics, and guide college students to contribute wisdom and sweat to realize the “Chinese dream” of great rejuvenation. Higher education should serve the governance of the country.^[2] Colleges and universities are responsible for cultivating builders and successors of the socialist cause and cultivating college students into useful talents who can consciously serve the society. The personal value of college students can only be realized in serving and obeying the construction of socialism with Chinese characteristics. The cultivation of struggle spirit should be guided by the needs of college students for a better life in the future, so that their personal needs are highly consistent with the needs of the society.^[3-4]

2. Combine curriculum teaching with social practice

The cultivation of College Students’ struggle spirit in the new era needs to establish a mechanism of joint education, integrate all elements to form a cultivation community and promote the cultivation of struggle spirit. Theoretical guidance is very necessary for the cultivation of College Students’ struggle spirit.^[5] Curriculum learning is an important channel for the cultivation of College Students’ struggle spirit. We should pay close attention to curriculum learning as the main position, and systematically study the struggle spirit accumulated in human long-term social practice in curriculum learning, which is an essential link for college students’ rational struggle. Teachers should infiltrate the cultivation of College students’ struggle spirit into the links of subject courses and professional learning. Give full play to the educational function of each course. As a compulsory course for college students, ideological and political theory course in Colleges and universities contains rich struggle thoughts and the truth of life. Other humanities and social sciences should also permeate struggle related knowledge and ideas,^[6] so that college students can more fully understand the struggle spirit from the perspective of different disciplines.

3. Combine inheriting excellent traditional culture with carrying forward the spirit of the times

Chinese excellent traditional culture has a long history. It is the wisdom accumulated by the Chinese nation in the long river of years, the condensed heritage of our ancestors in production and life, and is dazzling and shining in the long river of human civilization. Traditional culture has been baptized by years, but it has become more and more new, showing vitality and lasting charm. Excellent traditional culture contains rich thoughts such as management and politics, ideal struggle and moral responsibility. These thoughts are the spiritual resources of struggle. Since ancient times,^[7] China has spread classic stories such as “hanging a beam to stab a stock”, “grinding a needle with an iron pestle” and “Tao’s humble ambition”, including the wise sayings “people have no ambition and are not human; if they are determined, they will not help in the end”. Cui Xuan is ambitious and has a bright future; In the spring and Autumn period, Gou Jian, king of Yue, lay on his back and tasted bravery. For 20 years, he defeated the state of Wu; Yue Fei, a hero of the Southern Song Dynasty who fought against the Jin Dynasty, had the struggle feeling of “promising his country with his

life, why dare not do it?"; Chen Shu, the leader of farmers, has the lofty words and aspirations of "how can a swallow and a sparrow know the ambition of a swan?"; Tang Dynasty poet Du Fu's mind of serving the country "to the king Yao and Shun, and then make customs honest". Whether it is Confucianism or Taoism, these thoughts attach importance to reason and criticism, and emphasize individual positive action. The spirit of struggle in the new era is forged in the excellent style and spiritual quality formed by the people of all ethnic groups under the leadership of the Communist Party of China in socialist construction. It is the spiritual treasure of the indomitable struggle of the Chinese people. The spirit of struggle is the spiritual symbol of the new era, created by our party in combination with the practice of the Chinese revolution, and the spiritual pointer leading us from one victory to another. The spirit of struggle is also the spiritual driving force to encourage children of all ethnic groups to forge ahead on the road of socialism with Chinese characteristics in the new era. The cultivation of College Students' struggle spirit in the new era should integrate all excellent struggle spirit cultivation resources and absorb beneficial achievements of struggle spirit cultivation for my use. We should inherit the excellent traditional culture, deeply explore the great treasure house of Chinese excellent traditional culture, continue the cultural blood of the Chinese nation, adhere to the past for the present, and guide and illuminate the way forward with the struggle spirit created by our predecessors.^[8]

4. Combine example motivation with ordinary people's enterprising

To cultivate the struggling spirit of college students, we should give full play to the leading role of an example, so as to achieve the effect of "seeing the virtuous and thinking of Qi Yan".^[9] The vanguard role of talents is shown from two aspects: first, they directly promote the society with their own creative achievements; Second, they influence others, change others, and become an example, model and model for people to follow with the new values of people's quality, way of thinking and methods, moral concepts, personality temperament, lifestyle and emotional style created by themselves. In this way, a dynamic picture of human evolution is formed, in which talents take the lead and people gallop. The authority or social celebrities have more profound influence on the public, and their value orientation, words and deeds always affect their value orientation, words and deeds to the public. If authority or social celebrities advocate struggle and advocate struggle, the public will pay more attention to struggle and devote themselves to struggle. We should borrow the influence of authority or celebrities. No matter Deng Jiaxian and other experts on the two bombs and one star, Yu Min and other pioneers of reform and opening up, or Jiao Yulu, Kong Fansen and other figures, their contributions to the party and the country are made in the struggle. We should turn the spirit and stories of struggle advocated by authorities or celebrities into important resources for the cultivation of College Students' struggle spirit, and lead college students to the road of struggle.

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A Study of the State's Responsibility for Pensions

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Abstract: At present, China has entered into an aging society, and the social risk brought by the aging population has become a major problem facing the country and society. Along with the weakening of the traditional-type family elderly function, the expansion of the state's elderly responsibility has become an inevitable trend for the transformation of elderly responsibility. However, in the existing norms on old-age security, there are still problems of unbalanced distribution of responsibilities and blurred boundaries of government responsibilities. By analyzing the unreasonable aspects of the existing old-age security system, we summarize the proper contents of the state's old-age responsibility, reasonably coordinate the state's and individual's old-age responsibility by applying the "subsidiarity principle", and clarify the government's position in the old-age responsibility, so as to construct a perfect old-age security system.

Keywords: Population Aging; State Pension Responsibility; Pension Security System

According to the data released by the National Bureau of Statistics in 2019, since 2000, China's elderly-type age structure has taken initial shape and officially entered an aging society. Among them, the population aged 0-14 accounts for about 20% of the total population, and the proportion of the population aged 65 and above reached 7%. In 2018, the proportion of the population aged 0-14 in China dropped to 16%, while the proportion of the population aged 65 and above increased to 12%, and the aging of the population continued to deepen. From the data, it only took 18 years for the age structure of China's population to change from adult to elderly. The aging of the population will not only increase the pressure on social security and public services, but also continue to affect the social and economic vitality and innovation power, which is a major risk and challenge for the development of China into the new era.^[1]

1. Constitutional basis of the state's responsibility for the elderly

From the perspective of China's constitutional provisions, the state has a constitutional basis for assuming responsibility for the elderly. First of all, from the national goal level, it contains the content of the old people's care. The preamble of the Constitution stipulates that China will be built into a strong socialist modern state with wealth, democracy, civilization, harmony and beauty. If the problem of old age cannot be solved, family harmony cannot be realized, and there is no way to talk about the harmony of society and the country. Secondly, from the content regulated by the Constitution on social security, on the one hand, the state is responsible for establishing a sound social security system in line with social development; on the other hand, Article 44 of the Constitution stipulates that the state and society have the obligation to guarantee the post-retirement life of retirees, and, Article 45 stipulates that our citizens have the right to receive material assistance from society and the state in the event of incapacity, illness or old age. The right to assistance. At the same time, the relief and insurance required to guarantee these rights, as well as health care, are developed by the State.

2. Irrational aspects of the responsibility for old-age care

2.1 Imbalance in the distribution of responsibilities

According to the provisions of the Constitution and the Law on the Protection of Rights and Interests of the Elderly, the responsibility for old-age care in China is generally allocated to individuals, society and the state, among which the responsibility of individuals is the main one. However, with the expansion of the state's responsibility and the fact that children cannot stay with their parents to fulfill the obligation of support due to urbanization and movement of people, such a division of old-age responsibility has become unreasonable. The main reason for this is that individual responsibility for the elderly is no longer realistic in some areas. The "family-oriented" concept is a product of the dominance of natural economy in China for a long time, and under this traditional background, the responsibility of supporting the elderly has been borne by the family.^[2]

2.2 The development of private subjects is limited

With the expansion of state power, the main body of responsibility for old-age care has gradually shifted to the state and the government. Although China has been committed to improving the existing pension security system, the pension business is still in a relatively rigid situation. First of all, lagging is a common feature of every law that cannot be changed. The problem of aging population is increasing, the aging population is rapidly climbing, and the existing norms cannot adapt to the current rapid expansion of the demand for pensions. Secondly, conflicts between systems lead to difficulties in individual pensions. The problem of conflict

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between different systems can directly affect the realization and development of personal pension.

3. The due content of the state's pension responsibility

3.1 The sharing of responsibility in the constitutional relationship

According to the above, the emphasis on individual responsibility for old age has gradually lost its realistic conditions, and the scope of the state and society's responsibility for old age should be gradually expanded. However, the shift of old-age responsibility from individual or family to society and the state does not mean the complete transfer of individual or family's old-age responsibility to the state and society, but only the expansion of the responsibility to the state and society, that is, on the basis of the original individual as well as family and society's responsibility, the subject of responsibility is expanded to the state.^[3]

3.2 Clarify the positioning of functions in the state's pension responsibility

First, at the administrative pension level, the state can take the lead in promoting the investment protection of pension funds. Secondly, the necessary pension services can be provided in a targeted manner. Focus on protecting the old age of the three noes, i.e., the old people who have no source of livelihood, no working ability, and no supporters or dependents. Provide low-fee or even no-fee senior care services for semi-disabled elderly people who have sources of living but have financial difficulties. Finally, lowering the market access threshold and introducing social capital into the senior care service field becomes particularly important when the ability of individual senior care responsibility is insufficient. However, social senior care services have certain public product attributes, especially the service targets belong to the disadvantaged groups, therefore, the service quality as well as the safety guarantee of senior care institutions should be paid attention to. Moreover, as a provider of social public goods, senior care institutions are not the same as companies and other purely commercial institutions, and their registration conditions and related reviews should be different from those of general commercial subjects, which should be specially regulated by market supervision and management departments.

3.3 Constructing a perfect old-age security system

At present, China does not have a specific legislation regulating the cause of old age, only in the Law on the Protection of the Rights and Interests of the Elderly and other documents mentioned by the state to establish a sound system of old age security. And there is a certain lag in the existing norms, and the configuration of the content can no longer meet the needs of today's social pension. Therefore, the content of old-age security should be clearly defined at the legislative level.

First of all, the state should legalize the old-age security system as soon as possible to address the problems in the old-age business. At the same time, the state can make special provisions for "old-age men" according to the relevant legislative authority and authorization, and share the responsibility of individuals and society for old-age care according to the "subsidiarity principle". For example, legislation should be adopted to set up a flexible retirement system, a delayed retirement system, a retirement system for farmers, etc. One of the important aspects is the construction and implementation of a market-based pension insurance system to achieve a good "cooperation" between individual and state pension responsibilities.

Secondly, at the implementation level, the allocation should be made according to the principle of scientific and legalization. Specifically, the state can, according to the relevant laws and regulations, integrate the needs of the society and form some new organizations to take up the affairs functions in the receipt and payment of pension expenses, policy promotion and pension services.

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An Analysis on the Current Situations as well as Improvement of Basketball Teaching in College PE Courses

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Abstract: Basketball teaching is an important teaching item in college physical education, and it plays an important role in promoting student health and improving sports skills. Basketball sports can not only enable students to exercise and improve their physical fitness in activities and training, but also promote students' will. This article analyzes the current situation of basketball teaching in colleges and universities, and attempts to explore a more effective basketball teaching model.

Keywords: College physical education; Basketball sport

1. Introduction

With the development of the society, the requirements for talents have changed accordingly. Not only must they have a certain knowledge reserve, but also have a strong body. Playing basketball, as a kind of sport, is of great significance to promoting students to build a strong body. Playing basketball can not only enable students to exercise and improve their physical fitness in activities and training, but also develop students' spirit of striving. In addition, their team awareness will be further enhanced. Basketball class is very popular among students in the physical education at present, so it also occupies a large proportion in physical education. However, concerning the current situation of basketball teaching, there are still many problems, such as the teaching goal, teaching content and teaching methods. there are big and small problems to be solved, this article will discuss them.

2. The current situations of basketball teaching in PE class

2.1 Objectives of basketball teaching are too broad

Currently, basketball teaching goals are too broad, basically remaining on helping students improve their physical fitness and skill. However, such teaching goals are too rigid and have missed the entertainment part of basketball teaching. In fact, physical education not only aims to require students to take exercise for a short time, but also intend to help students develop a lifelong awareness of sports. Therefore, the basketball class should be a place where students can take exercises in a relaxing and pleasant teaching atmosphere. Thus students will increase their interest in basketball, which is the main teaching goal of basketball teaching at this stage^[1]. After students are cultivated with the interests in exercise, playing basketball will become a popular after-school exercise item for students. Playing basketball should not be limited in the class and only when students have the interests on it, will they persist in the physical exercise after the class is over.

2.2 The basketball teaching evaluation system is not perfect

Because most schools do not pay enough attention to physical education, the reform of physical education in many schools is not very strong. And sometimes it is difficult to carry out the reform according to the plan, which intensified the poor effects of the physical education. In addition, the teaching evaluation system is imperfect and unspecific, which makes physical education teaching more difficult. To carry out efficient basketball teaching, it is essential to improve the teaching evaluation system. Now, the assessment of basketball class is basically focusing on shooting, one-minute round-trip and other rigid assessment content, which can not show students' ability in an all-round way. As a result, many students are only concerned with the performance of the final test and do not understand how to have more professional basketball exercises. Therefore, it is urgent to improve the teaching evaluation system. Basketball class is definitely not the sport that can be comprehensively and objectively evaluated by one or two simple items.

2.3 The basketball teaching method lacking in variety

For the years, universities often take the the traditional physical education method in the basketball class. Teachers will explain the training theories at first and then show students how to play in the right way. And after it teachers intend to ask students to repeat the training. This teaching model has certain advantages and functions, because with the help of teachers in explaining theories and demonstrating the essentials of movements. And then through the repeated training of students, students become more skillful and have a more solid foundation in the basic movements. But there are also many drawbacks. A lot of time will be occupied by these boring teaching and training in the entire teaching process, causing students to feel bored in sports training. And some students will even lost interest in basketball due to the tasteless training, which deviates from the original purpose of the sports. On the other hand, although students have mastered certain sports skills, but they usually lack of initiative and the ability to carry out the training flexibly

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under this teaching mode^[2]. Therefore, basketball teaching in colleges and universities is not effective as it seems to be, for it does not achieve the basic goals and tasks of sports, and fails to stimulate students' enthusiasm for sports.

However, although educational reform has taken place for years, the basketball class in universities basically continues to use the traditional teaching method, mainly based on the explanation method and the demonstration method. This teaching method is basically used from elementary school to university. It is completely possible to change the basketball class from the traditional one to the new and interesting one. It is necessary to break the restrictions of the traditional teaching methods and to use games, competition, multimedia teaching and other methods to make a more innovative teaching. The method of teaching helps students rebuild their interest in basketball, thereby improving the overall quality of basketball teaching.

3. Improving methods of basketball teaching in physical education

3.1 Formulating realistic teaching goals and innovating teaching content.

First of all, it is important for the teachers to formulate realistic and achievable teaching goals. It should be clear that what should be the center of the class and what goals are aimed in the class teaching. In the current teaching activities, it is proven that the student-centered educational theory has made difference for it makes students change from traditional passive learning to active learning. This educational theory is also applicable for physical education. In the basketball lessons, more supplementary teaching methods should be continuously added to the original one to attract students' interest in learning such as the small-group teaching methods. The teaching concept of "game basketball", "entertainment games", and "competitive games" should be also applied into the class. Teachers can use these games and competitions to arouse students' initiatives and to release students' enthusiasm. And teachers can combine the teaching of techniques when instructing the students in the proper time so as to achieve the teaching goals. The teaching method of entertaining can also help the students maintain their interest in sports.

3.2 Establish an objective and comprehensive teaching evaluation system

The evaluation system should not only focus on the performance of students, but also on teachers. The assessment should be of more objectivity and comprehensiveness. For example, percentage of successful shooting or the one-minute round-trip performance of the students in the basketball class should not be the criteria. Comprehensive and objective evaluation of performance can not only help students alleviate the negative emotions on learning basketball, but also enhance their self-confidence in learning. For example, the evaluation system should pay more attention to students' change from the beginning to the end of the semester, to students ability and motivation to get engaged in the basketball game. Therefore, final test should not account for the greatest proportion in the evaluation system and students' class performance matters more.

3.3 Adopting small group teaching mode

The small-group teaching model refers to dividing students into different groups to inspire them to achieve team goals together. Then teachers provide feedback and sum up experience. To implement the small-group teaching model, the first step is to assign roles in groups. PE teachers can divide the students in the class into groups according to students' ability, physical fitness, flexibility and so on. Group leaders could be appointed by teachers or the students themselves. The team leader is actually a help assistant to the teacher. In group activities, the leader should lead the team to carry out training and competitions. Then teachers can divide the sports ground into different parts and distribute the areas to different groups, where students carry out the sports tasks in the form of small groups. Secondly, reasonable teaching tasks are assigned to stimulate students' enthusiasm for learning. The task of basketball teaching is to improve students' enthusiasm, and their motivation to achieve their personal training goals. The goals must be realistic enough to enable students to increase confidence, and stimulate their sports learning desire. Therefore, to implement the small group teaching model, the overall goals, group goals and individual goals can be set. Different group teams can set their own team goals. Students can set their own personal goals and train toward the goals^[3]. This process can also unite students and encourage them to cooperate as group members. Next, teachers can make use of feedback to further improve teaching. Teaching feedback increase the interaction between students and teachers to better realize the teaching tasks and achieve efficient teaching quality. The feedback process can include self-evaluation, mutual evaluation in groups, teachers' summaries. It provide more chances to exchange information between teachers and students.

4. Conclusion

Basketball teaching is a kind of popular sports which can promote people's health and it is favorably-received in PE class in the universities. However, the basketball class faces some problems nowadays as the objectives of basketball teaching are too broad, evaluation system requires improvement and the teaching method lack variety. Therefore, it is recommended that the realistic teaching goals innovating teaching content should be formulated, an objective and comprehensive teaching evaluation system is required and the small group teaching mode can be adopted.

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Application of the Overall Ecological Architecture Concept in the Ecological Architecture Design

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Abstract: Nowadays, China's population base is gradually increasing, and the development of urbanization is getting faster and faster, China's ecological environment is facing great challenges. Ecological imbalance must affect the quality of buildings. Therefore, in order to maintain the harmonious coexistence between buildings and the ecological environment, it is necessary to deeply implement the concept of the overall ecological architecture.

Keywords: Overall ecological building view; Ecological building; Design

1. Overall ecological architecture view

1.1 Definition of the overall ecological architecture view

The overall ecological building refers to the architectural designers design, the actual needs of the building as the premise, from the perspective of energy conservation and environmental protection design, to better improve the quality of the building. At the same time, in the design of the project, the staff should also combine the knowledge of ecology, architecture knowledge, according to the environment of the building location climate to design the energy saving and consumption reduction of the building structure.

1.2 Basic principles of ecological building view

China proposed that the purpose of ecological building management is to establish and protect the ecological environment and maintain the sustainable development of the society. We will establish the beautiful mountains and rivers of the motherland mainly through controlling soil erosion, planting trees and building ecological agriculture. When applying the "overall ecological building view" in the ecological building design, the following principles should be followed:

Protect the environment: Protecting and respecting nature is the concept that we have long adhered to. But in the actual design process, some enterprises in order to reduce costs, often "say one set to do one set". Therefore, when applying the overall concept of architectural ecological architecture, we should implement the concept of harmonious development with nature, protect the environment, and minimize the negative impact on the surrounding environment in the construction process.

Save resources: In the process of construction, a lot of non-renewable resources will be consumed, so in the early stage, the construction technology and preliminary design should be optimized, so as to reduce the dependence on non-renewable resources and improve the utilization rate of energy.

Aesthetic principles: In the process of architectural design, we should always pay attention to the latest international architectural modeling, and understand the recent relevant cultural connotation and hot topics. Create a comfortable and rich ecological architecture.

1.3 The significance of the overall ecological architecture view in the ecological architecture design

At present stage, the overall ecological architecture plays a key role in the field of construction, not only can improve people's living experience, but also can achieve the purpose of saving resources, the most important is to let the environment and construction coordinated development, now universality is very high, specific significance has the following: first, can improve people's quality of life and health level. In today's society, there are still many people with low quality of life. Therefore, the application of overall ecological building concept in ecological building design can change the status quo, meets people's requirements, meets the requirements of modern architecture, and promotes the sustainable development of the industry^[1]. Second, the use of the overall ecological building concept to improve the comfort of the living environment, and play a role in beautifying the buildings, providing people with an economic objective and green and energy-saving environment, which is also the future development trend in the construction field. The most important thing is to reduce the pollution and damage to the environment and maintain the ecological balance.

1.4 Overall analysis of the overall ecological building view

There are very clear provisions for the management of material flow and energy in the ecosystem, combining the path of each element flow and the source of elements. From the origin to the ecosystem and the building system, the conversion system should be analyzed. Understand the environmental requirements in the ecosystem based on the source of the elements. Poor design and inefficient

technology may damage the ecosystem when undergoing flow path conversion, so the energy consumption analysis is needed to improve its advantages. Architectural design should always pay attention to the process of the architectural system, make good use of the existing resources in the ecosystem, pay attention to the multi-elements of the system, and do a good job in the analysis of the overall ecological building view.

2. Interactive analysis of building systems and ecosystems

2.1 Relationship between building system and ecosystem

Combining the current practical application mode and the category of development technology, the type of technology needs to be clearly defined in the whole process. When in the stage of sustainability, the artificial environment may be less systematically inclusive. In addition, designers can make accurate and reasonable evaluation according to the inclusiveness of the environmental system, and analyze it in advance according to the actual needs of the network environment or automatic control, so as to make the existing material flow network more perfect.

2.2 Open nature of the building system

Normally, architects see the building system as a static and immutable entity. In terms of systematic design, the building system has the advantages of openness and dynamics, and clarifies the system category when applying the system. In addition, one of the core members of the biosphere is the construction system, which conducts a centralized analysis of the ecosystem energy and material in phased management, and benchmarks the predetermined mode to achieve the reuse of material. In addition, as an independent system, the building system needs to do a good job in liquidity analysis, combined with the source and elements of the building system, to clarify the actual path.

3. Application of the overall ecological architecture concept in the ecological building design

3.1 Reasonable use of green water features

In order to improve the overall environment around the building, we should also reasonably use the green water features to create a comfortable high residential environment. However, in the process of design, some buildings will pay too much attention to the greening effect, resulting in a low building level and reducing the quality of the living environment. Therefore, in order to truly use green waterscape, it must be changed to the traditional building structure, combined with the surrounding environment and the actual situation, reasonably allocate existing resources, in the construction of green waterscape structure to the greatest extent, to achieve the goal of energy saving and consumption reduction. For example, in the process of building a green waterscape, try to choose the local green vegetation, which can not only reduce the transportation costs but also improve the survival rate of the vegetation.

3.2 Sunshade and lighting design

The quality of buildings is also related to shading and lighting. Reasonable lighting and shading design can effectively improve the quality of people's living environment. Therefore, when making the use of the overall ecological building view, we should do the best in the shading, lighting design link. First of all, in the preliminary preparation stage, detailed analysis and calculation should be carried out, statistics and characteristics of airflow around the building, prepare the above data, and design the most suitable scheme for local people. Secondly, the local seasonal characteristics should also be considered when designing shading and daylighting. Therefore, the design scheme should also have flexibility, so that the building to achieve the effect of four seasons, improve people's living experience.

3.3 Reasonable use of the wind environment

In architectural design, in order to give full play to the highest value of the overall ecological building concept, we should pay attention to the main of wind environment and make reasonable use of wind environment to obtain high-quality living effect, which can also deeply reflect the thought of ecology. The following conditions should be followed for the rational use of the wind environment. First, design the overall layout of the building scientifically and reasonably, fully understand the airflow characteristics around the building during the layout, improve the application effect of the wind environment in residential areas; second, pay attention to the building ventilation design in the building. Ventilation is the core step in architectural design. Reasonable ventilation design can achieve the best effect of the applied wind environment, but also meet the economic needs of residents. It is the most obvious effect in the whole design link.

4. End language

To sum up, with the improvement of national comprehensive strength, the scale of construction is also rapidly increasing, people's demand for building design is more and higher, designers in addition to present the living effect of building, also to deeply implement the overall ecological building concept, not only can achieve the goal of energy conservation and environmental protection, but also can meet the economic needs of most people, maintain the sustainable development in the construction field of our country.

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Discussion About the Middle School Education and Teaching Management Under the Concept of Innovative Development

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Abstract: In the management process of middle school education and teaching, the innovation and development concept is paying more and more attention. At present, with the continuous development of China's education department, we also attach importance to the development of innovative development concepts in education work. In the process of innovative development concept, it is necessary for relevant workers to face up to the new situation of development, study some new problems and create a new environment and formulate a new order for the whole education. Under the concept of innovative development, the concept of middle school development will improve students' inner growth and development and personal comprehensive ability. Therefore, the current innovative development concept is of great help in the management of middle school education and teaching.

Keywords: Innovative development concept; Middle school education and teaching; Teaching management work; Specific research content

Introduction: There are still many problems in the current management of middle school education and teaching in China. The main problem is that the development and education concept of middle schools is not innovative enough, or too much is influenced by the traditional teaching. The development of school education and teaching requires relevant workers to keep a clear mind, understand the specific laws of teaching development, and carry out the teaching management of middle school students under the concept of innovation and development. Not only that, in the management work, we should also develop the school construction and management situation, and further solve the serious problems left by the traditional teaching concepts and traditional management concepts. As a school manager, the first thing to do is to face the new situation and new problems, to develop an innovative management concept, formulate an innovative management system, comprehensive and in-depth research and find the most suitable development path to help students develop better.

1. How to promote the middle school teaching management work under the concept of innovative development

1.1 Study new problems and integrate school education and teaching resources

For teaching management workers, how to face an education system under traditional influence, how to find some new problems from traditional education, and to make an integration of school education and teaching resources for these problems is the main task. At present, according to the survey, we can find that with the continuous deepening of the new curriculum reform, China's education and teaching management work is also facing many problems. One of the most important things is that there is no innovative form of middle school teaching and education in China, and no scientific and reasonable measure to deal with some problems in education and teaching work. Moreover, there is no practice that some core literacy, socialist core values and subject education concepts are not actually implemented in the teaching and education management work. Therefore, in view of these problems, the teaching management workers of the school need to further study the work in in-depth way and scientifically and reasonably integrate the teaching resources of their own schools according to the development demands of The Times. For example: at present, some new ideas of education has become a focus of education work. According to the survey, we can find that school education needs to follow some national education policies, and follow the Party's education philosophy to develop the school education management system. It is the core content of national education development to establish the people of moral education. In the process of promoting the educational concept of cultivating moral education by virtue, we can strengthen the moral education concept of "teaching, cultivating moral education", strengthen the development route of this thought and comprehensively implement the fundamental task of cultivating people by virtue. Of course, in the process of promotion, we can also make the image of teachers become the main example for students, with the image of teachers as the main way to improve the teaching ability and management ability, to drive the whole education environment atmosphere. In the process of promoting the new curriculum reform to join the middle school education work, we can also let students have a prominent main position of learning, so that students understand that in the process of learning, their own initiative to learn is the main teacher plays only an auxiliary role. Of course, of course, to contact some science and information technology, using science and information technology development innovation concept of secondary education teaching management make education progress

with the development of The Times, with the help of scientific power to drive the development of education, this is also the whole education system actively promote work content^[1]

1.2 Create a new environment and strengthen the management of school education and teaching

In the process of creating a new environment, it is mainly to strengthen the education and teaching management of schools. School education cannot be separated from the construction of the environment and the teaching management system. Therefore, environmental factors are more important for education and teaching work. Relevant workers need to follow the teaching environment with the development of the new era, and need to have a consciousness to keep pace with The Times and further comprehensive development of the teaching environment of the school. The main contents include: the conditions of running a school, the development background of the school, the social conditions of teaching, the school study style, school motto, cultural construction atmosphere, teacher teaching atmosphere, etc. Only by comprehensively grasping the comprehensive teaching environment can it play a helping role in the development of the school. At the same time, in the school teaching education management work to strengthen some important management systems, further implement the school teaching management work in many aspects, with teaching management workers as the main drive teachers to make changes in the classroom so as to achieve effective implementation to the students. At the same time, the primary goal of moral education management is the cultivation advocated in moral education management and teaching management. In moral education work, schools should not only make specific research content for the idea of moral education, but also comprehensively develop the work of moral education management. Especially in some moral education classrooms, moral education associations, moral education activities and other aspects to strengthen the development of the work. For example, some contents with moral education activities as the theme such as: "Lei Feng in my heart", "norms start from me", "respecting teachers and valuing Taoism is the main way" and so on are all innovative work made on the basis of the activities. Not only that, but also strengthening the environmental construction of the school can also be reflected in the atmosphere created by the school. For example: let students personally draw positive board content, hold some exchange meetings with campus culture, the establishment of campus culture corridor, the construction of a variety of cultural walls. Regularly let the students hold the campus culture theme class meetings and the theme of the essay activities, so that the students themselves to create a positive teaching environment.^[2]

1.3 Strengthen the soft power construction of schools

The soft power of the school mainly includes the team of school management workers and teachers, so the main construction of school soft power is to strengthen the team construction of school workers. On the problem of strengthening team building, the school should actively respond to some teaching system of the relevant education departments. For example, with the continuous update of The Times, some management systems, such as: "Chinese Student Code", "school safety system", "the" moral education management system "," teacher management system " and so on, belong to the school in strengthening the soft power construction of the work, need to follow the main content of the system. To strengthen the construction of school soft power is also to further establish some new order to improve the school education and teaching system. The level of education and teaching development of a school is directly related to the teaching soft power construction work of this school. The school soft power teaching level and scientific research content are the main value of a school and also prove how much role a school can play in students' growth and development. Strengthening the construction of school soft power is not only to strengthen the professional ability of school teachers, but also to strengthen the management ability of school management workers. A good school should have a scientific and reasonable management system, but also have a high teaching professional ability. Therefore, in view of the new requirements of the new curriculum reform, the school soft power construction is to need the relevant work certificates to seriously reconsider, and strive to carry out one aspect of innovation.^[3]

1.4 Explore new management and promote school education and teaching practice

The Times should develop, and the school management system should also innovate, so exploring management methods has become a major focus of school education and teaching work. In the new era, children will be more open to their thinking and change in their attitude to learning. Therefore, the arrival of a new era will not only be a new challenge for students, but also face a new situation for the whole teaching management of school education. What the relevant personnel need to do is to promote the teaching practice of the school to improve the school construction standards. Strive to develop the teaching quality and teaching efficiency under the background of innovation.

2. Conclusion:

In a word, the innovative management system needs to make some new requirements and progress according to the development of the new era, especially for the school management system and the school soft power compared with before. The significance of innovation for education is that students can better develop themselves. At the same time, the school can also better improve their teaching quality and efficiency, innovate in the middle school management of teaching education, is also a way to help students better adapt to the new era and use the new era to better cultivate their own learning thinking and improve their learning ability.

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Innovation and Thinking of College Counselors' Work from the Perspective of Moral Education

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Abstract: From the perspective of moral education, college counselors play an important role in education. Therefore, college counselors and teachers should actively analyze the educational connotation of moral education, constantly integrate educational resources, and cultivate the comprehensive quality of college students. At the same time, college counselors and teachers should actively think about the innovation of work mode and content, strengthen communication and exchange with students, so as to grasp the basic situation of students in time and urge college students to develop good life and study habits.

Keywords: University; The counselor; Work strategy

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1. The introduction

From the perspective of moral education, the work of college counselors and teachers will directly affect the educational effect of college students. Counselors with strong ideological quality can play an important role in the education of students' ideological theorists and value guidance, especially in driving students to learn the latest theoretical knowledge, helping students to constantly firm up their ideals and beliefs, firmly establish a correct world outlook and outlook on life. At the same time, counselors and teachers also play an important role in party and class construction. Counselors with strong comprehensive ability can often carry out the selection, training and incentive work of student backbone efficiently, so as to better grasp the comprehensive situation of students and timely maintain stability. Secondly, college counselors play an important role in leading the style of study in classes. If counselors can be familiar with and understand the professional knowledge of students, they can inspire students to establish a good view of career to a certain extent and urge students to improve their theoretical learning ability and professional practice ability. Secondly, college counselors can also guide students' innovation and entrepreneurship projects to guide students to perform better in extracurricular scientific and technological academic practice activities. In addition, counselors also play an important role in students' mental health education, ideological and political education in the new era, and coping with campus crises. Therefore, college counselors and teachers should recognize their own responsibilities, constantly optimize the work plan, innovate the work form, so as to cultivate more excellent and powerful college students.

2. Analysis of college counselors' work

At present, most college counselors can initially understand the essence of the education concept of Moral education, and guide students to set up a good concept of learning in the process of practical work, stimulate students' learning vitality. However, in the process of practical work, college counselors also encounter a lot of confusion in their work. First of all, when teachers carry out ideological and political education, they lack communication and exchanges with students, let alone timely work with the help of new media, thus failing to provide students with study guidance, life guidance and psychological education. Secondly, with the diversified development of college students' ideology, college counselors do not actively innovate the work path and still adopt the past education concept, which makes it impossible to carry out students' letter sending and education management efficiently, let alone help students solve the work of study and life, career making and friendship, value orientation and other aspects. At the same time, college counselors and teachers lack the ability to deal with campus crisis events, and do not actively carry out safety education. Safety education is too formalized and lacks effective work plan. In addition, when carrying out specific educational guidance, college teachers lack flexible handling ability, and most of them use traditional solutions to guide students to deal with practical problems, which makes students unwilling to express their feelings. Therefore, college counselors and teachers should pay attention to the above problems, inspire students to think actively, and cultivate students' ability to distinguish right from wrong.

3. How to carry out counselors' work efficiently from the perspective of Moral education

How to carry out the instructor work from the perspective of moral education is a problem that every educator should think about.

How to develop specific educational work below summary is like the following two points.

3.1 Regularly carry out various educational activities

From the perspective of moral education, college counselors and teachers should actively guide college students to establish correct values, lead them to learn the theoretical knowledge of the Party, and then improve their ideological accomplishment. At the same time, college teachers should actively drive students to participate in campus cultural and sports activities, so that students can exercise their ability in the process of participating in activities, and then cultivate their interest in learning. Therefore, in order to complete the above guidance work, teachers should carefully consider how to innovate the work path, guide students to update their ideas and improve their professional practice ability. To a certain extent, educational activities can meet the needs of college counselors and teachers to achieve efficient work and innovation, inspire students to actively do a good job in self-management and discover the fun of college life. Therefore, in order to carry out their work efficiently, college counselors and teachers should formulate flexible educational activities and teach students regularly. First of all, teachers can start from ideological and political education, mental health education, safety education, career planning guidance, learning concept education and other aspects, design educational activities to carry out the plan, and then train students' comprehensive quality. In this process, teachers should set an example, start with the familiar life and learning environment to guide students to learn the latest theoretical knowledge, and encourage students to have the courage to practice, so as to stimulate students' learning vitality. At the same time, college counselors and teachers should actively guide students to develop their personal interests, seek their own learning methods from many aspects, and then cultivate students' learning ability. Secondly, teachers should formulate a clear plan of educational activities, clarify the educational management measures, and urge students to complete daily work, study and life tasks in accordance with the jointly formulated class management system, so as to cultivate students' sense of discipline and self-management. In addition, teachers in the development of educational activities, can let student cadres, outstanding students to participate in the joint development of activities, so as to drive more students to participate in specific activities, improve the ability of unity and cooperation of students.

3.2 Regular exchange of ideas and learning with students

From the perspective of Moral education, college counselors and teachers should actively innovate their working methods and communicate with students regularly. Communication is the basis of understanding a person. Only by actively communicating with students can teachers understand the current confusion of students and help them overcome learning difficulties. Therefore, teachers should approach student groups together with student cadres to understand the progress of students in different fields, and then help students to overcome learning difficulties and find the right scheme to deal with things. Secondly, teachers should actively analyze the current students' common problems in life, study and work, and sort out and summarize the problems, with the help of mobile phones, computers and other educational platforms to communicate with students. In this process, teachers should deeply analyze the confusion of different students and help students one to one, so as to better solve the problems of students. In many exchanges and communication activities, teachers should pay special attention to students' psychological analysis activities, timely grasp the psychological characteristics of different students in dealing with things, and then timely help students to understand difficulties, inspire students to take the initiative to meet the challenges, and lead students to practice a strong heart. At the same time, teachers should also communicate with students in learning, analyze the practical problems encountered by students in the process of learning different subjects, and then help students overcome the confusion encountered in the process of learning, and achieve ideal academic results. In this process, teachers can talk with students about the craftsman spirit, the daily work of scientists and other content, so as to guide students to understand the problems they may encounter in further study, and urge students to set up a good attitude. In addition, teachers can also use the way of tree holes to communicate with students, eliminate the doubts of students' communication and help students overcome important problems.

4. Conclusion

From the perspective of Moral education, college counselors and teachers should actively implement moral education and guide college students to firm up their ideals and beliefs. At the same time, college counselors and teachers should actively understand the basic situation of students, encourage students to develop interest in learning, so as to enhance the cohesion of student teams and stimulate students' learning vitality.

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Reform and Practice of Basketball Curriculum Under the Background of Physical Education Professional Certification

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Abstract: Basketball course in line with the echo of personalized learning, online teaching, leading, dynamic and open teaching and efficient interaction between teachers and students, the depth of inquiry learning, improve teaching mechanism, such as teaching target, make the effective combination of students' knowledge, ability and quality, cultivate students the comprehensive ability to solve the problem and higher-order thinking, with the teachers' sense of responsibility and initiative, As well as to become an excellent physical education worker's accomplishment, so that the basketball course teaching content has The Times and forward-looking, the teaching form has the advanced and interactive.

Keywords: Physical education; Professional certification; Basketball lessons; Reform practice

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Preface

To implement the party's 19 big spirit, cultivate high quality teachers troop, according to the national education career development "much starker choices-and graver consequences-in planning work requirements, promoting the construction of teachers' education quality guarantee system, improve the quality of talent cultivation of teachers, the omni-directional, the whole process of teaching of professional of teachers evaluation, and the results of evaluation are applied to the teaching improvement, Promote the continuous improvement of the quality of training teachers. Physical education specialty has its particularity compared with other specialties, and its certification time, requirements and standards are different. Curriculum construction has become an important fulcrum of professional certification. At present, there are many researches on curriculum construction under the background of certification. However, there is almost no research on physical education, and only the research is limited to the macro research, without in-depth research on the main courses. Physical Education is the only normal major of Jilin Institute of Physical Education. Basketball course is an important course in the talent training system of physical education. It is the excellent course of Jilin Province, the excellent course of Jilin Province, the online video course of Jilin Province, and the key course in the professional certification process. There is a big gap in the society's demand for high-quality sports talents, high-quality sports teachers in short supply, the order training has been the norm, through the development of certification work, strengthen the reform of basketball courses, improve the quality of talent output, in order to meet the high standard of talent training needs of the society.

1. Interpretation of connotation of professional certification

Professional certification advocates the certification concept of "student-centered, output-oriented and sustainable development". It as a new type of evaluation, the mechanism of higher education quality in such aspects as purpose, implementing subject, organization system with professional assessment of the past, the review has certain differences, such as professional certification is a professional certification body for different professional evaluation, which provide professional teaching quality guarantee and conform to the requirements of the professional association or social unit of choose and employ persons, the effective ways to The country saw the deficiency in modern education, so put forward the concept of professional certification. Professional certification is a specialized evaluation of different majors, to help colleges and universities draw a clear line between each major, clarify the train of thought, make professional courses and training objectives.^[1]

2. Understanding the core problem of curriculum reform

2.1 Limitations of time and space in teaching

The current teaching form causes the problem that students can only learn but not teach, and the basic ability of normal university students cannot be improved. Through the teaching reform, the boundaries of time and space are broken. Students learn skills in practice classes, practice basic teaching abilities on the network platform, and then return to practice courses for inspection. Students' learning is no longer limited by time and space, and they can freely explore the knowledge they are 2.2 The lack of basketball teaching

resources

Basketball course is a complex knowledge system course, that is to master theoretical knowledge but also to master practical skills. The course also has a close connection with psychology, human science, neuroscience and other disciplines. Through the reform of teaching content and methods, students will not only master skills in class, but also meet their own interests when teachers explain limited content. After class, students will explore and dig relevant knowledge through online independent exploration, so that students' knowledge will continue to be enriched.^[2]

2.2 Poor communication between teachers and students

Break traditional teaching form, interaction between teachers and students after class. Through the reform of teaching mode, teachers can build a professional self-learning platform for students, through which they can communicate and contact with students to release learning tasks and urge students to complete them. At the same time, they can also use this platform to timely answer students' problems in self-learning or in class.

2.3 The problem of weak autonomous learning ability

Through the deepening of teaching reform, students' interest in learning is cultivated and students can study independently after class. Reform the teaching contents, enrich the teaching means, with the support of information technology, causes the student to explore basketball knowledge and their thinking to spread continuously, can more deeply feel the basketball knowledge and profound, the force will also guide students to independent exploration and experience knowledge, helps to develop their ability of independent learning.

3. Specific strategies of basketball curriculum reform

3.1 Change the mode of knowledge transmission

Give full play to the leading role of teachers in guiding, inspiring and monitoring the teaching process, and fully reflect the enthusiasm, initiative and creativity of students as the main body of the learning process. Through the reform of hybrid teaching mode, the teaching of basic theoretical knowledge is placed on the online platform, the training of teaching ability is completed by the online platform, and the training of practical ability and values is mainly realized by the offline link, which shows the effective combination of teaching efficiency and effect.

3.2 Construction of "knowledge point" teaching video

It adopts network teaching platform, micro-class and other forms suitable for online or fragmented learning, and avoids the use of single, traditional classroom recording video. Let the circulation of teaching resources benefit more schools and students, save learning time and promote more equitable distribution of education resources. So that students have the opportunity to enjoy the best video course resources in China or even the world, to meet people's demand for famous schools, famous teachers, famous courses, to achieve faster circulation of teaching resources.

3.3 Open online courses

Carry out online and offline teaching activities on the network teaching platform, and carry out the construction of micro videos, question banks and other supporting teaching resources. Through the reform of hybrid teaching mode, the teaching of basic theoretical knowledge is placed on the online platform, the training of teaching ability is completed by the online platform, and the training of practical ability and values is mainly realized by the offline link, which shows the effective combination of teaching efficiency and effect.^[3]

3.4 Adjust the syllabus

On the premise of ensuring the teaching objectives of basketball course, the curriculum syllabus should be adjusted appropriately, including the allocation of class hours, the adjustment of teaching methods, the adjustment of assessment standards and examination methods. With the help of big data technology, the network teaching platform can go deep into the specific links of each student's learning process, collect all the data related to students as much as possible, and develop personalized basketball theory course teaching plan according to the results of teaching data extraction, so as to achieve differentiated teaching goals.

4. Conclusion

With the opportunity of physical education professional certification, according to the requirements of core ability and quality of physical education normal graduates, through different teaching paths, broaden teaching resources, meet the learning needs of different students, promote the active construction and independent development of students' learning mode, and enhance teaching demonstration ability. To provide students with the learning conditions and environment they should have to become excellent sports normal students, so that students' comprehensive ability and accomplishment have core competitiveness.

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A Study to Origin Analytical Psychology and Traditional Chinese Culture

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Abstract: Jung's theory of analytical psychology is not entirely based on Freud's ideas, and we have more often than not overlooked the fact that ancient Chinese traditional culture is an important source and theoretical foundation of analytical psychology.^[1] Firstly, in the dimension of personality goals, Jung introduced the concepts of SELF and self-fulfillment, based on the core of the Tao in the I Ching. Secondly, in the dimension of coordination of personality structure, Jung based on the ancient Taoist idea of "natural inaction" and "induction of heaven and man", and then proposed the principle of co-occurrence. Again, in the dimension of personality types, Jung's concept of introversion and extroversion, as well as the eight personality types, are fully in line with the ontology of the Eight Trigrams of Yin and Yang of Taoism in China. In conclusion, Jung's analytical psychology is a secondary processing and development based on the excavation and full absorption of ancient Chinese traditional culture. Analytical psychology can be regarded as a model of deep integration of Chinese and Western cultures, and also provides a good example and model for us to further confront and develop Chinese traditional culture from the perspective of psychology history.

Keywords: Tao; Traditional culture; Analytical psychology; Personality types

Jung has played an irreplaceable role in the history of personality psychology. This is not only because he was considered by Freud to be the successor of the orthodoxy of psychoanalytic psychology, but also because the theory of analytical psychology founded by Jung directly influenced the emergence of the "third force" in psychology, that is, humanistic psychology.^[2] However, when it comes to Jung, many people tend to overshadow his own aura because of his deep affinity with Freud, and one aspect that has been overlooked for a long time is that a large part of the theoretical foundation of analytical psychology is rooted in the Taoist culture of traditional Chinese culture.

1. The profound influence of traditional Chinese culture on analytical psychology is, in my view, threefold.

"Tao" "SELF" and the True Self. In his commentary on the Taiyi Jinhua Tenets, Jung mentioned that the most crucial issue I discovered in my thinking and research was the concept of SELF, and that it was only then that I returned to the real world once again. Scholars around the world have differed on the meaning of SELF in Jung's theory, but I agree with Marray Stein, former Chairman of the Academic Committee of the International Society for Analytical Psychology, that Jung's "SELF" is to some extent, it is closer to the concept of "Tao" in traditional Chinese culture, especially in the I Ching.

In many of his writings, Jung actually disagreed with his good friend Wei Lixian's deconstruction and interpretation of the concept of Tao.^[3] In his interpretation of the Taiyi Jinhua Tenets, Jung quoted the opening words of the Hui Life-Sutra: "The essence of Tao is like a name, and the cultivation of life is like one." Jung's understanding is also that - the Tao is life, nature is consciousness (ego), and life is the collective subconscious and physical life. Sex and life are integrated before the parents give birth to the individual, and are separated from each other at the time of birth. From a Jungian perspective, to become a Taoist, one must transcend the 'interpenetration' of consciousness and worldly things, so that consciousness is in a state of emptiness and non-emptiness. Only in this way can we see into our own subconscious and externalize the archetypes of our individual spirit. The concept of self-fulfillment was first introduced by Jung and later became the core concept of humanistic psychology. Most Chinese scholars later translated it as 'self-actualization'.

2. "Heaven and man", "natural inactivity" and the principle of co-occurrence

Maslow, a representative figure of humanistic psychology, once pointed out that true self-realisation is the transcendence of the influence of customs experienced in the normal state. This is what Maslow called "Taoist inaction", a view that bears traces of Jungian theory and is inspired by and deeply influenced by Jungian theory. Maslow also acknowledges that Jung "opened up a third stream of thought in psychology".

In his commentary on the Taiyi Jinhua Tenets, Jung repeatedly mentions the concept of ‘Wu Wei’. This was based on Jung’s understanding of Taoist thought in traditional Chinese culture and its application to the examination and study of the process of personality development. As individual experience increases, human activity gradually becomes conscious, autonomous and free. The formation and development of the ego causes the human spirit to delude itself from the constraints of the subconscious and from the foundations on which it was previously grounded. The overgrowth of the ego leads to the “revenge” of the collective subconscious and to the creation of various neuroses and mental illnesses, which are the source of human suffering. To ensure a well-balanced and unified personality, we need to do nothing, that is, to suppress the over-expansion of the ego, to follow nature and to return to the basics, so that we can be at ease with the love and hate in our lives and to pursue ultimate happiness.

The author needs to clarify one point here - “inaction” does not mean inaction, based on the foundation of inaction, Jung proposed the “principle of co-occurrence” which embodies the “inaction of inaction”. The “principle of co-occurrence”. This comes from the oracular answer that Jung obtained many times by using reed sticks as trigrams according to the method described in the I Ching. [4] This means that the reality of the human mind can be determined through the objective occurrence of contingent events, which can be attributed to the category of extreme sensual meaning. Jung named this process the ‘principle of syncretism’: living subjects stimulate a process of activity similar to the inanimate ‘beings’ of human insight, and thus they provide oracular answers to the question of humanity itself. This idea of Jung’s fully demonstrates his profound understanding and appreciation of the traditional Chinese culture of the Taoist idea of the “unity of heaven and man”.

3. The relationship between the two rhythms, the four signs and the eight trigrams and personality types

The ontology of the Two Rites, Four Signs and Eight Trigrams in the I Ching was a great inspiration for Jung, and it can be said that his theory of personality types was based on the theory of the I Ching.

3.1 Yin and Yang and the two tendencies of inward and outward leaning stereotypes

Jung’s view is that although SELF is the basic goal of personality, almost no one in history has managed to express this goal in its entirety, and people generally develop it in a one-sided way. For example, an individual develops the conscious life at the expense of the subconscious life. The female individual tends to neglect the male aspect (the Animus archetype) and at the same time the male tends to neglect the female aspect (the Anima archetype). Based on this Jung proposed two stereotypes or polarities of tendency. The extroverted personality explores the outside world and likes to face it. The introverted person is absorbed in his or her inner world and likes to derive pleasure from a life of reading and art, for example. Both tendencies are present in every individual, but often one is favoured over the other and the other, which is not fully developed, becomes the subconscious.

3.2 The four signs, the eight trigrams and the distinction between personality types

The fact that the psychological and behavioural aspects of individuals differ greatly in many ways makes the simple classification of introversion and extroversion inadequate for categorising different individuals. Jung therefore introduced four adjustment variables called “faculties”: sensation, thought, emotion and intuition. Thinking and emotion are rational.

functions, while feeling and intuition are non-rational functions. Sensation, thought, emotion and intuition correspond to the four signs: old yang, young yang, old yin and young yin. The combination of internal and external inclination with the four psychological functions gives rise to the eight personality types, which correspond to the eight trigrams of Qian, Kun, Zhen, Xun, Kan, Li, Tui and Guang.

Throughout the history of psychology in the world, no one before Jung had ever attempted to deconstruct and interpret the Chinese Taoist culture of the I Ching from a psychological perspective, with the aim of enhancing one’s spiritual vitality and alleviating life’s suffering. After the two world wars, Jung realized that “visual reason” dominated everything, and that the abnormal development of human reason led to the prosperity of material civilization while human suffering, anxiety and sorrow increased. This is why Jung, through his contact with traditional Chinese culture, discovered that the ancient Chinese Taoist idea of “natural inaction” and “the unity of heaven and man” was the remedy for the deep-seated suffering of mankind.

Jung’s analytical psychology was not only the oddity of the “Chinese Taoist fever” in the West in the 20th century, but also opened the door for Western scholars to understand traditional Chinese culture from a unique perspective.^[5] It can also be said that Jung built a bridge for deeper cultural exchange and integration between East and West. More importantly, it laid a solid foundation for us to further grasp the psychological connotations of traditional Chinese culture and to advance further on the basis of ancient Chinese psychology. While many Chinese people tend to be sceptical and in denial about the origins of ancient Chinese psychology, Jung tells us with practice - psychology is not an imported product, and traditional Chinese culture is also one of the birthplaces of psychology.

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Analysis on Diversified Teaching Mode of Physical Education

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Abstract: Under the continuous promotion of the new curriculum reform, teachers need to constantly innovate in physical education teaching, and adopt diversified teaching modes to further improve students' physical quality. This paper mainly discusses the problems existing in middle school physical education teaching, and puts forward specific solutions, hoping to help relevant teachers to further enrich physical education teaching.

Keywords: Middle school sports; Teaching diversification; Problems

Under the influence of quality-oriented education, more and more schools began to pay attention to physical education teaching for students, but from the overall teaching situation, most teachers still could not use reasonable teaching programs to help students carry out physical exercise, thus making the diversification of physical education teaching plan run aground. In view of this phenomenon, relevant teachers need to solve problems from practical problems and adjust the teaching plan according to the specific learning situation of students, so as to better improve the quality of teaching and promote students' all-round development.

1. Currently has problems with physical education teaching in secondary schools

Influenced by the traditional teaching concept, most schools do not pay full attention to physical education teaching, which leads to many problems in the current physical education teaching, which is specifically manifested in the following aspects.

1.1 The attention to physical education teaching needs to be improved

The subject of physical education is not an examination subject, so under the influence of exam-oriented education, most teachers think that this course belongs to an entertainment course and is not really valued. In this case, the quality of teaching is greatly affected. For students, also did not take physical education seriously, more is a perfunctory attitude to complete the learning task, such as in the most common gymnastics exercise, most of the student union movement is not in place, if students do not pay attention to the subject, then the physical education level will certainly be affected, on such a basis, the teacher physical education teaching activities is a very difficult thing.^[1]

1.2 The teaching mode is single

At present, the common problem of physical education teaching is that the physical education teaching mode is not innovative enough, relatively monotonous and backward. In physical education class, teachers speak some simple teaching content and teachers will continue to repeat it, so it is difficult for students to be interested in physical education courses. To be specific, in the process of teaching, teachers will ignore the students' own learning needs, and often arrange the classroom content according to the teaching tasks. In this case, it is easy to lead to the teaching content being too boring, and it is difficult to attract students' attention. In addition, because some schools do not pay attention to physical education teaching, so there will be a physical education teacher with multiple classes, which leads to many physical education teachers do not have too much time according to the current teaching situation to do a targeted sports teaching, under the influence of various factors, the quality of physical education teaching is also very improved.

1.3 The venues for PE teaching are limited

Middle school in the stage of basic education, although our country has been increasing education investment in colleges and universities, but because the school is not enough to meet the site needed for students' sports activities, which makes many interesting sports activities due to limited site can not be effectively good, resulting in lead to the students' sports load can not meet the standard of real exercise. If the needs of physical education teaching venues cannot be met, many teaching plans cannot be carried out, and then the goal of diversified physical education teaching in middle schools cannot be realized.

2. Effective measures for diversified physical education diversification

2.1 Carry out pleasant physical education teaching to improve students' passion for learning

At present, the middle school learning pressure is greater, the learning task is heavy, the amount of time for physical exercise is less, in this case, not only the physical quality of students can not be improved, but also lead to certain psychological problems. In view of this phenomenon, teachers can take the way of pleasant physical education in physical education teaching, while helping students to improve their physical quality can reduce their psychological pressure, improve the development of students' personality and effectively cultivate students' healthy learning mood, and further promote the development of quality-oriented education in China.

In the specific teaching process can be implemented from the following aspects of the teaching. First of all, students need to master the overall physical learning situation and make learning plans according to their learning characteristics. For example, for some students with poor physical quality or fat body shape to carry out physical education teaching, it is necessary to combine their own actual situation to arrange the teaching content, to avoid intense activities caused by certain physical damage and make their fear of difficulties in physical education. Secondly, in giving lectures to students, we should pay attention to students' psychological activities to ensure that each student can grow up healthy and happily in the process of physical exercise. For example, it is necessary to choose a moderate physical exercise program, because the number of students, it is difficult for teachers to take into account every student, in this case, if the discomfort is moderate can meet the learning needs of most students, to avoid hurting students' self-esteem. In the process of teaching, students should also learn how to take the strengths of others in sports to supplement their own weaknesses, so as to effectively promote students' comprehensive development in the case of mental health.^[2]

2.2 Carry out special sports learning to improve students' overall physical quality

At present for the requirements of physical education teaching is constantly improving, physical exercise is not only improve students' physical literacy, more importantly through physical learning to help students master the corresponding physical education skills, so the relevant teachers in order to better improve the effectiveness of physical education teaching, can carry out special sports learning, to better ensure the learning effect. First of all, in the process of implementing special teaching, teachers need to constantly highlight the main status of students, such as can set a variety of sports for students to choose, so not only can let students choose their interested in sports, let them have greater enthusiasm and enthusiasm, into the special course teaching, but also can maximize the mining of students' potential, in this way, students' interest in physical learning not only improved, students' physical quality ability will be very good exercise. Secondly, the teachers need to carry out special physical exercise according to the physical education equipment, such as basketball training, table tennis training, long jump training and so on. And in the process of students' special learning, teachers should discover the advantages of students in time, for example, for taller students can have targeted basketball training, so as to further stimulate their physical potential. Through this form, students can be selected to combine their own actual situation, and can give full play to students' advantages in sports activities, not only students' physical skills will also be improved, and then the overall physical quality will be improved.

2.3 Carry out gamified teaching to enrich the teaching content

In order to further enrich the content of physical education teaching, relevant teachers can choose gaming teaching when carrying out teaching activities, so that students can have a good and happy learning atmosphere while obtaining richer physical education experience, so as to improve their classroom participation. In the specific process of development, relevant teachers can combine the physical education teaching content with the game. For example, in running training, teachers can encourage students to join the training through the form of relay competition, so that students can learn and exercise in the atmosphere of the game, which is conducive to the training of physical education classroom. Secondly, junior high school sports teachers can also hold some sports competitions, so that these students can constantly understand the spirit of cooperation and cooperation in the process of competition.

2.4 Physical education teaching and life, to mobilize students' enthusiasm for physical exercise

In order to promote students to more integrate into physical education activities, teachers can make physical education teaching life, so as to mobilize the enthusiasm of students' physical exercise, but the sports life teaching needs the following matters needing attention. First of all, the nature of physical education should be put in the first place, and the teacher's teaching content should revolve around the sports content. The purpose of teaching and life is to encourage students to better integrate into the classroom and participate in relevant learning tasks, so the activities carried out cannot be separated from physical education content. If the activities carried out are separated from physical education teaching, the activity will lose its own significance. For example, physical education teachers have introduced some activities such as electronic sports or magic into sports classes, and these activities are less related to sports, which usually waste classroom time and do not achieve certain results. Therefore, in the sports class, while making the teaching content more realistic, the teaching content should also be based on the nature of physical education. Secondly, the teacher has carried out the teaching content is what should allow students to have a simple and transparent understanding. In the sports class, if the teaching content is around life, but beyond students' cognition, it will be the development of this activity will not have much harvest. This situation is because students do not understand the content of this activity, so the effect of teachers' teaching class is also very low. In addition, the teaching content carried out by the teachers is too lower than the students' cognitive level, which will make the students feel easier, and can not arouse the students' interest.

3. Conclusion:

In short, under the background of the new curriculum reform, middle school PE teachers need to constantly carry out teaching innovation, so as to further improve the teaching quality and ensure the effectiveness of teaching.

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A study on the Problems and Skills of Business English Translation

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Abstract: In the development of international economic activities, or the communication of different national culture, is relying on the powerful tool for English language, business English as an international language, plays a bridge role in international trade, along with our country market gradually into the international economy and society, the demand of business trade English translation and contradictions increasingly prominent. Business English is a combination of language, culture and economy. It is a common language for cross-cultural communication in the context of international business. Business English translation should follow certain principles, understand the characteristics of business English and pay attention to translation skills, which are very important for business English translation. However, there are many deficiencies and problems in current business English. In view of these problems, the corresponding measures are put forward.

Keywords: Language characteristics; Problems; Translation skills

1. Language features of Business English

As a part of special English, business English is widely used in various business occasions, and this goal is mainly applied to business activities. What makes business English unique is the combination of professionalism and purpose. Cover all kinds of business activities, to provide the most business needs of the standard English. The style of business English is not to express the beauty of art, but to emphasize clear logic and rationality, correct thinking and strict structure. Simple format, easy to understand, few too much modification, generally do not use metaphor, personification, exaggeration and other skills, in order to improve communication efficiency. In general, they do not use old business terms and formulas, but are expressed in plain modern English. Business English emphasizes politeness, which is a remarkable linguistic feature of business English. Chinese business language sometimes lacks politeness. Generally, only "please" is used as a polite expression, while Business English pays much attention to etiquette and politeness is everywhere.

1.1 Use a large number of professional precise words

The most prominent feature of business English vocabulary is the use of professional and accurate words, including many professional words with business significance, abbreviations and related words in business theory and business practice, and its language has strong professional characteristics.

1.2 The application of new business words

Due to the gradual emergence of new varieties, new technologies and new ideas, scientific and technological progress and economic development will inevitably be reflected in the basic unit words, so new business language vocabulary will continue to appear.

1.3 Complex language patterns with accurate and complete semantics

Business English is rigorous in language, complex in pattern and complete in meaning. Because it involves the interests of two or more parties. Therefore, the terms and contents of a commercial contract, treaty or document should be very accurate. In order to be unambiguous, business English needs to use appropriate words, and sometimes many phrases or clauses that can modify or limit the content, so sentences become more complex.

1.4 The common usage of imperative and passive sentences

Imperative and passive sentences often appear in the sentence structure of business English, aiming to make business English language concise, express objective and fair content, and accurately express relevant events.

2. Problems in business English translation

2.1 Polysemy leads to translation bias

English words usually have multiple meanings, and common English words often have special professional meaning in business English. Sometimes, due to the inability to fully grasp the meaning of business vocabulary, inaccurate expression mistakes are easy to occur in translation. For example, the word chair is often used in common English to mean a chair, but in business English it means chairman. Therefore, if the meaning of words is not fully understood in business English translation, translation mistakes are easy to occur. These are subtle differences, but they can easily lead to translation errors, so be careful.

2.2 Translation errors caused by lack of solid professional knowledge

The translation of professional vocabulary is the difficulty of business English translation, which involves a wide range and a large number. Business English often involves many other aspects of knowledge, such as logistics, accounting, finance, etc., in translation, lack of understanding of relevant professional knowledge will lead to translation mistakes. The clarity of the translation determines whether the business can be understood correctly. If you do not know relevant professional knowledge, it will affect the fluency and clarity of translation. Translation work for business English majors requires a good command of relevant professional knowledge, otherwise translation mistakes are easy to occur. In the process of business English translation, we often encounter words peculiar to English culture, which requires translators to have a good cultural foundation, try their best to select the corresponding words for translation, and fully express the cultural information contained in the words.

2.3 Translation barriers caused by different Chinese and Western cultural backgrounds

Chinese culture attaches great importance to image thinking, while English as the first language culture often attaches great importance to abstract thinking and logical analysis. The difference of thinking mode leads to the difference of Sentence structure between English and Chinese. Different cultural backgrounds are bound to cause obstacles in business English translation. When conducting business, countries must conduct business contacts according to their local cultural backgrounds to avoid differences, which is reflected in business English translation. For example, the word “com” is translated as “corn” in the US and “wheat” in the UK, so the meaning of a word can mean different things in different countries. Therefore, business English translation is easy to have a wrong understanding of the meaning of words. That is to say, what you say is different from what the other side says. Every nation has its own language expression habits and vocabulary system. Under the influence of Traditional Chinese culture, Chinese expressions tend to be implicit, often using some indirect words to express refusal or politeness. Vague words are often used in communication. English expression stresses directness, so vague Chinese expression will bring difficulties to business English translation.

3. Business English translation strategies and skills

3.1 Master certain professional business knowledge

Business English is not only professional, but also has the requirements of relevant industries, which is different from English translation in daily life. It is related to international trade activities in many related industries. At the same time, the use of business English is closely related to the relevant industry background. Therefore, in the process of translation, it is necessary to understand the professional knowledge of the relevant industry, understand the cultural customs, language characteristics and expressions of the relevant industry, so as to make the translation more accurate and rigorous. Due to the rapid development of economic globalization, the emergence of new words is inevitable. Therefore, translators should not only have a deep understanding of professional knowledge, but also know how to use relevant professional knowledge and how to use new words, so as to withstand the challenges of The Times.

3.2 Use business vocabulary accurately and professionally

The accurate translation of business English should be reflected in two aspects: first, the choice of professional vocabulary. Business English is characterized by professionalism and accuracy. Translators should not blindly pursue the artistic quality of translation in the process of translation, let alone deviate from the basic correctness. Secondly, choose the right business style. As business English often involves many fields, the style and format used in business English should not be exactly the same due to different business fields. Otherwise, business information may not be accurately conveyed. Business English translators must pay attention to differences between styles, even if the differences are minimal. In the process of translation, we should strictly abide by the principle of “according to the material”. Neither the rigor nor the artistry of translation should be overemphasized.

When dealing with business English words, it is necessary to have a deep understanding of the meaning of the word, add or subtract the translation appropriately, and then carry out accurate and comprehensive translation, so as to achieve accurate and unambiguous. Pay special attention to the translation of business terms. There are many terms in business English, so the terms used in translation should meet business needs and correctly use the meaning expressed by the terms. At the same time, in view of the different structures between English and Chinese, the mutual changes between English will inevitably increase or decrease the vocabulary, make it more accurate, meet the requirements of readers, and make it easier for people to understand, so in the process of translation, we should add and subtract some words, so that the translation will be more reasonable and accurate. Due to the differences in sentence structure and speaking habits between Chinese and English, the nature and expression of words are also different in business English translation. Therefore, in order to achieve the accuracy of the expression and rules of translation, it is necessary to transform the words and sentences in translation, which requires very flexible skills.

4. Finish

With the development of economic globalization and the deepening of international cooperation and exchange, business English plays an important role in international business and trade exchanges, cooperation and negotiation. Therefore, every business English translator must pay attention to the training of basic skills, fully combine the characteristics of business English, and accumulate relevant business English translation skills, so as to achieve ideal business English translation effect.

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An Experimental Study of Tone and Tone Sandhi in Baoding Dialect

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Abstract: This paper analyzes the tone and tone sandhi of Baoding dialect by means of experimental phonetics. So far, only Li Zihé has conducted typological research on the tone sandhi of Baoding dialect in 2008. By using statistical methods, his paper summarizes the common characteristics of tone types and tone sandhi in northern dialects, and then investigates the two-character tone sandhi in Baoding dialect from the perspective of typology. This paper uses Praat to analyze the tone and tone sandhi of Baoding dialect and tries to give an objective description. In this paper, we obtain the data from the pronunciation of the native speakers of Baoding dialect. The data were collected from the native speakers of Baoding dialect by recording their pronunciation of the citation syllables and disyllabic sequence. The collected data were given a careful and detailed acoustic analysis by Praat. This study is the first attempt to analyze the tone and tone sandhi in Baoding dialect using the Praat. Comparing the present study with the previous study of Mandarin in terms of citation tones, it is found that T2 (43) is different in both pitch values and tonal shape; T1 and T4 are different in pitch values but not tonal shapes; T3 is the same in both pitch values and tonal shape. In terms of tone sandhi, the third tone T3 changed significantly in disyllabic sequence.

Keywords: Citation tone; Tone sandhi; Baoding dialect; Experimental phonetics

1. Introduction

This paper is an acoustic experimental study of the tone and tone sandhi in Baoding dialect. The tone sandhi in Baoding dialect have only been studied by Li (2008) in the perspective of typology with statistic methods. This paper is the first attempt using Praat to give an acoustic analysis of the tone and tone sandhi in Baoding dialect in order to obtain a more objective description of the tonal features in Baoding dialect^[1].

2. Introduction to Baoding dialect

Baoding, located in the center of Hebei Province and at the eastern foot of Taihang Mountain, is the central city of Beijing-Tianjin-Hebei region. Baoding is located in the west of Jizhong Plain, between 38°10' -40°00' N and 113°40' -116°20' E. Baoding has jurisdiction over 5 districts, 15 counties, 4 county-level cities and 2 development zones.

Baoding dialect is the local dialect of Baoding city, which belongs to Ji-lu mandarin of Sino-Tibetan languages, with four tones, no checked tone and with partial rhotic accent. Baoding city jurisdiction area is large, so the internal language situation of each district is not consistent. The northernmost Zhuozhou dialect belongs to Beijing Mandarin because of its proximity to Beijing. Other dialects, according to Liu Shuxue (2006), belong to the Jilu mandarin.

According to Li (2008), Baoding dialect contains 24 initials (including the zero initial). Baoding dialect has a total of 36 finals, including 10 single finals and 26 complex finals.

3. The Definition of Tone and Tone Sandhi

Tone refers to the use of pitch in language to distinguish lexical or grammatical meaning. For example, in Standard Mandarin Chinese, there are four lexical contrastive tones: yinping (55), yangping (35), shangsheng (214), and qusheng (51). For example, the syllable “ba” can have four meanings depending on the use of the tone. Ba (55) means 八 “eight”; Ba (35) means 拔 “pull out”; Ba (214) means 靶 “target”; Ba (51) means 坝 “dam”.

The tone sandhi is a phonological change occurring in tonal languages, in which the tones are assigned to individual words or morphemes change based on the pronunciation and adjacent words or morphemes. The phenomenon is very common and well documented in Chinese. The trigger of the tone sandhi can be adjacent tones, as exemplified by the well-known Mandarin third-tone sandhi, whereby a third tone (falling) becomes a second tone (rising) in the context followed by a third tone, for example, 买马 (214, 214), which means “buying horse”, will change into (35, 214).

4. Experimental Design

This paper aims to design an acoustic experiment to investigate the tonal system in Baoding dialect so as to offer some valid data on the study of tones in Baoding dialect.

About the selection of participants, the traditional choice is to take those who are elderly and have less education and travel experience to ensure the true dialect. However this kind of recording is hard to get because of the rare participants. So we chose

two Baoding people who were born and grown up in Baoding to take the experiment. During the experiment, each participant was recorded in a quiet room. In the experiment, participants were not allowed to think about pronunciation for a long time, but were asked to pronounce according to their usual pronunciation habits, so as to avoid interference from the pronunciation habits of Mandarin.

As for the recording materials used in the study, 32 monosyllabic words in citation form (8 for each tonal category), and 80 disyllabic phrases were recorded (5 for each tonal category). This reading materials are frequently used in daily life. In the recording process, the Chinese characters used as reading materials were printed out and presented in random order.

Recording were made by a laptop with a line-in microphone. Then, the technique Praat was used to further segment and analyze the data. The Praat is one of the most widely used computer programs for speech analysis and synthesis, which was developed by Paul Boersma and David Weenink (1995). Through running the Praat script, the pitch contours of each syllable were divided into nine equi-intervals. Then ten sample F0 values were chosen. Since this thesis focuses on the tone and tone sandhi in Baoding dialect rather than the individual's description of pronunciation, the F0 values of each one's tone and tone sandhi were not analyzed. Instead, the averages of each F0 value were calculated by the software Excel Viewer 2010^[2].

Fundamental frequency (F0) is very important for the analysis of the tone. However, according to Shi (1990), the F0 value is not in direct proportion with the subjective perception of the pitch. They are changed into common logarithm because of the fact that the psychological perception of the pitch is correlated with the logarithm of F0. Therefore, the pitch value of any point of a tone contour can be obtained in the following equation (Shi, 1990):

$$T = [(lgx - lgb) / (lga - lgb)] \times 5 \quad (\text{Shi, 2006})$$

5. Result and Discussion

5.1 Tones of Citation Syllables

The group data of F0 contours and pitch value contours will be presented. Hereafter, T1, T2, T3 and T4 are used to represent Yinping, Yangping, Shangsheng, and Qusheng respectively. Each tonal category contained 10 samples. The numbers 1 to 10 represent F01 to F010. The unit of F0 was Hz. For accuracy, two decimal fractions of each F0 value remained.

Based on the data, the pitch values for citation tones in Baoding Dialect can be generalized as in Table 1. (Because of the participants' speaking habits, we ignore the falling tone at the end of the figure.)

Table 1. Pitch values of citation tones in Baoding dialect

T1	T2	T3	T4
45	43	214	53

5.2 Discussion

From the above table, it can be seen that except for T3, the other tones T1, T2, T4 are slightly different from the Mandarin, especially T2. Unlike Mandarin the pitch contour which is rising, T2 tend to have a falling tone in the end. Baoding dialect is more flat and not soft enough, but Baoding dialect as a whole is still close to Mandarin.

5.3 Tones of Disyllabic Sequence

This part we will presents the results of the F0 contours and pitch value contours of the tone sandhi in disyllabic sequences.

The 16 (4×4) kinds of tonal combinations in disyllabic sequences in Baoding dialect are divided into four groups: T1+Tx, T2+Tx, T3+Tx, T4+Tx (here, Tx stands for any tone). The tone sandhi patterns in disyllabic sequences in Baoding dialect are generalized in Table 2 below.

Table 2. Tone Sandhi of Disyllabic Sequence in Baoding Dialect

First Tone	Second Tone			
	T1(45)	T2(43)	T3(214)	T4(53)
T1(45)	45+54	55+54	55+121	45+53
T2(43)	44+43	45+43	45+12	55+53
T3(214)	212+44	44+43	35+32	33+53
T4(53)	53+43	54+43	54+232	54+53

5.4 Discussion

From the above table, we can see all four tones became more flat in disyllabic sequence. The T3+Tx and Tx+T3 group showed the biggest difference. Based on the above analysis, all changes can be generalized as follows.

T3→212/___T1; T3→121/T1___ T3→44/___T2; T3→12/T2___ T3→35/___T3; T3→32/T3___ T3→33/___T4; T3→232/T4___

6. Conclusion

This study is the first attempt to analyze the tone and tone sandhi in Baoding dialect using the Praat. Comparing the present study with the previous study of Mandarin in terms of citation tones, it is found that T2 (43) is different in both pitch values and tonal shape; T1 and T4 are different in pitch values but not tonal shapes; T3 is the same in both pitch values and tonal shape. In terns of tone sandhi, the third tone T3 changed significantly in disyllabic sequence. Although the study of this experiment is desirable, it inevitably has limitations due to the limited time. In the future study, more participants should be included in order to get more data to conform the present finding.

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Application Research of SHOT Printing Simulator in the Course Teaching of Printing Specialty

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Abstract: There are many disadvantages in the traditional teaching of printing specialty. Under the traditional education mode, teachers are in the leading position in teaching, and students passively accept the indoctrination of knowledge, which affects the development of students' knowledge system and restricts the development of students' thinking ability and innovation ability. SHOTS (Sheeted Offset Training Simulator) is an important attempt in the teaching of printing course, which plays an important role in the improvement of theoretical teaching and practical teaching.

Keywords: Printing; Shots; Instructional applications

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The Ministry of Education attaches great importance to the training of printing talents in our country. There are two colleges and universities specializing in the training of printing talents all over the country, namely the Beijing Printing College and the Vocational School, but involves the printing technology specialized and the printing packing specialized university nearly 30. Printing experiment teaching is an important part of the training plan, but the cost of printing experiment teaching is relatively high. SHOTS (Sheeted Offset Training Simulator) is a practical and printing experimental teaching of the very excellent software, just to solve this problem.

1. The analysis of the current teaching situation of printing major in colleges and universities

At present, the main problem of the course system of printing specialty is that it overemphasizes the cultivation of students' theoretical knowledge system and lacks the cultivation of experimental skills. With the rapid development of the printing industry, the production line needs workers who know theory and technical operation, and the lack of skills of graduates from universities and colleges leads to the talents and enterprises can not be well connected, there are many graduates every year, but enterprises can not recruit talents, and thus the employment rate of the printing profession, the proportion of counterpart employment is even less.

2. The feasibility analysis of the application of SHOTS simulation system

With the development of computer technology, simulation system has gradually entered various fields and played a vital role in the development of various fields. Now, there are simulators for the printing industry, too. SHOTS (Sheeted Offset Training Simulator), also known as SHOTS, is a 15-year-old development by Sinapse of France. Using SHOTS (Sheeted Offset Training Simulator) software to assist teaching, after running the software, the printed sample sheets are analyzed, which is helpful for students to understand the professional terms and basic concepts of printing, strengthen the combination of theory and practice. To improve the efficiency and quality of teaching by using the software will be a trend in the future.^[1]

The system is divided into four modules, each module contains 100 items. During the course of the training, the students will be able to, by printing the response of the problem to judge the equipment failure and give solutions, realistic scenes, can really play to help students training purposes. The second is "SHOTS Trainer", which helps teachers to ask more specific questions. Teachers can also use this function to solve the problem of individual students' learning ability. The third is Shots aomatched session Analysis (Asa) Local. Through this function, students can understand the trajectory of the problem, a better grasp of teaching difficulties.

3. The analysis of the function of SHOTS simulation system in the course teaching of printing specialty

3.1 SHOTS simulation system arouses students' interest in learning

Printing technology course terms are many, the concept is also very abstract, do not refer to the object, students understand it is difficult, over time, it is easy to lose interest in this course. For example, the participation of software in theoretical classes is an improvement on the traditional teaching mode of rote learning. In the teaching process, the teacher creates the teaching situation through the SHOTS software. With the Guidance and inspiration of the teacher, the students spontaneously begin to discuss the

problems they encounter and use the simulation software to verify the problems. Ask Questions, discuss questions, verify questions. This is a virtuous circle, students do not understand the professional terms, concepts can be discussed together, and at the end of the test, do not understand the backlog of questions, and in the process of problem-solving, students bring a sense of joy and achievement, in the process of learning, give full play to the enthusiasm and initiative of students. Active learning is the best test of whether students are interested in a course, passive acceptance is a burden, not only the quality of teaching can not be guaranteed, but also easy to make students lose confidence in learning. The new mode of software participation in teaching, vivid examples, enlivened the atmosphere of the class, strengthened the self-confidence of the students, which is of great importance to the teaching of printing technology.^[2]

3.2 SHOTS simulation system contributes to the overall balanced development of students

The printing industry is an important indicator of a local economic development level. The economic level of each city in our country is different. The economic development in the Pearl River Delta is quite good, and the printing industry is also developing vigorously, people here are not unfamiliar with the concept of Printing. They even took part-time jobs before entering university. But students in some cities have hardly heard of printing and don't know what it is, like Qinghai, Xinjiang and other places, but the university enrollment is facing the whole country, because the economic development is not balanced and the resources distribution is not equal question, has caused the student source quality difference. Each student's understanding of the same thing is different, the ability to understand the good students, for printing terms, concepts, principles to master faster, to be able to follow the teacher's progress, to ensure the quality of their learning. There are also differences between the whole. Some students may be a little worse in understanding this aspect. They can not fully digest the inner classmates in the teacher's lecture in a short time, and then it will affect the effect of the following lecture, this in turn affects the pace of learning, and if it continues, it can cause students to drop out of the course and may also undermine their self-confidence in learning.

Shots printing simulation software contains more than 500 titles, more than 600 printing failure, according to the ease of printing failure is divided into 11 different levels, so teachers can according to the different learning ability of students to choose the topic, in this way, through software intervention, gradually reduce the overall difference in each class hour teaching, over time to achieve students on the printing professional terminology, concepts, original and process understanding level of balanced development.

3.3 SHOTS simulation system strengthens the interaction between students and teachers

Visually, moving objects are more attractive to the eye. An experiment has shown that, in terms of effectiveness, three-dimensional dynamic advertising than static flat advertising better than 2 times. The introduction of simulation software into theory-teaching classes will attract students' attention, increase their interest in learning and stimulate their innovative thinking. In the teaching practice, the teacher chooses the abstract and difficult teaching content as the demonstration content, which solves the difficulties of the teacher's teaching and simplifies the difficulties of the students' learning. In the process of software demonstration, students and teachers can constantly ask questions and explore solutions together, so that students from passive acceptance to active participation, enliven the learning atmosphere in the classroom, it also strengthens students' memory of key knowledge and understanding of difficult problems.^[3]

After class, the teacher can assign some thinking questions, summarize the class did not think of other problems, targeted to collect relevant information; at the same time assign the next class preview, cultivate the ability of self-study. Students can be divided into several groups. After class, they can sum up, discuss and share the learning in class, and exchange experiences with each other. In class, each group can discuss and learn from each other. Through practice, students' awareness of cooperation with each other has been raised, it also enhances students' learning autonomy.

4. Conclusion

From the teaching point of view, the teaching efficiency and the teaching effect have been improved. In the process of teacher demonstration, the participation of SHOTS software increases the amount of information and reduces the difficulty of teaching. Taking part in classroom teaching with software SHOTS can not only grasp the key points of teaching, but also make the difficult points of teaching easier to be broken through, and strengthen the visual teaching, so that students can use the knowledge faster and better. Teaching software has greatly reduced the cost of teaching, and environmental protection, reducing the use of machine teaching with the discharge of waste. From the teaching environment, the software teaching noise is small, easy for students to concentrate on listening, and the order of teaching to a certain extent can be guaranteed. The application of the software to the printing process teaching plays a specific inspiration and guidance role for the teaching of professional courses, and also lays a foundation for the further study of the elective courses of printing experiments.

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The Design of Exercise Structure and Operation System of Higher Mathematics Under the Background of Educational Informationization

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Abstract: The teaching reform of higher mathematics has been paid much attention and achieved a lot of achievements. But people have not paid enough attention to the exercises and homework of higher mathematics. The exercises and homework of higher mathematics should not be ignored. It is an important aspect of teaching and learning of higher mathematics. The traditional higher mathematics homework is the students' personal operation to do the exercises in the textbook after class. Practice has proved that these exercises are very necessary, but it is far from enough for homework to be limited to such exercises. In order to stimulate students' interest in learning, encourage their confidence in learning and strengthen the spirit of cooperation among students, the structural design under the background of information is mainly adopted in enriching the forms of higher mathematics homework.

Keywords: Informatization; Advanced mathematics; Problem sets; Design thinking

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Preface

In the process of higher mathematics teaching, students should strengthen their understanding of concepts, skillful use of calculating formulas and flexible grasp of problem-solving methods. Homework is inseparable from this important link, homework has a very important role. ^[1] Higher mathematics homework online system is the use of network teaching platform, the traditional mode of classroom teaching, including teaching contents, teaching means and so on carries on the connotation and denotation of development, realize the students answer, error analysis, operation management, homework reviews and answering questions discussed fully computerized and networked, practice shows that it can greatly improve the teaching effect of higher mathematics course.

1. Thoughts on the Question Bank of Advanced Mathematics

In the 1990s, there have been many exercises about higher mathematics in China, which have been used by many colleges and universities for many years. But (1) the lack of a general exercise system facing the network teaching platform; (2) Each question is only a single knowledge point, not a series of knowledge points and test points of the overall embodiment, can not well adapt to the needs of network platform teaching. In the structural design of exercises, college teachers have accumulated some experience, but there is no systematic arrangement; Zhu Fu put forward the basic idea in "On the Development of CAI Correcting Software System for Higher Mathematics operation". There are few research achievements in this field abroad. In short, there is no subdivision of knowledge points, progressive learning of the question bank. ^[2]

2. Thinking about the operation system of Higher Mathematics

Some universities in China, especially radio and television universities, have implemented many network operating systems. The traditional exercise structure is used in the exercise bank, only the corresponding knowledge points and chapters of each exercise, there is no comprehensive decomposition of the corresponding knowledge points subdivision; Not suitable for big data analysis of network platform; Simple statistics, rather than data mining in the context of big data; Maplesoft's products are only general teaching systems, not specialized operating systems, not operating systems for a specific course; There is no corresponding sample bank, no data analysis suitable for Chinese learning situation; Its Web presentation is self-contained and not suitable for the teaching accumulation of front-line teachers.

3. The main value orientation of information system

Problems existing in the current model of students: just to complete the task to do homework, do not think much about the relevant knowledge; Back the topic, back the answer, did not really understand the knowledge; The answer, not to pay attention to knowledge; Plagiarism cannot master knowledge. Exercise redesign structure: exercise decomposition itself is the analysis process of exercise, will play a good role in learning guidance; Re-decompose the existing exercises according to the leading knowledge, current knowledge, problem-solving steps, conclusions, question structure, etc. Each question is a series of small knowledge points

combination; Can guide students to summarize and master knowledge; When a mistake occurs, both the student and the teacher can recognize where the problem is. Operation system: random distribution of homework, tests, so that plagiarism is not easy to achieve, but also make the assessment more scientific; Can let the student, especially the knowledge foundation weak student, more delicate, more systematic master the knowledge.^[3]

4. Design thinking

4.1 The structural design of the problem

Collect, research and design the basic textbook of Advanced Mathematics, the seventh edition of Tongji University, and carry out the following work: Research outline, carry on the knowledge point and the knowledge system comb; Structural design of exercises; The parameter key value of exercises is designed to adapt to the database of network platform; Exercises type structure design, in order to achieve the purpose of randomly set questions.

4.2 Design of operating system

Design a variety of answer templates, design the corresponding Web page. Design the following data analysis: operation results analysis; Similarity analysis; Evaluation and analysis. The system adopts the client service architecture based on Web. The client program is mainly responsible for making requests and displaying results, providing the interface for students to visit the operating system, and sending the results of students' operations back to the server when the homework is completed. Server-side program is the core of the online operating system, all functions of the parsing and database calls are completed by it, the server to the data processing. Perform performance statistics, analysis, feedback, etc.

4.3 Knowledge point combing and outline revision

Knowledge structure, integrity (covering the whole course knowledge), intersections (crossing different knowledge points and chapters), and repetition (quoting and strengthening previous knowledge). For example, according to knowledge points or chapters, can meet the needs of the examination; Weight analysis, the organic combination of the importance of a single question and the rationality of the score, for example, the problem is not necessarily high; Difficulty parameter, on the basis of the weight coefficient of single question, the adjustment of the overall difficulty of the test paper; The design of the process assessment, the arrangement of knowledge structure, including the relationship analysis of the number of exercises of basic questions, each question or each knowledge point to add exercise parameters.

4.3 Problem structure design

Each of the traditional exercises is subdivided into a series of knowledge points and examination points; It includes: preliminary knowledge, understanding of basic concepts, classification of question types, solving or proving ideas and skills, process embodiment, conclusion and so on.

4.5 Operating system design

First of all, the teacher side is responsible for the input management of homework questions, teachers can input, delete, modify various types of homework questions, including fill-in-the-blank questions, multiple choice questions, judgment questions, calculation questions and mathematical model questions. Secondly, according to the teaching needs, the teacher should use the online assignment function, select the corresponding topics of advanced mathematics knowledge points in the question bank, randomly select exercises of different difficulty, as students' homework, submit to the server, students can see the teacher's homework after logging in. In addition, the teacher side also has the function of managing homework. On the one hand, teachers can query students' homework status through various query conditions, such as names not submitted or names submitted, to obtain the names and scores of each score segment, teachers can also add homework to the display area for students to evaluate each other. On the other hand, teachers can realize real-time remote communication through the discussion area, and understand and answer students' puzzles in the process of solving problems.^[4]

5. Conclusion

Under the background of information, the design of exercise structure and operation system of "Advanced Mathematics" will reduce teachers' labor. Can be done to each student separately assign a set of homework, to prevent students copy the phenomenon of homework: by the computer supervision of students to hand in homework, to solve the problem of difficult to receive homework and do not receive homework; Can give students to write down the usual homework points: help students to sum up their experience in solving problems. It is helpful to teach students according to their aptitude, and will have a positive role in promoting teachers' teaching ability.^[5]

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Research on the Current Situation and Improvement Strategies of Classroom Teaching Management in Secondary Vocational Schools

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Abstract: With the continuous acceleration of the upgrading of my country's industrial structure and the continuous adjustment of economic structure, the demand for technical and technical talents in all walks of life is getting higher and higher, and the important position and role of vocational education has been paid attention to. As the core of educating people in secondary vocational colleges, classroom teaching currently has many problems. Through extensive research, this article summarizes and sorts out the outstanding problems in the current secondary vocational classroom teaching management, and analyzes the reasons in depth, and proposes improvement strategies.

Keywords: Secondary vocational classroom; Classroom teaching management; Improvement strategy

1. Reasons for the difficulty of classroom management in secondary vocational schools

1.1 Reasons for students

Affected by various factors, most junior high school graduates choose to study in ordinary high schools, which makes the quality of secondary vocational school students decline, students' enrollment scores are generally low, learning difficulties, and the ability to accept new knowledge are also poor, plus students Affected by inferiority complex, most of them are tired of studying. The teacher talked happily on the podium, and the students were drowsy in the audience. Secondary vocational students are in the transitional period of physical and mental growth. Their independence and self-awareness are gradually increasing, they begin to know how to examine themselves, and use their own thinking and consciousness to perceive the world around them. Secondary vocational students generally think that they can be independent, and are no longer willing to accept and eagerly hope to get rid of the shackles of families, teachers, and schools. In order to express themselves, secondary vocational students often use a critical eye to examine food, hoping that others will treat them as independent individuals. They are worried that the outside world will ignore their independent existence.

1.2 Reasons for teachers

Some secondary vocational teachers have a low sense of responsibility, and they have the mentality of "getting it off" and "being a monk and hitting the clock". They prepare sloppy lessons, teach according to textbooks, and improper teaching methods can not stimulate students' enthusiasm for learning. The more difficult it is to teach classes, this creates a vicious circle in which classroom teaching is difficult to manage. Teachers don't care about violations of discipline in the classroom, resulting in more and more chaotic classroom order. Some secondary vocational teachers have poor professional skills and insufficient professional knowledge, and even some related professional technical knowledge teachers themselves do not explain clearly, improper explanations or teaching mistakes, teachers will not be confident in teaching in front of students, so students are likely Putting learning behind your head violates classroom discipline. The concept of teacher-student relationship of some secondary vocational teachers is incorrect. Some teachers do not understand the psychological characteristics of secondary vocational students. Once students have problems, they do not patiently persuade and guide them, but use a condescending posture to force them to obey their authority or even violate the personality of secondary vocational students. And this approach will inevitably cause the inner revulsion of the secondary vocational students, and even openly contradict the teachers in the classroom.

1.3 School reasons

The curriculum setting of secondary vocational schools is unreasonable, the content of teaching materials is aging and out of touch with the needs of society, it is difficult for teachers to teach, and it is difficult for students to learn. In addition, some schools have poor internship training conditions, insufficient venues and equipment, and insufficient training sessions, which creates a situation in which students are reluctant to learn and do not like to learn. The daily management of most vocational schools often unilaterally requires students to abide by discipline, rather than actively guiding students to learn actively. Students do not want to learn book knowledge, do not have much time for internship, do nothing in class, lack concentration, and the effect of classroom management can be imagined.

2. How to strengthen classroom management in secondary vocational schools

2.1 Formulate reasonable classroom rules

“There is no rule, no square.” Therefore, formulating classroom rules that students can actively follow is the top priority of classroom management. The topic rules should make students clarify the behavior requirements of the classroom, make students understand the standards on which the behavior is based, and standardize classroom behavior. Once the rules are established, teachers must first strictly abide by them, and at the same time supervise whether students strictly abide by them. Teachers must treat students equally, treat them equally, and must do what they say and do what they do, and build their own prestige. Keep in mind that the management is consistent, otherwise the classroom management will get out of control and the teachers and the school will fall into a passive situation.

2.2 Teachers should strive to improve their own teaching ability

Teachers must constantly update their teaching concepts. Through theoretical and practical learning, one's own teaching concepts are in line with the development of the times, and outdated and outdated teaching methods and teaching concepts are avoided to obliterate students' interest in learning. Teachers must carefully prepare every lesson. In the course of preparing lessons, remove those unpractical or outdated knowledge content, and explain the knowledge that secondary vocational students can understand and use in class, so that students can accept it more easily, and the classroom will be easier to manage. Teachers should adopt appropriate teaching methods to activate the classroom atmosphere. In the course of teaching, teachers should reasonably use different teaching methods to allow students to learn with a sense of joy and success, so that students' enthusiasm and interest in learning are stimulated, and students are willing to learn and there is no problem of classroom management. .

2.3 Schools should pay attention to the guidance of students' ideological and moral character

If students establish a good outlook on life, world outlook, and values, and understand the importance of learning, they will naturally study hard, and teacher classroom management will be much easier. This requires the school to conduct ideological and moral guidance to students in daily student management, so that students understand that learning is not useless. How to improve the classroom management ability of secondary vocational schools is a question that every secondary vocational teacher should consider. It is true that the current classroom management of secondary vocational schools has problems of one kind or another, but teachers cannot blindly put all the responsibilities on the students. This will only cause the situation where students are struggling to learn and teachers are struggling to teach, and a good classroom effect is also There is no way to talk about it. The road to building an active and effective healthy classroom may be tortuous, but it is not unachievable. As long as each teacher explores more, practices more diligently, sums up more, learns more in the long-term teaching process, and strives to improve his professional knowledge level. Improve communication skills with students, I believe that the quality of teaching in secondary vocational schools will get better and better, and will cultivate more and more useful talents for the society.

3. Summary

With the increasing demand for technical and technical talents in economic and social development, it is imperative for secondary vocational schools to improve the quality of education and teaching, and optimizing classroom teaching behavior is the cornerstone of improving teaching quality. Classroom management is an eternal topic in secondary vocational education. For students, they should set career goals, clarify their development orientation, reshape their learning confidence, continuously improve their overall quality, and reduce the occurrence of problem behaviors in the classroom; for teachers, they should introduce new educational management ideas and educational management concepts to fully Use information technology resources to build a pleasant classroom environment for students; for families, they should pay attention to home-school co-education, reflect on their own problems, and grow and progress together with children; for society, they should pay attention to school-enterprise cooperation and multi-faceted development. To promote the development of vocational education together.

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The Role of Format Specification in Visual Communication Design

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Abstract: Format specification is one of the most important knowledge in visual communication design, in the field of visual communication design has the widespread application, the specification and design in the design of plate in the daily work of one of the most commonly used design specifications, whether online or offline, throughout the design process, cannot leave the format specification, in this paper, by combining the poster design in the format design, for example, This paper expounds and summarizes the function of layout design specification before, during and after the design of actual combat.

Keywords: Plate standard grid using golden proportion design process

1. Introduction

Format specifications are the standard requirements for the arrangement of graphics and words in the design of the layout. Following the format specifications can better convey the information in the layout, make the layout more reasonable and improve the reading experience of readers.

2. Main content of format specification

2.1 Basic format specifications

- (1)Text alignment; There are three main alignment schemes, namely left alignment, center alignment and right alignment;
- (2)Comparison of words; The first is the modeling contrast, with font contrast, stroke thickness contrast, stroke independent shape or color change, font color, and font texture to produce texture effect; Secondly, the comparison of font size, line spacing and space spacing, and the direction of Angle tilt of copywriting elements on paper; The third is through the projection, improve or reduce the lightness to create a relationship, fuzzy background content, frothed glass transparency and text strokes interspersed occlusion three-dimensional space effect; The fourth is the theme text by adding color blocks, lines, lines, theme text next to add interesting graphic elements;
- (3)Information paragraph group, group is an important part of plate specification, copy the division of the weights of hierarchy can lead readers visual line, separated by the copywriter weight and hierarchy can effectively guide the readers should read what first and then read what, finally read the what information, also can let the reader can easily distinguish whether similar information, Improve the efficiency of information transmission;
- (4)Picture balance; Balance is an important criterion in layout design, mainly including the upper and lower balance, left-right balance and four-side balance, which makes readers feel more comfortable to the layout and brings readers better visual experience.
- (5)Duplication of information; The repeated placement of similar information in the text forms a visual effect. The repeated display can also emphasize the information and enrich the visual content in the picture.

2.2 Application of grid in layout

Grid is like the skeleton in layout design. Only with the support of the skeleton can the layout be stronger, otherwise it will be visually loose. Whether it is the paper layout of posters and books, or the UI interface, if you want to create a good visual experience in the design process, it is necessary to use the grid skeleton reasonably. In addition, the use of grid system should avoid arbitrary placement subjectively, so that the production of each step has a reasonable explanation, improve the design efficiency, and provide support for the establishment of design concept.

- (1)Subfence grid; If a line of text is too long, it may cause visual fatigue, while shorter sentences are easier for readers to read. Columns can reduce the length of each line without missing any content. According to the size and content of the layout, it can be divided into the following columns: first, two and three columns, which are common in small layout, such as book binding, picture album and poster; Followed by more than three columns of columns, the most common is often used in magazines, newspapers and large print typesetting;
- (2)Longitudinal sequence grid; The picture is divided into multiple vertical columns, the number of vertical columns is usually even, all the grid width is the same, the same spacing between each column. Similar points bar network lattice column grid, but there are also differences between the two, can will occupy the most page content area, other area can put auxiliary information, also can be in an area of more than one column grid to merge, and other area can be used separately, so it bar network more flexible in use, the

score is easier to adjust text, graphics and pictures.

(3) Modular grid; Modular grid is on the basis of the longitudinal sequence grid increases the horizontal lines of the grid, a modular grid plate content provide free combination, on posters and a modular grid is often used in book binding design, modular grid is also asked the even in a vertical column, but any number of horizontal lines, in the use of modular grid, each piece area can choose freely.

2.3 The role of the Golden ratio in typography

In layout design, the layout is divided according to the golden ratio, which is also known as the golden ratio, and the ratio value is 1:1.618. Graphics and graphics optimized by the golden ratio will have a more perfect visual experience.

(1) Use the Golden Ratio to set the length and width of the picture. A very simple method of the golden ratio is to set the length and width ratio of the rectangle to 1:1.618 to get a perfectly proportionally painted canvas.

(2) Golden ratio partition layout, in the picture of building with golden ratio aspect, may contain in the picture is divided into the square area of the golden ratio, guide the allocation of each element in the picture, so I can more rational layout, the area according to the golden ratio in the visual will become more serious, In addition, the golden ratio can be continuously used in the layout, so that the elements in the picture are connected in space.

(3) Golden ratio method: In the composition of a picture, the golden ratio can be used to establish a skeleton structure, so that information can be arranged according to the area divided by the structure, and guide the audience to read important information; This division can be set as 1:0.618:1, which divides the layout into three parts horizontally and vertically. First, the width of the left and right sides is 1, and the middle is 0.618. Secondly, the height of the top and bottom two columns is equal, both of which are 1, and the middle is 0.618, so the intersection of the lines can attract readers' attention well.

3. Steps of making layout design

After the format specification is clear, these specifications are integrated into the same design process to establish a complete and effective production step;

(1) The first is to develop the layout, determine the size of the main content of the screen, the main content of the blank outside, respectively occupy how much area;

(2) To develop the grid system, whether to use the column mode, or the golden section of the format, or to develop the module grid;

(3) Classify copywriting levels according to the primary and secondary copywriting, arrange titles, content and auxiliary information, and plan the sequence of entering the audience's attention;

(4) Divide the regional position according to the weight, and arrange the copywriting into the corresponding region according to the primary and secondary relationship;

(5) Adjust the layout copy, here it is necessary to arrange the text and layout creatively, combine the basic design norms, such as alignment, contrast, grouping, etc., and then add design materials to make the picture richer and better convey information;

(6) In the color matching part, color matching is carried out through color specifications, such as purity and shade balance, cold and warm balance, complementary balance multi-color and monochrome balance, black, white and gray and color balance, area balance, etc., to enhance the visual experience of the picture;

(7) Extension of the scheme: Some new schemes are designed by replacing some graphic elements and materials, adjusting layout and screen color matching;

4. Conclusion

Format specification has an important influence in the page layout and design, is also widely used in the field of visual communication design in the design of the knowledge, in print format and interface board type design can effectively improve the reader's visual experience, in the entire design process, through the guidance of the format specification, in addition to can make a design more theoretical basis, but also can improve the design efficiency, This article set format specification to format design before, during and after the three processes, expounds and summary, after completion of the design still has a lot of work to do, to observe what they created works of art, find out more details, constantly optimize, works to enhance the expressive force of will, that is to say art is endless, we need to constantly watch our work, Also want to constantly improve their own cognition, so that we can create the work can also continue to get sublimation.

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Application Research of BIM + VR Technology in Real Green Building Engineering

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Abstract: After the application of BIM+VR technology in green building engineering, the previous single design scheme is broken, so that users can see the results of green building construction in advance. Designers introduce product performance and green design content through technology, so as to satisfy user experience. In the construction of BIM technology +VR technology, construction personnel can also enter the scenario analysis, laying a solid foundation for the smooth progress of the subsequent green construction.

Keywords: BIM + VR technology; Green construction project; Application

Introduction

With the development of science and technology, BIM technology and VR technology have begun in the field of architecture. At present, BIM and VR technology are widely used in various industries and further enhance the intelligence level of construction projects. At the present stage, construction engineering is developing towards green engineering. In the use of BIM+VR technology, it can not only ensure the construction safety of patients, but also rationally carry out engineering planning, avoid the abuse of materials in construction, ensure the rationality of construction engineering, comprehensively improve the quality of construction, and realize the sustainable development of construction engineering. Construction companies should actively use BIM + VR technology, depth development, master the technical point of technology, thus promoting the rapid development of China's construction industry.

1. BIM + VR technology

BIM technology uses digital model to fuse various information and comprehensively process data. In green building engineering, BIM technology can be used rationally to provide help for the design and construction of building projects, so as to ensure the effect of drawing design and effectively improve the quality of construction. Through the research on BIM technology, the building thinking can be changed, the construction process can be improved and optimized, the problems in construction can be grasped in time, and effective countermeasures can be taken. In addition, the rational use of BIM technology can also model the building, so as to test the construction quality and clarify the construction effect of the project. VR technology in architectural engineering is conducive to play the effect of visual media, clear display of engineering project works, help owners master the design scheme, improve the overall level of architectural engineering.

2. Status quo of green building engineering

The concept of green building was put forward in 1960. With the economic development after World War II, various countries around the world paid attention to the problem of building energy consumption and promoted the development of green building. Paola Soleri, an American architect, proposed the concept of "arcology". In 1976, the United Nations convened the National Conference on ecological and human communities, which closely integrated the ecological environment and human habitation. In 1980, with the development of the concept of sustainable development, various countries studied the development path of green building. "BREEAM" of the United Kingdom, "LEED" of the United States and "CASBEE" of Japan have laid a solid foundation for promoting the development of green building. Green buildings originated in China in the 21st century, China has raised the "China Ecological Residential Technical Assessment System" for the construction standards of the world, which is also an early development of China's green construction project. With the success of the Olympics in China, "Green Building Evaluation Standards" and "Green Architectural Evaluation Standard (Second)", which stipulates that the development of China's architectural development is proposed. "Green Building Evaluation Standard" as the guiding document of building construction in China.

3. Application of BIM+VR technology in practical green building engineering

3.1 Application in architectural space planning

Space design planning as a step to determine the construction site of building products, in the design process should be on the floor area and terrain, trend, slope rate and other factors to analyze, determine the shape and direction of building products. During the construction process, it is of great significance for planning of product space for the complex problems of terrain. During the planning

process, through the BIM technology to expand space planning, save a large number of planning times, quickly analyze the basic data of the terrain and slope to the building design management area in the virtual platform, lay a solid base for the later architectural design work. Based on the BIM technology, VR technology is conducive to combining BIM technology with VR devices. After the BIM model and the VR device are combined, the space is presented in a three-dimensional manner. The owner can directly see the overall design effect, including architectural form, ribbon, space division and building distance. It can even analyze the situation of each component to achieve the goal of high-quality space planning. Through the combination of VR technology and BIM technology, it can also improve the advantages of BIM technology and VR technology in the field of architecture.

3.2 Application in architectural design phase

BIM technology makes various professional collaboration, making the content of each professional section jointly, enhance the quality and speed of design work. BIM technology integrates project information through parameter model, achieves sharing and transmission goals in the stage of project planning, operation and maintenance, and enables engineers and technicians to have a comprehensive understanding of building information. After the application of BIM technology and VR technology, engineering and technical personnel have a comprehensive understanding of the building situation, which lays a foundation for the operation of the design team and the collaborative work of various building subjects. From the professional perspective of construction design, BIM technology and VR technology are conducive to solving modeling and management problems. BIM technology is in the drawing design phase, the basic data of each component is established, and the data analysis and summary will receive engineering budget and related economic indicators. VR technology builds a real scene model, and users feel the design scheme personally, so that the effect of the scheme is more specific, intuitive and humanized.

3.3 Application in the construction stage

Among the construction stages, environmental protection materials should be strictly used in the construction stage, and each project is divided into dozens of tools. The construction methods taken in each process are different, resulting in the affected engineering budget. In green construction projects, VR technology and BIM technology should be used to simulate construction, and the simulation construction is to imitate, designers and construction engineers think about the difficulty of construction through VR technology. Feedback for problems, thereby effectively improving construction efficiency and reducing construction costs. In the construction, designers lay materials for energy conservation and environmental protection, and analyze the economic indicators, so that the owners can master the ecology and rationality of the design scheme, and provide help for the construction progress. VR technology is combined with BIM database, and advanced virtual engine is introduced to construct realistic construction scenarios.

4. Outlook of BIM + VR technology in green building

With the development of green building industry in China, BIM+VR technology has become the development trend of The Times. The past design thinking of architects broke, the architect's words improved, architects completed the green engineering design through technical means, and improved the past architectural design concept. In the past green architectural design, users participated in the research phase before design, after the project construction, into the building inside, which seriously deprived the user's speech. BIM + VR technology is conducive to improving user participation, paying attention to user feelings, using users have a sense of gain, making green architectural design to people-oriented. In the future development of green buildings, VR technology and BIM technology will change the performance situation after green building design. The performance will be simulated at the initial stage of design, and the best design scheme will be selected to avoid relying on later technology to achieve the purpose of energy saving and consumption reduction. In the future, all major can participate in project design, and each major should also promptly suggest opinions, seamlessly connect, and give amendment opinion in green construction projects, reduce the change rate of the program. BIM technology and VR technology based on CAD technology development, designers have more time to invest in the design, let green engineering building design and construction to science and technology.

5. Conclusion

Under the background of large-scale promotion of green building engineering, green building design has been criticized in architectural design for optimizing space in the early stage and continuously adding technologies in the later stage. Green buildings should pay attention to the masses. Through technical means to let users feel the green performance of the building, after the early production design, the construction staff analyzes the program, find the problems in the construction, and put forward the problem solution. In green buildings, there should be three spatial planning and design, construction, and use VR + BIM technology to improve construction quality, and ensure that green buildings meet people's needs.

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Design and Implementation of Real Time Data Processing System Based on Spark Streaming

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Abstract: With the rapid development of Internet technology, people have more abundant ways to obtain information through the Internet. More and more information is spread in the network, which will produce a large amount of data. The big data type is more complicated. In order to implement data implementation, the industry is generally combined with different data types and business scenes, special development and design of different processing subsystems. This method has a large research cost and learning cost, and a unified computing system platform is relatively lacking, which further makes developers unable to maintain and expand the system formed by different sets of technology systems. Based on the above situation, this paper designs a universal real-time data analysis and processing system based on Spark Streaming.

Keywords: Spark Streaming; Real-time data processing; The system design

1. Introduction

With the development of great technological progress, the public attaches more importance to the value contained in data. With big data technology, the public can effectively excavate the value of the value, thereby providing corresponding guidance for life, production and learning. Real-time data is generated and updated all the time, but the public's processing of that data is inadequate. Therefore, more and more researchers pay attention to effectively improve the efficiency of data processing by using different technologies from the large amount of data acquired.

2. Significance of Spark Streaming real-time data processing system design and implementation

The value in data is very rich. In order to fully mine the value in data, it is necessary to use effective modern tools to mine it, including real-time analysis and data mining. Because the data on the Internet is more complex and diverse, the general solution in the industry is to combine different data types and business scenarios to develop different processing systems, including Hadoop, Storm and Hive, and then use caching, message queues and other ways to connect different links. Although the above practices are applied to specific practice, there is a relatively large research cost and a learning cost, and there is no unified computing platform. Therefore, it is difficult to maintain and expand the system. However, Spark can effectively solve these problems. With the further development of the times, people also have higher requirements for data processing analysis. The problems of different computing modes and frameworks are more obvious. As an emerging distributed computing framework, Spark can replace Hadoop and MapReduce to some extent.

Compared with Spark, the MapReduce programming mode mainly processes a large amount of data offline and can meet the requirements of some real-time analysis scenarios, but the execution efficiency is low. Spark provides relatively fast memory calculation. For machine learning algorithms, iterative training is generally required. The application of Hadoop MapReduce computing mechanism is mainly to repeatedly store intermediate results on disks. In the next calculation, the data needs to be sent to different sub-nodes, this method is not suitable for machine learning algorithms because it requires long practice. Spark is good at iterative calculation and easy to expand. It can incorporate a variety of classical machine learning algorithms, laying a foundation for data mining in a big data environment. Real-time data stream processing means that the data received by the system needs to be processed in a short time, and the value of the data will decrease as time goes by. Although the Storm distributed flow calculation framework is also based on memory calculation. At the same time, it is also possible to improve data processing capabilities, but the disadvantage is that it can only be applied to a single environment. Spark Streaming solution proposed based on Spark can process data stream in a shorter time interval. It can be said that it is a quasi-real-time system, which can conduct streaming processing for real-time data stream, it has good scalability and has high fault tolerance and throughput.

3. Design of real-time data processing system based on Spark streaming

Data access, transmission, calculation verification and storage are the main processing processes of S real-time data processing system. The first is to collect the data access, the need to transfer the data to the corresponding location, waiting for the data calculation and verification work. Verify the data before it can be stored in the database.

3.1 Access to the data

Data comes from different sources. For real-time data acquisition in the database, you can enable binlog in the database. In order to achieve the data synchronization between the target library and the source library, you can configure the instances' properties profile of deployer in canal, configure hbase-yml and application-yml configuration files in the adapter. The principle of implementation is mainly to carry out master-slave replication between databases. If the obtained data is mainly new data in log files, Flume can be used as a tool for collecting, aggregating and transferring massive logs to detect changes in log files. Flume can obtain the new data if the contents of log files are changed. Sink, Channel and Source are the main components of Flume. Sink is used to fetch data from Channel and store it in the corresponding file system, Kafka or database. Channel is mainly used to cache data provided by Source. Source mainly collects data.

3.2 Data transmission

Data access rates are different from data processing rates, so a buffer needs to be inserted between data processing and data access. The buffer needs to be high performance and can be used in real-time event scenarios, and Kafka meets these requirements. The open source stream processing platform under Apache is Kafka, which can effectively process the action stream data generated in users' daily life. Kafka's main operating mode is cluster mode, which can be used to deal with stress between servers or nodes. So the monitoring log file data obtained by Flume can be sent to Topic and cached in the Kafka buffer, prompting the collected data to be eventually applied.

3.3 Check data calculation

MapReduce is generally used to calculate data. However, MapReduce supports reduce and Map operations. Map and Reduce results are written to disks and HDFS respectively. However, MapReduce takes too much operation time, so it cannot be used in real-time computing scenarios. Spark is mainly used for memory calculation. Multiple calculation has certain advantages, and Spark has many RDD operations. Therefore, S is more suitable for the data calculation verification part.

3.4 Store data

The real-time data import system is mainly after Sflow processing, stores corresponding data in HBASE. HBase provides massive storage, high concurrency, easy expansion, and low cost. At the same time, HBase can also store multiple different versions of data, which has a higher data query response speed. Because it has a relatively special addressing mode, it can access the Timestamp URL obtained by metadata and also cache metadata related information. Therefore, the corresponding fast feature of HBase is shown. Rowkey design is very important in HBase. There are many regions in HBase. Each region has its own stopRowKey and startRowKey. Thus further leading to the dielectric properties of the situation.

4. Implementation of real-time data processing system based on Spark Streaming

The real-time data processing system uses Spark Streaming to invoke data in Kafka and process data in real time. The processed data structure is stored in HBase. Take Flume as an example. As mentioned above, Sink, Channel and Source are the main components of Flume, and the three components need to be configured and connected in series. At the same time, Kafka is set to the type of Flume Sink, and also pay attention to serialization mode settings to be transferred to topic. The data stored in Topic needs to create data collected by consumer consumption. Consumers are primarily based on Spark Streaming, with Spark Streaming to verify the calculation of collected data, it needs to connect Kafka and Spark Streaming. After reading the Topic data, you can verify the calculation. Separate the data string array by means of a space, if the data value in the array or the array length does not match the demand, it is not possible to store the corresponding data. Like: WordCount, after reading the topic data, it needs to store it in an array separated by Spaces, then convert it into a tuple, and finally aggregate the tuple with the same key value to specify the number of occurrences of words. Data after processing, stored in HBase, then create a corresponding table and insert the data that has been calculated into the HBASE table. The first batch of data needs to be processed for the second batch of data. HBase can store data of multiple versions if key data is the same. Therefore, after inserting the database in the same Key data, it is not possible to implement the accumulated implementation. Therefore, it is necessary to delete the same data in the original table, and insert the sum of the new value and the original value. Therefore, you need to get all the RowKey acquisitions in the table. During the data insertion, you need to first detect the same RowKey. If the data does not exist, insert it. If the same data exists, record the original value and delete the data.

5. Conclusion

With the development of big data technology, enterprises attach more importance to the value in real-time data. The real-time data processing system based on Spark Streaming can access, transmit, verify, calculate and store real-time data. Therefore, for the company, in order to fully excavate the hidden value of the data, the corresponding data acquisition, application platform can be established, and the real-time data processing system can be introduced and applied. However, the system also has some deficiencies, which need to be further optimized and perfected.

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Analysis on the Logical Proof And Practical Approaches of Aesthetic Education

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Abstract: The educational function of aesthetic education is a realistic subject to improve the quality-oriented education in a comprehensive way. Theory is the forerunner of action, therefore, it is necessary to enhance the basic theoretical research and give clear answers to some basic theoretical questions in the field of aesthetic education, in order to receive much attention from the whole society. What is the logical starting point of aesthetic education? What are the internal conditions of aesthetic education? How to realize the educational function of aesthetic education in the process of its implementation? These are the fundamental questions to be answered in deepening the research of aesthetic education. Grasping the essential stipulation and logical starting point, clarifying the internal conditions and creating practical conditions can realize an implementation of in-depth aesthetic education, which are conducive to overcoming many difficult problems of aesthetic education.

Keywords: Logical starting point; Internal conditions; Practical approaches

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1. Logical Starting Point of Aesthetic Education

Why does aesthetic education affect people? Aesthetic education, a reflection of human educational achievements, is a kind of historical existence, social existence and cultural existence. Therefore, its logical starting point is not only an ontological problem of aesthetic education, but also a practical problem of realizing its mighty function of education. In order to realize such an educational function, the most key point is to build a lively relationship between students' life growth and their appreciation of aesthetics, that is, the logical starting point of aesthetic education is people's cognition of beauty.

On the one hand, the premise of people's cognition of beauty is to understand what is real beauty. What is beauty? Undoubtedly, it comes from the process of understanding and transformation of the world. Human beings create beauty, which contains not only beautiful things, but also beautiful state. It brought civilization harvests to the development of human society in two aspects. For one aspect, it prettifies the subject of the world, that is, human beings, which means a beautiful state of harmony and unity between human bodies and the whole world. For another, it prettifies and develops the whole external world according to the good will of mankind. On the other hand, we should establish the sense relationship between beauty and human development. The ultimate goal of aesthetic education is not students' possession of knowledge, but the cultivation of all-round developed people. The knowledge of aesthetics is merely teaching materials, while the establishment of the value thinking and sense thinking of people from beauty is an ideal form of resonance between aesthetic education and human, which can not only cultivate and establish a noble and healthy aesthetic standard, but also conducive to the formation of world outlook and outlook on life in a scientific way.

2. The Practical Path of Aesthetic Education

Follow the meaning of cultivating Times by virtue. The education in the new era needs aesthetic education and which can be fulfilled in such an era. Therefore, the focus of the development and improvement of aesthetic education in the new era should follow Xi's speech at the national education conference and the strategic layout of *Modernization of Chinese Education in 2035*, in which the aesthetic education at school can be strengthened and promoted, high-quality people can be educated by aesthetics and culture, and thus the goal of strengthening morality can be achieved.^[1]

In order to realize the purpose of morality establishment and cultivation of people, aesthetic education should do the followings:

First, clarify who is to be trained in aesthetic education. China is a socialist country led by the Communist Party, which determines that the people being trained by our aesthetic education should be socialist successors who support the leadership of the Communist Party of China and determine to struggle for socialism with Chinese characteristics in their whole life. This is the fundamental task of aesthetic education as well as the goal of aesthetic education modernization. Second, clarify how aesthetic education cultivates people.

First, to cultivate patriotism. Then we should strengthen students' ideals and beliefs, enhance their self-confidence in road, theory, institution and culture, and then resolve to shoulder the great ideal of national rejuvenation. What's more, we should cultivate students' struggle spirit, The road of pursuing beauty is full of infinite difficulties, so we should dare to take responsibility. Last but not least, the combination of students' aesthetic and humanistic quality is required. Third, clarify the cultivation system of aesthetic education. That is to say, we should integrate the idea of establishing morality and cultivating people into every link of aesthetic theoretical education and aesthetic practical education, and run through all disciplines and learning stages of higher education. The aesthetic education discipline system, the aesthetic education teaching material system and the aesthetic education work management system should all focus on the goal of establishing morality and cultivating people^[2].

We should inherit the spirit of Chinese aesthetic education. Since the 18th National Congress of the CPC, general secretary Xi Jinping has stressed the importance of spirit as a flag, a pillar and even our homeland. Therefore, we must inherit and carry forward the spirit of Chinese aesthetics under the conditions of new era, so as to show the Chinese aesthetics.

We should promote the development of aesthetic education curriculum. The construction of aesthetic education discipline system should be the key to improve aesthetic education. The narrow sense of curriculum refers to a discipline or a kind of activities, from which a discipline plays a fundamental role in the development of curriculum. However, referring to the authoritative catalogue of undergraduate majors of ordinary colleges and universities (2012), it can be found that aesthetic education has not been included in humanities education, art education or other majors. Obviously, the gradual establishment of aesthetic education discipline should be the breakthrough point for the improvement of school aesthetic education. Firstly, we should establish disciplines of clear subordination, special construction, clear theory and perfect system. Secondly, course teaching materials should run through the whole process of education. In addition, target paradigms should be formulated according to different educational stages. Teaching staff, evaluation mechanism and supervision guarantee should be consistent. It can be said that the establishment of aesthetic education discipline is the practical problem of aesthetic education improvement and even the focus of aesthetic educators.

We should build a general pattern of aesthetic education. In 2015, the State Council issued The Opinions on Comprehensively Strengthening And Improving Aesthetic Education At School, one of which runs through the full text is to build a general pattern of aesthetic education.^[3]

First, we should build a multi department linkage platform at school. The current situation of aesthetic education at most schools relies merely on aesthetic workers to promote the aesthetic education, while a multi department linkage platform can form a joint force and linkage effect among all departments of the school, and increase the effectiveness of aesthetic education. Second, we should give play to the guarantee role of the central department of aesthetic education, policy support and material funding support are needed. Good deployment by all departments can promote the aesthetic education with target and order. Third, social pavilions and activities provide a practical carrier for aesthetic education. Fourth, the exemplary role of the family is important. We should form a combination pattern of family, school and society. In addition, the innovation of the network carrier and the new position of aesthetic education require colleges and universities to make full use of online lessons and the network learning platform to explore a mixed educational model on the one hand. And on the other, we should strengthen the construction of new media system, transform the communication power of new media into the influence of aesthetic education, and enhance the appeal of aesthetic education with the help of campus network, forum, microblog, video platform and so on, so as to penetrate into the lives of the educated.^[4]

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Research on Teaching Strategies of Chinese Discontinuous Text Reading in Junior Middle School

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Abstract: Under the promotion of the new curriculum reform, Chinese teaching in junior middle school has made great progress. As an indispensable part of Chinese teaching in junior middle school, the importance of reading can not be ignored. Discontinuous text reading is a very important quality and skill. It helps students deepen their understanding of the text in the form of pictures and texts, and helps to enhance the effect of students' reading learning. This paper discusses the teaching strategies of Chinese discontinuous text in junior middle school, hoping to have a positive help to the teaching of discontinuous text reading.

Keywords: Teaching Strategies; Discontinuous text reading; Junior middle school

Discontinuous text refers to a file that transmits information in various forms such as tables, graphics or pictures^[1]. Compared with simple text information files, discontinuous text has the advantages of high efficiency, simplicity, practicality and authenticity. Reading discontinuous text can save more time than reading pure text information files, and it is not easy to make people feel tired. The transmission of information is more intuitive. More content can be expressed in a relatively simple form, and a lot of potential information can be excavated. Reading discontinuous text mainly focuses on five aspects, namely "information search and extraction, overall understanding of the text, interpretation of text information, content evaluation and reflection, and mining of potential content"^[2]. Discontinuous text reading is a very important quality and skill, so teacher should carry out targeted training on discontinuous text reading in junior middle school Chinese teaching. This paper puts forward the following three measures to improve the effect of discontinuous text reading teaching.

First, improve the utilization of textbook content and enhance the effect of discontinuous text reading. In junior middle school Chinese teaching, we should carry out targeted training on the reading of discontinuous text. At this stage, in the process of carrying out Chinese Reading Teaching in junior middle school, students mainly take teaching materials as the main learning content. Junior middle school Chinese textbooks contain a lot of discontinuous text reading resources^[3]. Whether it is the cover, catalogue or illustrations in the text content, they all belong to discontinuous text reading resources. Teachers need to make full use of relevant resources in reading class to guide students to learn and acquire more knowledge. At the same time, students are required to imitate the sentences in the textbook, which is very beneficial to enhance students' reading ability of discontinuous text. For example, in the process of explaining the relevant course contents of Kong Yiji, a junior middle school language published by the people's Education Edition, teachers can ask students to carefully read the caption descriptions in the articles, so that they can use their spare time to collect data and information related to Lu Xun, so as to Master Lu Xun's experience, understand his novels and increase students' interest and enthusiasm for discontinuous reading.

Secondly, constantly improve the reading teaching methods to stimulate students' interest in discontinuous text reading^[4]. For junior middle school students, suitable reading learning forms are very important. Teachers should constantly improve reading teaching methods in order to stimulate students' interest in discontinuous text reading. It is very necessary for teachers to improve students' reading enthusiasm by improving the teaching methods of discontinuous text reading and ensuring the quality of reading teaching^[5]. For example, in the process of explaining the contents of the junior middle school Chinese course "motherland, my dear motherland" of the people's Education Edition, the teacher adopted a new reading teaching method and played many songs related to the love of the country for the students, such as "singing the motherland", "my motherland", "dear motherland" and other songs, all with the theme of expressing love for the motherland. By making rational use of these songs, teachers can form discontinuous text reading resources with relevant articles. Therefore, students can enjoy beautiful songs while completing the task of reading and learning, cultivate students' patriotism, improve their sense of honor of the motherland, and make them more interested in reading.

Finally, pay attention to the use of extracurricular reading resources to expand students' extracurricular reading knowledge. When Chinese Reading Teaching in junior middle school is carried out, teachers need to pay attention to the use of relevant extracurricular reading resources, so as to expand students' extracurricular reading knowledge^[6]. After the new curriculum reform, there are many discontinuous text reading contents in textbooks. Therefore, when teachers teach Chinese reading in junior middle school, they need to pay attention to and deeply explore the discontinuous text reading materials, make effective use of them, and actively introduce

more extracurricular teaching resources to ensure the quality of discontinuous text reading teaching. For example, in the process of explaining the relevant course contents of Cao GUI's debate of junior middle school Chinese published by the people's Education Edition, the teacher also asked the students to read carefully the "teacher's example" and "Zou Ji satirizes king Qi and accepts advice". Since the writing objects of the above three texts are emperors, in this process, teachers should guide students to discuss and analyze from different aspects such as the language expression characteristics, theme and feelings of the text content, so as to make students deeply impressed by the reading content. With the help of this reading teaching model, on the one hand, it can realize the effective integration of closely related text resources and enhance students' ability to deal with text information; On the other hand, it expands students' reading knowledge, increases their reading volume, and truly completes the task of Chinese discontinuous reading teaching in junior middle school.

To sum up, with the implementation of the new curriculum standards and the deepening of the new curriculum reform, improving students' discontinuous text ability occupies a more and more important position in the teaching objectives, and is completely different from the traditional text reading teaching methods, but the relationship between discontinuous text and text information is complementary and cannot be separated^[7]. At this stage, Chinese teachers should constantly enhance the actual effect of Chinese discontinuous text reading teaching in junior middle school, so as to promote the sustainable development and progress of Chinese education in junior middle school.

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Research on Equity Incentive in Service Industry Under the Influence of Epidemic

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Abstract: With the continuous improvement of China's market environment and policy environment, more and more companies in China begin to introduce equity incentive system. Because of the global spread of COVID-19, many enterprises are in trouble, especially in the service industry, which is seriously damaged and cash flow is rather tight. Based on the perspective of long-term operation and development of enterprises, it is very important to choose an appropriate equity incentive model.

Keywords: Epidemic; Service industry; Equity incentive

Project: 2021 school level scientific research project of Guangdong University of science and technology, Research on equity incentive of service industry in Dongguan under the influence of epidemic (GKY-2021KYYBW-20).

1. Introduction

1.1 Topic selection background

Since 2020, due to the impact of COVID-19, catering, tourism, training and other service industries are facing cash flow difficulties, business has been seriously damaged and cash income has dropped sharply. At present, COVID-19 is spreading all over the world, and domestic control measures are still strict, many businesses will face a long-term impact. Due to the rigid payment nature of employees' salaries, many enterprises are faced with legal proceedings and are forced to go out of business due to temporarily unable to pay full wages.

1.2 Research significance

More and more enterprises in China have launched stock incentive implementation plans one after another. Because many factors such as corporate governance mechanism and capital market are different from those in developed countries, new problems will inevitably appear in the process of implementing equity incentive, which is difficult to achieve the expected goal. In terms of equity incentive policies, the state has successively improved various laws and regulations and actively provided policy norms and support. Equity incentive is an important part of long-term incentive. From the results of theoretical research and the application of management practice, equity incentive plays an obvious role in improving the working motivation of enterprise managers and improving enterprise performance.

2. Overview of equity incentive

2.1 Definition of equity incentive

Equity incentive is a long-term incentive mechanism implemented by enterprises in order to motivate and retain core talents. By obtaining the form of equity of the company, Enable employees to participate in enterprise decision-making, share profits and take risks as shareholders, so as to try their best to serve the long-term development of the company. At present, equity incentive models mainly include: restricted stock model, stock option model, stock appreciation right model, virtual stock model and performance stock incentive model.

2.2 Role of equity incentive

The role of equity incentive includes the following three points: It is conducive to the optimization of the salary structure of enterprise managers. Short-term incentive and fixed payment of salary will make the enterprise salary Committee unable to play its due role, while long-term incentive can avoid this situation and improve the operating performance of companies; Promote the work enthusiasm of the management and the company's employees, so that the self-interest of the management is closely related to the long-term development of the company. The operator will make every effort to improve the enterprise performance, contribute to the successful implementation of the talent strategy, and establish an efficient and united management team; It is conducive to the stable development of the securities market, maintain the orderly operation of the securities market, shareholders support the long-term development of the enterprise, shareholders and stakeholders can hold enterprise shares for a long time, accelerate the capital circulation and turnover of the enterprise, promote the long-term development and growth of the company, and contribute to the stability and development of the securities market.

3. Equity incentive model in service industry

3.1 Characteristics of service industry

The basic difference between the service industry and other industrial sectors is that the service industry produces service products, which have the characteristics of non storability, non physical nature and the simultaneity of production and consumption. In the actual work of national economic accounting, the service industry is usually regarded as the third industry. There are many modes of equity incentive, the service industry is extremely dependent on cash flow and the corporate governance structure is relatively simple, the virtual equity incentive mode is a better choice. How to establish a win-win mechanism between enterprises and core employees through the design of relevant systems, so that both sides can continue to cooperate for a longer time is the key.

3.2 Advantages of virtual equity incentive

Compared with other incentive modes, virtual equity incentive is more convenient and flexible, the main advantages of virtual equity incentive include:

(1) Under the virtual equity incentive mode, because the virtual equity is granted based on the identity relationship of employees and cannot be transferred and inherited, the company faces less equity disputes. At the same time, for incentive objects, virtual equity incentive usually does not need to pay consideration, so the payment cost is very low;

(2) The equity used for incentive usually comes from the equity held by the founding shareholder, and the rights and obligations are determined by the grantor and the grantee through agreement. There is no need to go through the formalities of spot or forward equity transfer or capital increase. Therefore, the equity source of virtual shares is easier to solve;

(3) Under the virtual equity incentive mode, the founding shareholders only need to transfer a certain proportion of the company's dividend right without actually transferring the company's equity, and their voting right proportion is not affected. Therefore, it can ensure the actual control of the founding shareholders over the company;

(4) The virtual equity incentive model does not involve any change in industrial and commercial registration, so it is more flexible and convenient in the exit mechanism.

Because of these advantages, virtual equity incentive does not need complex system design and a variety of contract terms, so it is more suitable for the service industry with relatively simple corporate governance structure.

3.3 Implementation of virtual equity incentive

Virtual equity incentive refers to a kind of virtual stock granted by the company to the incentive object. The incentive object can enjoy a certain number of dividend rights and gains from stock price appreciation, but it has no ownership and voting rights, can not be transferred and sold, and will automatically become invalid when the employee leaves the enterprise. The service industry is extremely dependent on cash flow and the corporate governance structure is relatively simple. Therefore, virtual equity incentive is a better choice. We can effectively build the implementation scheme of virtual equity incentive mechanism from the aspects of the number of virtual equity incentive shares, the dividend method of virtual equity, the dividend amount of virtual equity, and the change limit of the number of equity holders.

After clarifying the specific virtual equity incentive model, the company should first determine the object of equity incentive and its qualification conditions. The company should first clarify whether the incentive object is for all employees or only core employees. In order to ensure the incentive effect of virtual equity, we suggest that virtual equity incentive is only for core employees. This approach can make all employees of the company clearly realize that only the excellent talents of the company can enjoy the virtual equity, which represents a kind of privilege. Employees of the company must work hard, achieve high performance and strive to become core employees. Secondly, the company should also set certain performance conditions for the realization of virtual equity income. The incentive objects need to invest time and energy to realize the virtual equity income, so as to further improve the incentive effect.

4. Conclusion

Since the development of equity incentive system in China is not mature, there will be some problems in the implementation process. It is necessary to formulate a set of equity incentive scheme suitable for the development of enterprises based on China's special market environment and combined with the specific characteristics of Companies in different industries. Virtual equity is gradually improved on the basis of mature equity incentive, it is a new incentive mode developed on the basis of stock appreciation right. Equity incentive has a significant positive effect on the company's performance and can orderly promote the sustainable development of service industry companies.

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Summary of the Evolution from “Dialectics of Nature” to “Philosophy of Science and Technology”

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Abstract: Dialectics of Nature has always been an important part of Marxist philosophy, which can not only help people find the essence through phenomena but also explore the objective laws of nature, society and thinking. Philosophy of science and technology is the continuation and result of the development of dialectics of nature, which not only combines materialism but also combines natural laws, human knowledge, science and technology, and so on. It can not only help people find the law of natural and social development, but also find the law of scientific and technological development and new trends so as to promote the harmonious development of socialism. Therefore, the philosophy of science and technology is the inevitable trend and result of the development of dialectics of nature, which should be paid attention to.

Keywords: Dialectics of Nature; Philosophy of Science and Technology; Difference; Evolution

Dialectics of Nature belongs to speculative natural philosophy and is a continuation of natural philosophy, which not only reveals the objective laws of nature, but also reveals the objective laws of society and thinking, and is the core content of materialism theory. Materialism is the main content of Marxist philosophy. Therefore, dialectics of nature has become an important part of Marxist philosophy. In dialectics of nature, human society is constantly progressing and developing and it influences and promotes each other with the natural environment. All production activities should be carried out in combination with the objective laws of nature to ensure the harmonious development of human society and the natural environment. Philosophy of science and technology is a new philosophy formed by dialectics of nature with the development of modern science and technology, and it is also a continuation of dialectics of nature, which can reflect the objective laws of natural science and technology. Therefore, this paper summarizes the evolution from “Dialectics of Nature” to “Philosophy of Science and Technology” according to relevant literature.

1 Difference

Philosophy of science and technology is based on the development of dialectics of nature, with a close relationship between them, that is, philosophy of science and technology has continued the tradition of dialectics of nature, and it is a new philosophy formed by constantly incorporating new scientific and technological elements under the promotion of social development, which leads to certain contradictions between philosophy of science and technology and traditional dialectics of nature. Dialectics of Nature is an integral part of the Marxist philosophy system, the essence of which is to study natural science. It originated from German classical philosophy and is an orthodox philosophical ideology in China. The whole dialectics of nature pays more attention to the study of social reality development and natural laws. Although “philosophy of science and technology” evolved based on dialectics of nature, it pays more attention to the development of science and technology, which is quite different from traditional German classical philosophy in terms of ideological tendency and thinking level. Some speculative natural philosophy also rejects ideology and emphasizes that science and technology become the independent development direction. Compared with dialectics of nature, it has a more convergent research scope and more specific research content ^[1].

The relationship between the dialectics of nature and the philosophy of science and technology is complicated, but it is undeniable that dialectics of nature cannot be replaced by other philosophical systems. The same to Philosophy of science and technology that it can't replace the dialectics of nature. Literature shows that “philosophy of science and technology” is understood as a new paradigm of dialectics of nature, which is a new natural philosophy theory based on Engels' philosophy theory and scientific and technological elements ^[2]. But in fact, there are many differences between the philosophy of science and technology and dialectics of nature, which are mainly reflected in the following two points: First, the basic connotations are different. Dialectics of nature belongs to the category of “dialectics”, which is a special philosophical system and mainly studies objective laws. Philosophy of science and technology is a component of a philosophical system and a comprehensive embodiment of world outlook and methodology; Second, the research objects are different. Dialectics of Nature focuses on the objective laws of nature, society, and thinking itself. Philosophy of science and technology is to expand natural philosophy and deeply study natural science and technology, the relationship between man and nature, etc.

2. Evolution (History)

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“Dialectics of Nature” is a systematic theory and belongs to the theoretical system category of Marxist philosophy, which not only reflects the Marxist view of nature but also the Marxist view of natural science so it can unify Marxist philosophical world outlook, epistemology, and methodology. Dialectics of nature will gradually reveal the dialectical relationship, the objective law of nature and the objective law of harmonious coexistence between man and nature driven by the development of nature and science and technology. With the gradual enrichment of human activities, the gradual acceleration of social development and the improvement of natural transformation, the research direction of dialectics of nature has gradually expanded from natural laws and social laws to the relationship between man and nature, science and technology, and other fields, making the research field of dialectics of nature more and more extensive, and the research content is more and more abundant. Then it develops into a more comprehensive theoretical system of the philosophy of science and technology [3].

“Dialectics of Nature” originated in Germany and was put forward by Friedrich Engels (German philosopher), who successfully expressed the theory of dialectics of nature. After his death, Marxist philosophy and Engels’ thought were deeply studied. With the development of science and technology, the limitation of studying only natural laws, social laws and thinking laws has been broken that the integration of social development, natural science and science and technology has been realized [4]. The evolution from “dialectics of nature” to “philosophy of science and technology” not only reflects the present social development but also reflects the law of human development and natural change. It is concluded that “natural law” is the main influencing factor of the development of human society, that is, only by finding the objective law of nature and the objective law of society can we find a road suitable for the harmonious development of human society and natural environment.

Dialectics of Nature was introduced into China as early as the last century. However, the academic environment was poor with few related scholars at that time, which led to the lack of remarkable academic achievements in the study of dialectics of nature. However, since the reform and development, China’s science and technology, political culture, and social economy have entered rapid development, which has created a suitable cultural, technical and economic environment for the academic research of dialectics of nature, and promoted the rapid evolution of dialectics of nature to the philosophy of science and technology.

After China moves towards international development, the research on dialectics of nature is becoming more and more mature, which has passed the dark ahead of the prosperity of economic development and ushered in the dawn. As a result, the research on dialectics of nature in China has gradually improved the corresponding philosophical theoretical system after absorbing a large number of excellent foreign construction experiences. Based on the country’s situation, the philosophy system of science and technology, which conforms to the law of social development and the demand for scientific and technological development, has formed and played a positive role in promoting the harmonious development of socialism in our country [5]. Philosophy of science and technology spans natural science and social science, including natural philosophy, philosophy of technology, philosophy of science, and other scientific projects. Its research scope will continue to expand with the development of society.

3. Conclusion

Philosophy of science and technology is closely related to dialectics of nature, that is, dialectics of nature is the foundation of the philosophy of science and technology, while the philosophy of science and technology is the result of the development of dialectics of nature and the key to the harmonious development of nature and society. Therefore, they not only attract the attention of philosophers and thinkers but also lead the attention of people from all walks of life. Although the philosophy of science and technology evolved from dialectics of nature, there are still many differences between them, that is, philosophy of science and technology is integrated with modern science and technology, while dialectics of nature is natural philosophy, and the combination of German classical philosophy and Marx’s materialism lacks a philosophical theory of science and technology. Comparatively, “Philosophy of Science and Technology” is more in line with the requirements of the development of modern science and technology society, but it cannot be separated from the support of dialectics of nature. Both are very important to the harmonious and healthy development of society. Therefore, the above briefly analyzes the difference between dialectics of nature and philosophy of science and technology and based on which how dialectics of nature evolved into “philosophy of science and technology” is analyzed.

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Research on the Positive Development Model of College Students' Mental Health Education Based on the Perspective of Life Education

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Abstract: In the process of mental health education in colleges and universities, taking life education as a perspective is a new idea, which is conducive to promoting the physical and mental development of college students, can expand the life width of college students, create a living environment for college students, and improve the quality of life of college students. At present, many college students have different levels of mental health problems, which reveals that colleges and universities still have problems in mental health education. Based on this, this article uses literature analysis and induction methods to explore the construction of a positive development model for college students' mental health education from the perspective of life education, hoping to provide reference and reference for educators.

Keywords: Life education perspective; College students; Mental health education; Positive development model

Introduction

College students are in a critical period of transition from adolescents to adults, and they are also in a critical period of psychological and physical development. College students may have a crisis of self-identity. Affected by many factors such as social environment and family environment, many college students are psychologically immature, their psychological age lags far behind their physical age, and the problem of poor self-care ability appears in the process of living alone without their parents. In the process of participating in social practice and moving from campus to society, it is also prone to problems of unclear self-understanding and incorrect self-evaluation. In this context, it is very necessary for colleges and universities to carry out mental health education, which can provide correct guidance for confused college students. The life education perspective can expand and innovate the mental health education model.

1. Determine the goal of mental health education based on the development of a scientific outlook on life

Life education can help college students form and maintain a positive mental state in their life and study, arouse their positive psychology, and promote the cultivation of core literacy. In recent years, all countries in the world have attached great importance to the cultivation of core literacy. The Ministry of Education of our country has also clearly stated that it is necessary to "organize and study the core literacy system for the development of students at all levels". To develop core literacy, we must first enable college students to establish a scientific outlook on life, so that they can maintain a love of life on the basis of a correct understanding of life, take the initiative to participate in various social practice activities, and form a scientific spirit while possessing a certain cultural knowledge. Realize independent development on the basis of a healthy life, and eventually become a "all-round development person" with a responsible spirit. In the process of developing mental health education, the core literacy should be the goal, and the mental health education system should be formed based on the "three literacy" of cultural foundation, independent development and social participation.

2. Focusing on stimulating vitality and selecting mental health education content

In the process of constructing a positive development model, colleges and universities should take life education as a perspective, activate students' vitality as a clue, core literacy as a framework, and select the content of mental health education in accordance with the needs of college students in the new era. On the basis of conventional teaching, positive psychology courses and life education courses can be offered. At the same time, traditional cultural education can be integrated into them, and college students can be educated in the form of public elective courses. Specifically, in the positive psychology course, teachers can analyze the uncomfortable psychology of students after entering university life, and provide them with positive guidance, help them answer questions, and keep them in a positive psychological state. Realize the change of identity as soon as possible. Through this form, college students can achieve independent development on the basis of self-searching and self-planning, and establish the confidence to live earnestly and study hard. In the life education curriculum, teachers can interpret life education knowledge for students, and take sex education and death education as topics, so that students can realize self-acceptance on the basis of self-respect, and in the process of integrating into the collective and social participation Realize self-worth. Finally, in traditional cultural education, teachers can show the profoundness

of our traditional culture to college students, make them feel national pride, guide them to think more deeply about culture and life, and then realize self-improvement and self-development.

3. Reform the form of mental health education by means of interactive experience

There are no fixed models and methods for the establishment of mental health education courses. Colleges and universities can revolve around the growth and development of students, reform the educational form based on the perspective of life education, and attract college students by adding elements of interactive experience. First, teachers can interact with college students in the form of lectures on topics. In this process, on the basis of interpreting relevant concepts and summarizing important laws, teachers leave the remaining time to students and encourage them to learn mental health knowledge through display, sharing, experience and expression, and to understand related concepts. The content forms a deeper understanding, and a rich emotional experience is obtained in the process. Second, teachers can organize students to carry out visit and experience activities after class to achieve interactive experience in practice. On this basis, students can also be encouraged to carry out research and research and record their experiences. For example, visiting teahouses, investigating the mental health of specific social groups, and publicizing mental health knowledge, etc., will have an impact on the values of students. Third, the goal of situational education can be achieved through school clubs and off-campus practice. For example, in the club of the "Mind Association", students can share their life and love, the difficulties they face in career planning, and solve problems on the basis of communication and cooperation. In the "volunteer service" club, students can participate in activities such as psychology conferences, assistance for left-behind children, and mental health education for special children, in order to enhance their sense of value and responsibility in the process.

4. Constructing a three-dimensional development model based on integration

Mental health education is of great significance to the cultivation of core literacy, and it is a kind of holistic education. In the process of carrying out educational activities, it is necessary to integrate as the commander, provide college students with full-program and multi-style education based on different perspectives, realize the collection of school resources and the integration of different positions, and use life education as a perspective to build a three-dimensional The development model of mental health education. First of all, we must strengthen management and improve the system. In this process, colleges and universities should build a complete organizational structure, decompose the goals of mental health education, and achieve responsibility to people, and strengthen supervision and inspection during the implementation process to achieve the standardized and institutionalized development of mental health education. . The mentor responsibility system can be implemented to formulate mental health education plans for college students with different personalities, and help them rationally use various resources to realize the value of life. Second, we must give full play to the advantages of teachers and carry out mental health education while imparting knowledge. For class teachers, it is necessary to take the initiative to infiltrate and integrate the content of mental health education into subject teaching. At the same time, the school should also take advantage of the professional advantages of psychology teachers to enable them to provide targeted assistance to students in areas such as entrance education, postgraduate entrance examinations and employment, as well as innovation and entrepreneurship. Finally, we must highlight the functions of counselors to achieve the effect of serving and educating people. As a life mentor, counselors will have an important impact on the thinking and character of college students, and they also have obvious advantages in mental health education. In the early stage of enrollment, the counselor should help college students get familiar with the new environment as soon as possible, and organize various activities to alleviate the loneliness of students. In daily life, counselors should pay attention to special groups and at the same time form a warm and harmonious atmosphere in the college. Counselors should also provide students with personalized guidance to help them form a career plan, stimulate their positive emotions, and enable them to form a good character.

5. Concluding remarks

In general, there is a close relationship between life education and mental health education, and both are important forms of education that cultivate the core literacy of college students and promote the overall development of college students. At present, many college students have unclear understanding of the value of life and lack of life orientation. In order to solve this problem, colleges and universities should take the scientific outlook on life as the guidance, the activation of life vitality as the main line, the activity experience as the method, and the integration as the command, so as to construct an active development model of mental health education based on a three-dimensional, multi-level approach. Create a good educational environment and strengthen the life beliefs and meaning of life of college students.

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Discussion on the Path of Legal “Common Wealth” in New Times

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Abstract: The whole society enters the common prosperity phase, eliminating the problem of polarization, which is an important feature of common prosperity. After 100 years of self-built the party, the Communist Party of China is committed to the common prosperity and the common prosperity path is more broad. In this regard, this paper analyzes the value pursuit of public prosperity, explains the current situation of income distribution, and puts forward the path to achieve legal “common prosperity” under the background of new era.

Keywords: Common prosperity; The path; New Times

Introduction:

Chairman of china proposed to solve the common prosperity in the tenth meeting of the Central Finance and Economic Committee. Explore the prevention of major risks and do finance stable work. Chairman of china pointed out in the meeting that common prosperity is the basic requirements of China’s socialist development, and it is also the characteristics of the nature of Chinese style. In high quality development, the principles of marketization should be followed, pay attention to the quality of the living, and coordinate the development of financial risk prevention. Through the history of China’s development, we realize that poverty is not socialism, break the shackles of the past, lead the rich first and then achieve the goal of common prosperity. After the 18th National Congress, the Party Central Committee will work together in an important position. Various measures should be taken to ensure people’s wellbeing so that they can achieve common prosperity legally. This paper is based on the path deployment of legal common prosperity.

1. Common wealth of value pursuit

In the process of development, China will realize the common prosperity of the masses as a beautiful vision. The premise of common prosperity is the growth of material wealth, the improvement of productivity and social and economic progress. If economic development and material can not meet people’s needs, it will only lead to more poverty in the country. Common wealth is to let some people get rid of, it is not a wealth to stay in individual people. The common prosperity requires that there is a difference in property in the universal affluence, but the difference cannot be too large. With the continuous improvement of social productivity, the goals of common prosperity are also close, which is also the difference in capitalism and socialism. In this regard, promoting economic development and promoting social progress can achieve common prosperity. The masses requested the masses through honest labor, legal operations, and then drive the people in the backward area. As a leader, the masses should play a demonstration role in the backward area. This model of the rich belt from richness is beneficial to mobilize the enthusiasm and initiative of the masses from the perspective of China. Some people misunderstand common prosperity as synchronous prosperity, but there are differences in the working and living environments of the masses, and their contributions to the society are different, so egalitarianism cannot promote social progress. People only have honest labor, legal operation to meet the requirements of common prosperity in the new era.

2. Income distribution status

In the course of development, China has managed to meet the food and clothing needs of its 1.4 billion people through its own efforts, and ranks first in the world in the export of agricultural and industrial products. In the case where the income distribution difference is obvious and the income distribution structure has different problems, and the living conditions of the masses are more difficult. In the reform and opening up, the income distribution presents averageism, but this income has a large drawback, which cannot stimulate the enthusiasm, creativity, and impact of social productivity. After the reform and opening up, China’s social and economic system reform, from the planned economy in the past to the market economy, the income level of residents increased accordingly. However, with the increase in the income level of residents, the difference in income distribution is expanded. At present, China’s Gini coefficient exceeds the international warning line, some monopolized industries, enterprise executives have high salary, good welfare, and the masses in poor areas maintain low-income levels, poor people, peasant workers and laid-off employee have low income, no benefits and social guarantees, leading to China’s polarization problems more serious. The Party organization with Comrade as the center pays attention to the rationality of income and pursues the development goal of common prosperity so as to solve social contradictions.

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3. The path to the legal “common wealth” in the new era

3.1 Achieve common prosperity through innovation and entrepreneurship

Comrade stressed that common prosperity means the prosperity of all the people, the prosperity of both material and spiritual life of the people, rather than the prosperity of a few people, rather than equalitarianism. We should promote common prosperity in stages. The state has given strong support to innovation and entrepreneurship, ensuring people's wellbeing in the course of development, enhancing people's creativity in development, opening up channels of flow, and providing more people with opportunities to get rich. We will foster a development environment in which everyone participates, adhere to the basic social economic system, and uphold legitimate business operations by the people in the primary stage of socialism, with public ownership as the mainstay and multiple economic systems developing side by side.

3.2 Control over medical, real estate and other industries

In the new stage, China presents the situation of difficult and expensive medical treatment and high housing price. In order to achieve common prosperity and eliminate social contradictions, the team led by Comrade has provided the people with a place to rest in their old age. Actively improve the medical industry, achieve medical equality, so that medical expenses continue to decrease, thereby ensuring that the masses can see the disease and eat. The property industry is the people's livelihood industry. In recent years, it has developed rapidly and promoted China's economic development. But in the development process, the property forms an economic foam, once the foam is broken, it will have a serious blow to a part of the lives of the masses. In order to solve social contradictions and promote common prosperity, China has implemented measures such as restricting house purchases, providing affordable housing, and prohibiting the purchase and sale of houses at will, so as to keep house prices stable or reduce them appropriately. By management of real estate and medical industries through diverse measures, providing basic guarantees for people's lives. China pointed out in the 14th Five-Year Plan, and people's lives are more beautiful in 2035, and all people have achieved substantial progress. In recent years, Chairman of China has stressed common prosperity on several occasions to promote common prosperity with more effective measures.

3.3 Solve historical problems and promote urban and rural development

Common prosperity is the essential requirement of socialist development and the aspiration of the people. Common prosperity is a gradual process. Since the reform and opening up policy, the people have allowed some people to get rich first. The people's living standards have been constantly improved through the liberation of productive forces by bringing wealth first and then rich. Building a moderately prosperous society in an all-round way is an achievement of China's historical development and a huge victory has been scored in poverty alleviation. However, people should be aware that the problem of unbalanced development in China is still quite serious, the income distribution gap between urban and rural areas is too large, and the conditions for common prosperity in various regions are different. Promoting common prosperity is still a long-term task. Common wealth is the essential requirements of socialism, and the results are also to promote socialist development. The Fifth Plenary Session of the 19th Centariance of the Communist Party of China pointed out that the common prosperity is further developed in 2035. The 14th Five-Year Plan will propose a common prosperity and goal of the whole people during the planning process. In fact, it is a comprehensive plan for common prosperity.

3.4 Focus on top-level design and demonstration construction

During the 14th Five-Year Plan period, we formulated an action plan for common prosperity, and defined the direction, key tasks, policies and measures for common prosperity. The government should propose policies to improve the income of mass, enabling government and enterprise distribution patterns. The people will generate income in legitimate ways, encourage enterprises to raise the income of employees, and reasonably increase the proportion of labor remuneration in the primary distribution. Construction of wage rationalization mechanisms, reasonable adjustment of minimum wage standards, and implement paid leave. We should actively innovate the distribution mechanism, speed up knowledge exploration and technical services, expand the income and consumption channels of residents, enrich the financial products that people can invest in, and improve the enterprise dividend system. The process of rural collective property rights reforms accelerates and enhance the overall economic benefits of rural people.

4. Conclusion

Implement common prosperity as an economic problem, it is related to party and government issues, and encourages overall planning. We will make gradual planning in accordance with economic development, handle regional and income differences independently, and improve people's sense of gain and happiness. Common prosperity is an inevitable requirement of historical development. Our country is constantly exploring and striving for a better life for the masses.

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The Application of the Expression form of Contemporary Art in the Creative Advertisement of Dongguan Time-honored Brand

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Abstract: Excellent advertising creativity can enhance the value of a brand, and also represent a brand image. There are various forms of expression of contemporary art, and just because of this, the perfect collision between the charm of contemporary art and advertising creativity can burst out gorgeous sparks. Dongguan is the most representative city of Lingnan culture, which is rich in long history, culture and rich folk characteristics. The time-honored brands of Dongguan contain the warmth and memories of the city. The brand image with regional characteristics is deeply rooted in the hearts of people and it has become an immortal memory in the hearts of a generation. Dongguan's old-fashioned brand creative advertisement conveys a new idea through the expression of contemporary art, it is necessary to start research from the origin of the brand. And according to the unique temperament of the time-honored brand, reasonable addition of innovative advertising ideas. Under the influence of the expression form of contemporary art, the creative advertising of time-honored brands must be changed to improve the innovation ability, so as to effectively comply with the trend of social development, achieve development goals, enhance the publicity of dongguan time-honored brands, and establish a positive corporate image. Make the advertising design of the Dongguan old brand brand in the market. In this paper, through the study of the expression of contemporary art in dongguan time-honored brand advertising creative application of the following research.

Keywords: Contemporary art; Pattern of manifestation; Dongguan; Time-honored brand; Brand creativity; Advertising creative

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1. The expression form of contemporary art and the application of advertising creativity

The expression of contemporary art can be abstract or concrete, planar or three-dimensional. With the prevalence of the new media era, many brand creative advertising through TV media and self-media, showing a novel publicity concept to the masses, and constantly refreshing our awareness.

1.1 Advertising creative form of movie art short film

There are many ways to express the language of contemporary art, among which the spiritual connotation conveyed by a three-dimensional artistic image can establish the corporate image. According to the old brand impression and can better convey a retro feelings, and according to this unique advantage of the previous image to do further upgrade. Through the expressive forms of rich contemporary art language, the internal and external images are shaped as a whole, organically combining tradition and modernity. The regular output of information for the masses in the form of TV advertising media is an important channel to improve the impression of enterprises and economic benefits. The creative combination of TV advertising in the form of film art short film works, according to the unique personality of Dongguan time-honored brands to upgrade the overall impression of the enterprise, enhance the traditional cultural positioning of time-honored brands, and broaden the positioning of consumers. The brand stories of dongguan time-honored brands can be connected in a way of storytelling, and the story with a historical background can be integrated into the advertising creativity of time-honored brands, and the brand story can be told with rich traditional cultural background. Then the story is divided into series, and the cultural connotation of the time-honored brand is displayed in the form of narrative film. The emotion of the characters is used as a foil, and the technological means of contemporary film technology is used to give full play to the creative advertising.

1.2 The art show in ink text increases brand cultural atmosphere

The creative design of brand visual image is not only the design and decoration of old brand stores, but also the design of trademark packaging, advertising posters, brand signs and exclusive stores. Dongguan's time-honored brands often use calligraphic fonts and traditional auspicious patterns in their design forms. During the evolution of Chinese characters, traditional culture has been inherited. The Chinese characters themselves have a vicissitudes and cultural thickness of the times. At the same time, the Chinese character itself is a character image with a symbolic graphic, a combination of a form. By borrowing calligraphy fonts and ink rendering as corporate brand logo, it can bring more cultural atmospheres for visual images. According to the original meaning of

Chinese characters, the font design combines “traditional font” with “modern graphics” to make the logo full of personality, simple and fashionable. The novel design style must meet the corporate culture of Dongguan’s old brand brand, but also meet the aesthetic needs of modern people.

2. Old brand image as the creative elements of advertising

With the rapid development of economy and the homogenization of products, people tend to blindly follow the pursuit of new things, but the traditional time-honored brands are the essence left by historical screening.

2.1 Architectural image is inspired by creative advertising

How old brands can stand out from many brands, how to break through the numerous novel product brands show their horns, relying on contemporary artistic expression forms for dongguan old brands to put on a gorgeous coat. Personalized emotional experience is more and more respected by the public. The traditional style of dongguan time-honored buildings are still preserved in the streets and lanes of Dongguan, which brings people’s thoughts back to their childhood. Dongguan’s time-honored brand is also the childhood memory of a generation, so that people can experience a kind of cordial and nostalgic feelings. Based on this sense of nostalgia, the old and simple store image of Dongguan old brand is more likely to arouse people’s nostalgia and memory of the time they have been to, so as to trigger consumers’ sense of belonging, stimulate people’s desire to buy Dongguan old brand, and promote the inheritance of Dongguan old brand from generation to generation. Therefore, in the design of old brand creative advertising, we should retain the connotation of traditional culture and optimize the design style of brand creative advertising through the expression of contemporary art. Using the existing building foundation as an advertising creative design, the old traditional architecture creates an old building. Based on this, the exaggeration method of contemporary art expressions is counted, and a traditional cultural character of Dongguan can be inherited. Create a good condition for the continued healthy development of the old character enterprises in Dongguan.

2.2 Relying on geographical characteristics and folk features for packaging advertising creative inspiration

Dongguan old brand packaging advertising creative design to follow the local folk custom and distinctive regional characteristics. Packaging should be based on the functional characteristics of the product, the use of materials with local characteristics, to create a unique creative modeling, skillfully show the regional cultural characteristics of dongguan time-honored brand products. When designing product packaging, designers should understand the characteristics of the product and the local folk customs and regional characteristics, and summarize the unique cultural characteristics of the local region. On the basis of this, creativity and conception are carried out in the form of expression of contemporary art, and vivid packaging forms are designed, and decoration design is carried out on the packaging. Through the unique packaging image of products, fully reflect the regional characteristics and humanistic feelings of Dongguan time-honored brands.

3. Conclusion

With the continuous development, the local time-honored brand image in Dongguan has been replaced by the new brand with each passing day, which has a great impact on the time-honored brand. How can consumers not forget laozi hao in the numerous choices. First of all, designers should find a breakthrough point from the perspective of consumers. Young people have different ideas about time-honored brands from the elderly. If not in a new form to change the image of laozi hao in young minds. The traditional time-honored brands should break the traditional age gap and introduce the aesthetic and uncertain promotion methods suitable for young people. In order to suit contemporary young people taste artistic expression technique, highlight a young and energetic state, the overall style is designed into a light and bright design style, on the basis of maintaining the original cultural background, add a young state of health concept. For the old brand brand advertising creative design concept to increase the traditional definition of effect and traditional style design intersection, highlight the design style in the plane design, highlight the product characteristics in the three-dimensional design, to combine the traditional culture and modern culture with innovative design methods. In today’s modern culture, located in different corners of Dongguan streets, the visual image of Dongguan time-honored brands has not changed. The brand visual image of the old name should add some art forms with modern culture on the basis of retaining the original historical culture. In the era of modern multi-culture, the update and promotion of local time-honored brands in Dongguan play an important role in the development of the time-honored brands in Dongguan.

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On the Features of Contemporary Youth's Values on Life and Educational Countermeasures

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Abstract: With an increasing development and boom of China's socialist market economy, people's living standards have been greatly improved and promoted. While conducting economic activities and trading with other countries, we are also actively carrying out cultural exchanges. As a result, people's traditional ideologies have been impacted to various degrees, and their values have also been changed greatly. This change has a positive and negative impact on the formation of the values of life of young people who are actively thinking and not deeply involved in the world. The life values of contemporary adolescents are becoming more diversified, and there has been a deteriorating trend, especially when it comes to dealing with the issue of "the relationship between dedication and demand". This paper mainly expounds the characteristics of teenagers' life values, and puts forward relevant scientific and reasonable educational countermeasures: in view of the current situation of teenagers' life values, we should carry out value education for contemporary teenagers, strive to establish a correct orientation of public opinion, and hope to have a certain reference and reference for the formation of teenagers' life values in our country.

Keywords: Teenagers; Life values; Characteristic; Educational Countermeasures

1. Characteristics of teenagers' life values

1.1 Life values are becoming more and more diversified, but the mainstream is not bad

It is worth noting that in the past ten years or so, the diversified characteristics of adolescents' life values have been deteriorating. The outstanding performance is that the proportion of students who hold three types of values of right, wrong and compromise is increasing day by day, and the rapid increase of eclecticists is especially obvious. The author designed a survey and asked 100 teenagers five questions: (1) the value of life lies in dedication, (2) contribution should be greater than demand, (3) both demand and contribution should be equal, (4) contribution should be less than demand, (5) the value of life lies in demand. Use these five questions to test contemporary teenagers' views on "the relationship between dedication and complaint".

1.2 The life behavior choices of middle school students are lower than the level of rational knowledge, and there is a serious disconnect between words and actions

As mentioned in the previous article, although the level of life values of contemporary young people has declined to a certain extent compared with previous years, on the whole, the mainstream is not bad. This is mainly in terms of its level of understanding. What is their level of actual behavioral choice? According to a survey of nearly 1,400 high school students, all students believe that they need to love their motherland, but only 48% of students believe that "the rise and fall of the country is the responsibility of everyone" and "worries and worries before the world, and joy in the world afterwards." It is a fine tradition of the Chinese nation that should be promoted and clearly stated that they should practice it in real life in the future; 43% of students think this motto is good, but in reality there are too few such people, and they also think it is difficult to do so. 90.4% of students admire Lei Feng's deeds, but only 71% of students say they want to learn from Lei Feng's spirit, and 51.4% of students think they can't do it.

2. Educational Countermeasures of teenagers' life values

2.1 Strengthen the moral construction of the whole people and improve the external social environment of school moral education

The social environment that has a negative impact on school moral education mainly includes the following aspects: (1) generally low social moral standards. After the impact of reform, great changes have taken place in the value system of China's whole society compared with the 1950s, and people's moral standard has decreased significantly. "The world is deteriorating" is people's common feeling. The current market economy's heavy profit and competitiveness have further impacted collectivism, cooperation and mutual assistance, social responsibility and ideal. This situation also naturally affects teenagers. (2) The wrong direction of public opinion. Since the early 1980s, a large number of low-level and vulgar cultural consciousness and wrong social thoughts have sprung up in western society. (3) Exaggeration of the dark side of society. Many teachers report that there are many newspapers and magazines that currently promote heroes, advanced deeds, good people and good deeds, which are pale and empty, and it is difficult to achieve their due educational significance. However, for illegal and criminal activities, behaviors that undermine Party discipline and style of Party

work brings negative education to young people with strong plasticity.(4) Parents have low requirements for their children's moral and spiritual outlook. Most of them have extremely high expectations for their children's academic work, but they don't pay much attention to the children's moral character requirements, and from time to time they instill some wrong ideas that are incompatible with school moral education. School moral education workers always look forward to a good social environment, increase the intensity of spiritual civilization construction, and create an environment that maintains the effect of school moral education.

2.2 Establish a new standard of life value under the new situation as soon as possible, and provide practical work goals for school moral education.

“Why do people live?” “How can life be more meaningful?” “How to deal with the relationship between individuals and others?” Issues such as the value of life are often considered and discussed by young people. According to the survey, among the 21 kinds of needs listed, knowing the meaning and value of life is the sixth need of today's middle school students after cultivating the ability to master knowledge, gain respect, classmate friendship, and enter university. It can be seen that students have strong wishes and requirements for receiving outlook on life education, and basically welcome outlook on life education. Therefore, it is more urgent to establish the standard of scientific life values in line with the characteristics of the new era.

2.3 The education of life values should start from childhood and form a scientific sequence

We often say that middle school students are the mature period of outlook on life and world outlook, and the key period of scientific outlook on life education. But this does not mean that it is insignificant in primary school. Psychological research shows that children before the age of 12 basically can not understand the exact meaning of the concepts of “life” and “value”, and only understand the superficial meaning of the ethical concepts of “happiness”, “obligation”, “honor” and “conscience”. However, it can not be considered that the implementation of outlook on life education in primary school is premature and contrary to children's age characteristics. Because the scientific outlook on life is gradually formed under the continuous influence of the acquired environment dominated by school education. It is indeed inappropriate to teach the course “scientific outlook on life” directly in primary school, but primary school students have a preliminary design for the future and ideal, and also have their own views on life goals, life values, money, happiness, responsibility, etc. These are precisely the basis for forming their own unique outlook on life in the future. If there are unhealthy factors in the above aspects at this stage, it is obviously difficult to form a scientific outlook on life in the middle school age. Therefore, the education of life values must be started as soon as possible. In the middle school stage, it is implemented by setting up special courses, combined with subject teaching and its rich and colorful educational activities inside and outside the school.

3. Conclusion

To sum up, the outlook on life education in primary school is mainly combined with the education of daily code of conduct. Because many contents themselves in the daily code of conduct are the most primary correct outlook on life. At the same time, with the help of vivid and interesting stories, example deeds that are easy to dry and infect, catchy poems and songs, and in combination with the teachers' handling of occasional events in the class organization and school, we can instill some shallow life and value viewpoints into the students, such as “there are others and collectives in the heart” “Study hard and strive for progress” “Love the motherland, the people, labor and science” “Ideal, moral, educated and disciplined. Students are not required to fully understand these views, but to practice them in general practical situations. In order to make these views deeply understood by students and establish deep-seated scientific life values, it is also necessary to set up special courses in middle school, combined with subject teaching and rich and colorful educational activities inside and outside school.

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Coherence in Chinese Conversation

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Abstract: Conversational analysis, as a branch of spoken discourse analysis, is to investigate the way that conversation works in practice. Relevant studies on the adjacency pairs in conversational analysis aim to explore the discourse coherence. To probe into the coherence in Chinese conversation in a further way, this paper investigates how a chain of adjacency pairs functions in Chinese conversation.

Keywords: Illocutionary acts; Conversational analysis; Adjacency pairs

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1. Introduction

In daily communication, people not only use the language to say things as making statements, but also to do things while performing actions. Thus, a theory called *illocutionary acts*^[1], is utilized to examine what kinds of things people do when they speak, how people perform the action and how do acts fail or succeed in achieving a illocutionary goal. This goal achieving in any interaction relies on the negotiation between the speaker and hearer, which is also a meaning-making process engaged three steps: “a hypothesis, formation and testing”(Thomas, 1995)^[10]. A hypothesis, or preposition is raised by the speaker at first, then the meaning is formed or negotiated between interlocutors and is finally tested during conversation. In this meaning-making process, the conversation goes from probability to certainty(Leech, 1983)^[5].

For demands of exploring the conversational process, a conversational discourse is created based on the combination of conversational study and discourse analysis. And hence, conversational analysis(short for CA), as a branch of spoken discourse analysis, is to investigate the way that conversation works in practice, and is also considered as an approach to the study of social interaction (Hyland, 1998; Schiffrin,1994)^[4,9]. Previous discussion on CA concerns more on issues like the general structure of CA and inner links of conversation from the perspective of thematic progression(topic progression) but study on CA still displays its lacks within discourse analysis.

To inquire into CA, pragmatists suggest a framework“activities type”(Levinson 1979)^[6], in which, turn-taking and topic control are emphasized, that is, to what degree the interlocutor can utilize turn-taking norms or principles to fit for or establish his or her own agenda in interaction is discussed. Actions during conversations are implemented through the demonstration of turns, and hence, turn-taking is a fundamental feature in conversational organization. Analysis on turn-taking is mainly exploited on what the primary units of turns are and how these units are allocated among interlocutors. As an example of conversational turn-taking, an adjacency pair divides utterance types into “first pair parts” and “second pair parts”, forms a “pair type”(Tsui, 1994)^[11]. Moreover, in the conversational discourse, all adjacency pairs form a meaning unit around certain topics, and even contribute to the topic progression. In view of this, a chain of adjacency pairs presents the coherence of conversation. In this paper, with the purpose of exploring the coherence of conversation, issues like how two parts in a pair are connected, and whether all pairs in the conversation are consistent are discussed. Based on this, two research questions are addressed: firstly, how do the first and second parts work together to make an adjacency pair contribute to the flow of conversation? Secondly, how does the sequence of adjacency pairs contribute to the coherence of the Chinese conversational discourse?

2. Literature review

In 1952, Z.S. Harris proposed a hierarchy method for the analysis of connected speech (or writing) in his paper *Discourse Analysis*^[3]. His view that a discourse analysis should go beyond the boundaries of sentence level is appreciated and is regarded as the starting point of discourse analysis. After 1960s, discourse analysis began to develop, Barthes, Greimas and Metz had done discourse analysis from the perspective of semiotics. Later, Halliday published a paper *Notes on Transitivity and Theme in English* in 1960s, raising three metafunctions: ideational, interpersonal, and textual. And in 1976, four main types of cohesion are stated in his book *Cohesion in English*, they are coreference, substitution/ ellipsis, conjunction and lexical cohesion(Halliday& Hasan, 1985)^[2]. They can “create relations of identity or comparison, logical semantic relations or similarity”(Menzel, 2017)^[8].

CA, as an approach to the study on social interaction that was developed by the collaborative research conducted by Harvey

Sacks, Emanuel Schegloff and their followers in the 1960s and early 1970s. In 1975, Birmingham School developed the Initiation-Response-Follow-up Structure (IRF) at the level of exchange in teaching context. Later, in 1994, Amy Tsui suggests that a three-part exchanges is the basic unit of organization of classroom discourse, while in causal conversations, in fact, two-part, four-part and even five-part exchanges may happen, displaying the complexity of exchange structures.

3. Data analysis and discussion

According to Schegloff and Sacks, utterances is referred to form pair types so that a particular “first pair part” sets up the expectation of a particular “second pair part” (Tsui, 1994)^[11]. The “Adjacency pair”, termed by Schegloff and Sack, could be utilized to describe such a pair type, and some examples of adjacency pairs like ‘Question-answer’, ‘greeting-greeting’, and ‘offer-acceptance/refusal’ etc. are discussed. This adjacency pair could be utilized to analyze the organizational pattern recurrent in conversation.

This study aims to explore the issue on Chinese discourse coherence through the analysis of the adjacency pairs in one selected text. The part analyzed is selected from a mini- drama show in the textbook for Teaching Chinese as a Foreign language in Taiwan. In this text, there are seven adjacency pairs and eight turns in total. There are three adjacency pair patterns identified, they are, request-rejection, question- answer, and complain- remedy, and the structural complexity emerges. In addition, the persuasion- refusal-acceptance presents the topic progression, causing the interlocutor finally to yield, and responses to the request.

As the findings show above, answers to two research questions are discussed here. For the first question: how do the first and second part work together to make an adjacency pair contribute to the flow of conversation? As McCarthy(1991)^[7] mentions, “pairs of utterances in talk are often mutually dependent”(p119), and an adjacency pair is thought as the smallest unit in speech acts, consisting of a first, a second and even more parts. These parts are produced by different interlocutors in a conversation. While analyzing the texts above, each act, as shown in the conversation, in fact, is not of equal structural complexity. To be more specific, after the speaker poses the question, the hearer doesn’t give the pure answer to previous question directly, while some further statements or assertions are elaborated after or before the answer, as a trigger to the following adjacency pair. To sum up, all adjacency pairs are considered to be one important factor contributing to the flow of a conversation.

For the second research question: how does the sequence of adjacency pairs contribute to the coherence of the Chinese conversational discourses? The concern of it is to explore the use and linguistic features of language in communication, discussing the sequencing of adjacency pairs on constructing the coherence of discursal meaning in the conversation. In the conversation, it starts from the two-part pair: request- refusal, and linguistic strategies are frequently used by interlocutors to persuade one of them to speak more and then get the final agreement The discursal coherence is presented in a clear way through the topic progression^[11].

Analysis on these two conversations displays the descriptive power of *adjacency pairs*. And in this study, both a sequencing rule within the adjacency pair, and a sequencing of all adjacency pairs in a conversation contribute to the discursal coherence are explored.

4. Conclusion

From the above discussion, the sequencing of adjacency pairs is described as a demonstration of discursal coherence in the Chinese conversation. The sequencing of adjacency pairs plays an important role in the structuring of conversations, and utterance follow utterance with a certain amount of regularity and cohesion in itself demonstrates the coherence of the Chinese discourse.

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Research on the Construction of First-class Chinese Medicine Undergraduate Education System in the New Era

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Abstract: The new era has put forward new requirements for first-class personnel training. Chinese medicine colleges and universities should actively explore the construction of first-class Chinese medicine personnel training system, and comprehensively improve the ability of personnel training. In this paper, based on the construction concept of first-class TCM personnel training system in the new era and the connotation research of first-class TCM personnel, we explore the construction of first-class undergraduate specialty system, first-class curriculum construction system, teacher training system, student development system and quality assurance system.

Keywords: New era; First-class talents; Cultivation system; Traditional Chinese medicine

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Under the background of the new era, it is the responsibility and mission of The Times to promote the construction of first-class personnel training system in an all-round way. The state has promoted the construction of “double First-class” with “Chinese characteristics and world first-class” as the core, providing a rare historical opportunity for the development of TCM disciplines with the most Chinese characteristics, original advantages and international competitiveness. How to inherit, make good use of and develop TCM, comply with the requirements of the national “double first-class” construction, uphold integrity and innovation, actively seek innovation and change, train first-class TCM talents, and build first-class TCM undergraduate education system are practical problems that TCM higher education needs to face.^[1]

1. Construction concept of first-class TCM personnel training system in the new era

In the new era when China promotes the construction of “double first-class” and deploys the “quality revolution” in higher education, TCM higher education is facing a new situation and shouldering new tasks and missions. When TCM colleges and universities build first-class TCM talents training system, they need to deeply analyze the new ideas of higher TCM education in the new era, systematically sort out the new national education and teaching policies in the new era, clarify the new mission of higher TCM education in the new era, and provide a theoretical basis for the construction of first-class TCM undergraduate education system.

1.1 Deeply understand the new ideas of education in the new era

General Secretary Xi Jinping has made a series of important plans for education and made a series of important statements, explaining in depth major theoretical and practical issues such as “whom to train, for whom to train and how to train” and “what kind of education to run, how to run and for whom to run”. A series of educational thoughts and speech spirit not only provide fundamental follow for first-class undergraduate education in the new situation, but also provide strategic guidance for striving to surpass and strive for first-class education. In the process of building a first-class TCM undergraduate education system, it is necessary to accurately grasp the new situation and requirements, deeply understand the new ideas and new connotations of higher education, and strengthen the sense of responsibility and urgency to accelerate the modernization of education in the new era.

1.2 Take on the new mission of TCM education in the new era

Is one of the world medical education system characteristic of traditional Chinese medicine medical system, the inheritance and development of traditional Chinese medicine, the use of good, good construction “with Chinese characteristics, the international level” of the first-class university of Chinese medicine, to provide a “healthy China” wisdom of traditional Chinese medicine, for “health” in sichuan province to provide solution of Chinese medicine, Chinese medicine person’s responsibility and mission. The quality revolution of TCM personnel training is a new opportunity and challenge for the development of TCM higher education. In the process of striving to build first-class TCM personnel training capacity, the new mission of TCM education in the new era should be clarified, and the responsibility and responsibility for the construction of first-class TCM personnel training system should be strengthened.

2. Construction of first-class TCM personnel training system

2.1 Connotation and requirements of first-class TCM talents

New era of first-class talents of Chinese medicine, to follow the rules of education, on the basis of more in line with the needs of the social economy rapid development, has the stronger cultural confidence, insist on “the love as the soul, sincerely for this, innovation to and value their ability to” first-class talent training philosophy, on the guard are the foundation of, develop innovation source. As first-class TCM talents in the new era, they should have deep feelings about TCM, profound understanding of TCM theories, profound mastery of TCM skills, profound understanding of TCM culture, full confidence in TCM development, and a sense of responsibility for social responsibilities.^[2]

2.2 Make standard first-class and build a high-level TCM personnel training system

In first-class talent cultivation orientation of traditional Chinese medicine, on the basis of the attempt to reconstruct the course system, reform of practice teaching system, perfect the system of student development, pay attention to cultivate teachers, strengthen the quality assurance, puts forward new requirements to adapt to the new era, to construct a new era of higher education of Chinese medicine first-class talent cultivation system, comprehensive improve the ability of personnel training of Chinese medicine.

2.2.1 Build first-class major construction system and first-class undergraduate major

Docking national “two plan”, stick to the national development needs, take the initiative to adapt to a new round of technological revolution and industrial revolution, around the “five kinds of resources” of traditional Chinese medicine and health demand in China, optimizing characteristics of traditional Chinese medicine professional Settings. Adhere to the principle of “make the specialty of Traditional Chinese medicine fine and excellent, keep the leading position in the country; Do strong special medical health professional, highlight the characteristics of the regional advantages; The concept of specialty construction and development of medicine and health related majors should be established to serve the needs of great health development, and a first-class undergraduate specialty system with reasonable layout, distinctive characteristics and adaptability to economic and social development should be established.

2.2.2 Build a first-class course construction system and create first-class courses

To update the curriculum construction concept, promote curriculum reform and innovation, strict curriculum management, promote the construction of “curriculum ideology and politics”, and build first-class courses with TCM characteristics. Implementation of “wisdom” classroom teaching reform, building three-dimensional teaching resources, pay attention to the reform of curriculum evaluation, strengthen the construction of teaching organization, active play to teaching and research section benchmarking demonstration leading role, to explore the standardized test, perfect quality oriented curriculum construction of incentive mechanism, build a first-class course construction system, outstanding quality, promote all-directional class revolution.

2.2.3 Build a first-class teacher training system and forge first-class teachers

Comprehensively strengthen teachers’ responsibility for educating, pay attention to the evaluation of teachers’ ethics and ethics, follow the law of teachers’ development, establish a support system for teachers’ career development, establish a mechanism for teachers’ continuous improvement of their teaching ability, promote the transformation of student-centered teaching and classrooms, and establish a first-class teacher training system. To cultivate first-class teachers who have the determination to love teachers’ career, the enthusiasm to research teaching reform, the characteristics of developing disciplinary advantages, the innovation of scientific research, and the initiative to improve digital ability.

2.2.4 Build a quality assurance system to ensure the cultivation of first-class talents

Refining higher education of Chinese medicine education concept and idea, optimize the channels, function complete internal and external quality assurance system, the formation of “standard-monitoring-feedback-warning-rectification-increases” teaching quality guarantee system of closed loop, build a first-class talent training demand of traditional Chinese medicine of undergraduate education quality assurance system, perfect the higher education quality assurance mechanism of traditional Chinese medicine, Escort the training of first-class TCM talents.

3. Summary

First-class undergraduate education quality in the bouncy times revolutionary new requirements and new standard first-class talents of Chinese medicine, Chinese medicine education teaching work need to further improve the personnel training system, strengthening the construction of first-class undergraduate professional and first-class undergraduate courses, improving the capacity of teacher education, improve the quality of student learning, strengthen the education teaching safeguard system construction, Only by strengthening the awareness of problems, crisis, responsibility and quality can TCM colleges and universities continue to promote the quality revolution of TCM undergraduate education and cultivate first-class TCM talents.

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Algorithmic Risks and Countermeasures of Ideological and Political Education in Colleges and Universities from the Perspective of Communicative Practice

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Abstract: Algorithm recommendation has become the main means of social life information dissemination. As the forefront of ideological work in colleges and universities, ideological and political education is more directly affected by algorithm recommendations. There are algorithmic risks in the relationship between the lack of subjectivity of educators, the solidification and closure of the value of the educated, and so on. The algorithmic risks exist in the field of communication, such as the personalization of technical algorithm recommendation, the broadening of traditional ideological and political education, and the confusion of values in mainstream ideology. The Marxist concept of communicative practice takes people as the basis of production practice, and highlights the practical structure of ‘subject-object-subject’. It provides useful thinking for dealing with the algorithmic risks of ideological and political education in colleges and universities. It is necessary to reconstruct the relationship between teachers and students in ideological and political education and strengthen the construction of cultural positions in ideological and political education in universities.

Keywords: Perspective of communication and practice; Colleges and universities; Ideological and political education; Algorithm recommendation

Colleges and universities are the main front for ideological construction. The president Xi Jinping emphasized at the National Conference on Ideological and Political Work in Colleges and Universities that ‘The ideological and political work of colleges and universities is related to the fundamental problem of what kind of people to cultivate, how to cultivate people and who to cultivate people for. It should adhere to the cultivation of morality as the central link, ideological and political work throughout the whole process of education and teaching, realize the whole process and all-round education, and strive to create a new situation for the development of higher education in China.’^[1] artificial intelligence technology has been developed by leaps and bounds, and algorithms are an indispensable part of artificial intelligence technology. Through the use of algorithm recommendation to promote the development of artificial intelligence, algorithm recommendation increasingly dominates the aggregation and dissemination of human information. Guided by the inter-subjective thinking among the multi-polar subjects contained in the Marxist communicative practice view. The recommendation of ideological and political education algorithm is carried out as a work to excavate and cultivate the self-motivation of young people’s growth.

1. The connotation and essence of ideological and political education under the perspective of communication and practice.

The communication practice of ideological and political education means that in a certain activity, the subject uses a common object (such as text, topic or activity) as an intermediary. With the help of language or non-verbal symbol system, it can cultivate and construct a complete education of the educated. Practical activities of inter-subjective communication aim at the spiritual world^[2] (P97). The communicative practice ideological and political education is essentially a brand-new concept, which is a practical structure model of subject-object-subject.

2. The essential features of intelligent algorithms.

Algorithm recommendation is a basic technology for in-depth and precise development in the intelligent era. Algorithms have gradually become the main force in disseminating information and receiving knowledge in ideological and political education in colleges and universities. By analyzing the essential characteristics of algorithm recommendation, ideological and political education will better exert its functions and effects. Intelligent algorithms have become the embodiment of instrumental rationality and value rationality with a strong intervening nature, changing the ecological environment of ideological and political education in colleges and universities. Among the many algorithms based on the information push system, the more mainstream ones are the collaborative filtering algorithm and the content-based algorithm^[3].

3. The association of intelligent algorithm and ideological and political education.

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The extensive use of algorithm recommendation technology has a profound influence on the ideological field, value orientation and other consciousness levels with a strong correlation with ideological and political education. Firstly, intelligent algorithms empower ideological and political education in colleges and universities. Secondly, ideological and political education can give the algorithm value rationality.

4. Algorithmic risks of ideological and political education under the perspective of communication and practice

4.1 Algorithmic risks of communication relationships.

The algorithmic risks of ideological and political education from the perspective of the communicative practice perspective is mainly reflected in the lack of subjectivity of the educator and the solidification and closure of the value of the educated in the communicative relationship.

4.2 Algorithmic risk of the interaction field.

Firstly, Personalized recommended algorithm on the technical field and generalization of ideological and political education. This kind of personalized and accurate push for themselves creates a sense of pleasure and resonance, and gradually completes the construction of self-identity, which causes young students to rely more on algorithm recommendation technology, and their own value deviation cannot be corrected. Ideological and political education will face the problem of being separated by different opinion-polarized groups, and social consensus is difficult to consolidate^[4]. Secondly, value confusion in the ideological field. the algorithm based on capital logic can obtain the effect of maximizing benefits, rather than human-oriented. the mainstream ideology is a scientific theoretical system with rigorous logic and advanced levels, which requires systematic study. The relaxed sensory stimulus and non-linear input knowledge method brought by the algorithm will impact the young students' search for the mainstream ideological linear cognitive schema, which will cause young students to replace the complete cognition of the theory with fragmented information, weakened cognition and recognition of the mainstream ideology. And Western ideologies with ulterior motives use algorithmic recommendations to conduct propaganda offensives against young students.

5. Practice strategy of ideological and political education in universities for algorithmic risk under the vision of communication practice

5.1 Reconstruction of teacher-student relationship.

Upholding student-centered is still the concept that the relationship between teachers and students in colleges and universities. Improving information literacy is a fundamental means for the construction of the relationship between teachers and students in colleges and universities in the environment of algorithm recommendation education. Creating a good environment is a necessary guarantee for the construction of the relationship between teachers and students in colleges and universities in the algorithmic recommendation education environment.

5.2 Strengthen the construction of cultural positions.

Algorithm recommendation, the external performance is an artificial intelligence technology, but the internal implicit is still the embodiment of social progress created and served by people. Therefore, the algorithm should not only focus on the maximization of benefits, but also bear certain social responsibilities. For college ideological and political education, it is necessary to adhere to the mainstream value orientation, promote the optimization of the algorithm content system, provide a high-quality cultural environment for college network ideological and political education, and optimize the information recommendation mechanism^[5]. it can fundamentally ensure the value legitimacy of algorithm technology. Algorithm recommendation technique increases the richness and diversity of the content of ideological and political education. Therefore, when integrating ideological and political education into the algorithm recommendation pool, it combines the preferences and needs of young students mined through data analysis.

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Global Logistics Supply Chain Analysis-Take Xiaomi Company as an Example

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Abstract: This essay will analyze the impact on global supply chain and logistics of globalization and technology, then will include competitive strategy of Xiaomi and it is future challenge.

Keywords: Global logistics supply chain; Xiaomi company

1. Introduction

Supply chains are becoming volatile as a result of changes in the external environment, such as natural disasters, globalization and technology. The global supply chain and logistics management the global supply chain and logistics management are the process of purchasing, transporting and inventory between suppliers, manufacturers and customers.

2. Factors influencing globalization

Globalization has had both positive and negative effects on global supply chain management and logistics. The first advantage is that the globalization of supplying chains can reduce costs. Globalization has allowed more companies to build factories in countries with low labor costs to decrease costs and increase profits. For example, Uniqlo has built most of its production plants in China to reduce the cost. Therefore, built industries in developing countries can reduce products costs so that more consumers will buy products and the company market share will increase meanwhile. The second advantage is that globalization can strength communication within supply chain and is able to let companies reach new customers and new market easily. Globalization of supply chains allows business owners, suppliers, manufacturers and customers to communicate more closely. Hence, there are many companies build their supply chains abroad to get closer to customers, which make it easier for them to focus on the local market and understand customer preferences to make it easier for them to enter the market. However, there still have adverse impact. Supply chain globalization is vulnerable to natural disasters affecting its sustainability. Supply chain sustainability is often affected by natural disasters, when the company's raw materials, factories, and customers are located in different parts of the world. In addition, the 2011 earthquake and tsunami in Japan forced Toyota to close its U.S. factories because of damage to its car manufacturing plants in Japan. In other words, natural disasters can increase the risk of global supply chain disruption and companies will lose a large amount of money.

Changes in technology have also brought good and bad effects on the supply chain. Firstly, digitization helps companies make purchasing decisions to maintain the correct inventory quantity. Procurement refers to the entire procurement process for the purchase of services or goods for the enterprise. In addition, inventory management is also a member of procurement management. To be more specific, using a digital inventory monitoring system to query current inventory levels can help companies make purchasing decisions to keep inventory in the right amount. This means that supply chain management costs are not increased by excessive inventory. Nor are supply chain delays caused by too little inventory. Secondly, development of drone technology will reduce logistics costs. Amazon is trying to deliver drones to consumers who shop on the internet. In brief, the progress of the use of drone technology to transport goods has improved the efficiency of logistics and reduced the cost of human transportation. Thirdly, Technology reduces the risk of supply chain volatility due to COVID-19. And COVID-19 has led to an increasing number of workers because of illness lead absenteeism that has made the supply chain more volatile than ever before. That is to say, for suppliers, lack of workers will lead to inefficient production of products and an inventory shortage, supply chain will delays and even interruptions, for logistics, the lack of truck drivers lead to slower logistics. However, technology can change the destructive impact of COVID-19 on the supply chain. Moreover, Robots can be utilized in the manufacturing, assembly and warehousing of the supply chain and take less time to be more accurate and efficient. This means, robots can replace human jobs and be more efficient, as well as reduce supply chain instability owing to the lack of employees. Fourthly, Advances in technology can reduce defect products and can also decrease the cost of the reverse supply chain. Reverse supply chain mainly includes the return of defective products for customers and the recycling and disposal of old products^[1]. Moreover, according to the survey, Americans returned nearly \$260 billion in 2016, most of them due to defective products. Take food industry for an example, the use of x-rays is a key technique for detecting defects^[2]. Namely, improving technology can reduce the probability of detect products. Nevertheless, there are also the negative impact of technology on the supply chain. Increased customer demand requires more advanced technology to make the supply chain more flexible, and a lack

of capital for small companies can lead to the inability to use advanced technology. The need for the younger generation, especially millennials, is always changing, for example, they always want the update products and faster delivery. Therefore, in order to meet clients expectations, companies need technology to develop products and find faster ways to deliver them. In addition, changes in consumers expectations present significant challenges to traditional supply chains, and companies need to be more flexible in their supply chains. Especially for small companies, the challenge becomes even greater. The reason is that, small companies do not have enough capitals to support the development of technology.

3. How does Xiaomi face the challenge

3.1 Xiaomi competitive advantage

One of competitive advantage of Xiaomi is cost advantage. Firstly, Xiaomi manages supply chain relationships through strategic alliances, joint ventures, and back vertical integration. For strategic alliances, strategic alliances are partnerships between multiple companies to share resources and strength to achieve common goals. Xiaomi and CK Hutchison which is a multinational group, formed a strategic alliance that not only expanded Xiaomi's overseas markets through resource sharing, but also provide preferentially priced of Xiaomi in carrier channels, which reduced Xiaomi's costs. For joint venture, which are co-financed by more than two entities of the same commercial purpose. That is to say both strategic alliance and joint venture can reduce Xiaomi cost by sharing resources and strengths.

For back vertical integration which refers to when a company is acquisition or bundling with a supplier for the high degree of control and ownership of the supply chain. Moreover, vertical integration back allows for better monitoring of suppliers and maintains supply stability and continuity. Xiaomi has invested \$115 million in AAC technology suppliers to secure the supply of camera components. This means that Xiaomi's equity investment in suppliers not only ensures the stability of supply, but also can be negotiates with suppliers the best terms for lower-priced camera components to reduce the price of Xiaomi products.

Secondly, Xiaomi utilize direct distribution channel to reduce cost. Direct distribution channel is for producers to be sold goods directly to consumers. Xiaomi through the offline and online consist of a distribution channel. For offline, Xiaomi continues to expand offline channels and plans to expand its new retail business in small and medium-sized cities in China to expand customers and enhance the customers experience. It is means that customers can order directly online after the offline experience and online orders are delivered to customers through direct distribution channel. Since the direct distribution channel is the company's direct sale of products to customers, there is no middleman to reduce costs and improve logistics efficiency.

3.2 Future challenge

Xiaomi is expected to continue to expand overseas markets, but there are obstacle have negative impacts which is the changing global political will have negative supply chain of Xiaomi.

Xiaomi promises a combined profit of no more than 5% for all products. That is to say Xiaomi used lower product prices to attract customers. Plus, in 2020 Xiaomi's markets overseas continued to rise and reached 39.8 billion RMB. This means that Xiaomi is growing rapidly in overseas markets. However, the continued rise in the exchange rate of RMB has brought challenges to Xiaomi. From 2014 to 2018, the RMB exchange rate continued to rise^[3]. In addition, Biden will be still impose economic sanctions on China. That means there is probability that the RMB exchange rate will continue to increase in the future which can lead Xiaomi's products exported overseas will become expensive and lose its price advantage. Nevertheless, Xiaomi can reduce the cost to maintain price advantages overseas. The first way to reduce cost is outsourcing. Outsourcing is transferrable of generation and manufacturing of products to other countries. Therefore, Xiaomi can transfer the supply chain to develop countries and export products from other countries rather than from China.

4. Conclusion

In a conclusion, globalization and technology have critically impact on the global supply chain and logistics. Then the core competitiveness of Xiaomi is cost and differentiation to support and in the future. For cost, Xiaomi maintains a good relationship with supplier and use direct distribution channel as well as just in time to cut cost. In the future, Xiaomi plan to expand overseas markets will also face RMB exchange rate increase.

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Application Research of Multimodal Sensing Technology in Online Classroom

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Abstract: Online classroom can be said to be the result of the combination of Internet technology, multimedia technology and classroom teaching. In particular, since the 2020 new crown, many schools have implemented online courses, as an alternative to suspension during the epidemic. Multi-mode perception technology is a very practical technology to carry out online classrooms. It can make classroom teaching diversification, making classroom teaching more lively and relaxed, further promoting the improvement of students' interest in learning. Therefore, we should actively promote the use of multi-modal perceptual technology online class. Below, we will carry out some analysis according to this topic.

Keywords: Multimedia technology; Multimode perception technology; Online classroom; Application; Research

1. Introduction

In recent years, with the continuous development of multimedia technology and multi-level application in various fields of society, it also promotes the continuous application of multimodal perception technology in online classroom. In online classes, multimodal perception technology belongs to the mode of communication by mobilizing people's senses of hearing, seeing and touch, and combining various languages, pictures, sounds and actions with some symbolic resources. Its value is already preliminary. Especially in foreign language teaching is unique.

This article specializes in analyzing multi-modal perceived technology online classroom applications, combining this project proposes some programs that can play effective recommendations.

2. What is multimode perception technology

Modal, people themselves interaction between the external environment. Multimodal perception technology was first proposed by Kress and vanLeeuwen in 1996. It can be said that multimedia technology has developed to a certain extent. Specifically, it refers to collecting a series of data samples -- multimodal data -- by using a variety of methods and perspectives for a specific target scene to be described. Any method and viewing angle in this link is a modal. In a narrow sense, multimodal information covers modal images and text, video and voice, vision and touch with different characteristics. In general, there is also a combination of different feature fuses from the same modality information, plus data fusion from different types of sensors.

Based on multi-mode mode, teaching mode and teaching effects can be further optimized, improve the vitality of the classroom, improve the teaching effect of teachers and students' learning effects.^[1]

3. Multi-mode perception technology online classroom basic application advantages

The use of multi-mode perception technology in classroom teaching is mainly for English teaching. Below we use primary school English teaching as an example to analyze the basic use of multi-modal perceptual technology online classroom. Under the guidance of core literacy concept, cultivate students' thinking quality has become an important objective of primary school English teaching.^[2] The teaching model we have taken in the past is too single, just through blackboard and teaching materials to explain the classroom content. Teaching models and means relatively single, it is difficult to mobilize students' interest in learning, and it is difficult to cultivate students' thinking from a multi-angle. Therefore, students can only be in a state of passive learning. In particular, students have difficult foreign language communication skills. Therefore, it is difficult to meet the requirements of English teaching in the new era.

In recent years, the promotion of online classrooms in China is increasingly popular. Since the COVID-19 pandemic in 2020, many schools have widely introduced online courses as an alternative to being forced to close classes during the pandemic. This also further promotes the scope of application of online classrooms. On-line class itself is a combination of Internet technology and classroom teaching, and further provides a broad world to multi-modal perception technology.

The basic advantages of the application of multimodal perception technology in online classroom are as follows: the boring situation of classroom teaching can be changed immediately, the teaching mode is more lively and diversified, and students can be immediately aroused to learn interest and improve classroom participation. According to some foreign teaching experience, multi-

mode perception technology has been promoted online, and it is possible to make students' language memory capabilities and language understanding.

4. Application measures of multi-modal technology in primary school English

At present, multimodal technology has been used in primary school English teaching in China, which has achieved some achievements, but also has some shortcomings[3].Below we analyze the use of multi-modal technology in primary school English.

4.1 Main use ideas

The multimode belongs to the interaction between two senses.Multi-mode technology is used in primary school English, mainly use points in: language and contextual language environment, basic vocabulary and grammar, basic meaning and media levels. The main idea lies in the effective integration of pictures and texts. Compared with the traditional teaching mode of blackboard and chalk, multi-modal technology is more multimedia means such as PPT.Integrate video and audio.This requires us to first create a beautiful multimode English paint to primary school students.Picture Book should pay attention to include a concise and beautiful picture, concise text plot and rhyming English language, plus the meaning of diversity.In short, you must meet the psychological cognitive characteristics of primary school students, you can inspire primary school students' interest in English.The most basic point of teaching is to maximize the "combination" of multi-senses and different methods in teaching, to regard students as the main body of teaching, teaching should be more integrated with the situation in life. Teachers should be more of a guide than an arbiter.

4.2 Combine teaching needs to select teaching resources

We should combine the teaching needs of this class to select the appropriate painted resources.If you can't find the resources you need to meet the needs of teaching in a time, the teacher can write a picture book.In the process of selecting teaching resources, teachers need to first selection according to the teaching theme, and then select the teaching resource for the teaching resources.

For example, in the first volume of My Schoolbag for grade four, some picture books related to "My schoolbag" can be selected or created during online teaching, and some vivid and interesting stories can be added to the picture books.It should be noted that the difficulty of picture books must be moderate, too simple and too difficult are not desirable.It is easy to cause lack of challenge and freshness.It's too difficult to make students "hope", thereby losing interest.In addition, teachers should also actively be actively developed to the development of the repository, select the drainage library that is more in line with the current era.

4.3 Do a good job in teaching design to enhance teaching effects

As a unique teaching form of primary School English, English picture books can not only extend from classroom to extracurricular, but also change from instilling knowledge to guiding students to acquire knowledge actively.Cultivate students' good English learning skills by integrating various teaching activities.Therefore, teachers can combine English in classroom activities to improve students' classroom participation, so that every student can master English basic knowledge with English drawn.

For example, in the course content teaching of "Letusspell", teachers can choose high-quality picture books named "LoveandCooperation".In this picture book story, many words contain the vowel O. Teacher can teach students the pronunciation rules of O vowel.In teaching, teachers can use online teaching to interact with students for many times. In English teaching, the school has established an oral easy platform. Teachers can make full use of this platform to communicate with students and help students correct inaccurate pronunciation.

4.4 Help students build and improve English integrated

English teaching materials for primary schools are formulated according to the level of primary school students. Their contents are relatively simple and their knowledge is not comprehensive enough, which limits the English level of primary school students. Primary school English paint this, vocabulary, description, expression, storyline is very rich.Therefore, teachers can use primary school English to read this reading, enrich the English vocabulary of primary school students, exercise the English reading ability of primary school students, and improve the English speaking level of primary school students.Through the plots in the English picture books of primary schools, the students are brought into a certain situation mode to exercise their emotional experience and expression, constantly improve their English ability and level, and improve the core quality of English.

For example, in the reading of SnowWhite, a primary school English picture book, teachers can ask students to act out the whole story in the form of role-reading, so that students can figure out the characters' characteristics.Let the students experience the emotions and emotions that each character wants to express.

5. Conclusion

In recent years, with multimedia technology in various fields in society, multi-mode perception technology has also been urged to operate online.It can make classroom teaching diversification, making classroom teaching more lively and relaxed, further promoting the improvement of students' interest in learning.Especially in the online teaching in English teaching is more obvious.Therefore, we should actively promote the use of multi-modal perceptual technology online class.

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The Influence of Art Education on Thinking Mode

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Abstract: This article mainly discusses the influence of art education on thinking mode, and analyzes the effective strategies of how to cultivate innovative thinking in art education, so as to promote the development of education and teaching, and lay the foundation for subsequent development. Painting practice and art theory can both open up and inspire ways of thinking. Due to the characteristics of art education activities, people can easily and naturally enrich their ways of thinking.

Keywords: Art education; Innovative thinking; Dialectical thinking; Design thinking

In the process of quality education in our country, art education occupies the forefront position. Because pursuing beauty is human nature, art education can also help us establish a correct aesthetic view and improve our aesthetic ability. The process of learning art is the process of learning and understanding culture.

In human society, the core of practical activities is innovative thinking, and the completion process of artistic works is the most creative labor achievement. ^[1] In the process of receiving art education, people can analyze, summarize and operate image, structure and material materials. Appreciation of art works helps to improve the appreciation level. The study of fine art theory can promote the development of image thinking ability and innovation ability. Therefore, art teaching aims to cultivate innovation ability, develop thinking ability, and broaden thinking modes.

1. Break the thinking set and release the thinking potential

Thinking set refers to the tendency of an activity to be caused by a previous activity. Under the same conditions, inertial thinking can solve problems quickly and effectively; when conditions change, inertial thinking will become the shackles of the new thinking model.

1.1 Overcome the inertial thinking

As Marx said: "If humility is the characteristic of discussion, this is not a mark of fear of hypocrisy but a mark of fear of truth. Humility prevents my progress." "Humility" is part of the inertial thinking. Inertial thinking is reflected in people's fear of making mistakes. If people are affected by this kind of psychology for a long time, they will not be able to innovate and create works. When accepting art education, people can practice boldly. Art teachers will often encourage students to experiment bravely. Waste of materials may be the worst result, which is fundamentally different from scientific and rigorous science and engineering practice. Data or experimental errors can cause serious accidents. The practice of art education determines the cost of trial and error, so people don't have to worry while liberating their thinking modes.

I regard you as a person with creative potential. I will express myself through painting, aiming to provide a way to release potential and help you enter the level of creativity, intuition and imagination. Because we overemphasize the cultural education system of language and technology, which leads to an undeveloped level of consciousness. ^[2] When learning knowledge, we acquiesce in the authoritative status of knowledge, so we only accept existing thinking modes and neglect to establish new thinking modes. In the art discipline, there are many artists and authorities of various styles and genres, and the different opinions of some artists do not affect their status. Therefore, in the process of learning art, we should not be superstitious in authority, which is also an effective way to train us out of inertial thinking.

1.2 Cultivate divergent thinking

When we carry out creative activities or solve problems, we can start from multiple angles, carry out various thinking, and then come up with different solutions. This is divergent thinking.

Traditional education exercises our memory, calculation ability and logical thinking ability. This thinking mode is linear and single. In the era of information society, innovation ability is the key to creating value. The development of imagination and the cultivation of innovation ability are imperative. As a comprehensive educational activity, art education exactly is needed to train divergent thinking. Common thinking training is divided into the following types.

1) Modeling association and divergent thinking

Association refers to the thought process of associating one thing to another according to a certain correlation. The key to produce association is to find the association between things. The farther the distance between things, the more unique the association effect.

Association is a thinking process that starts from one point and diverges to the surrounding point, which is a typical divergent thinking mode.

2) Creative painting and divergent thinking

Creative painting is not simply an exaggerated image, but a visual creative activity that reflects a certain theme or idea. Creativity is not required to be reasonable, nor is it the pursuit of being different, but it can come from life and nature. We can start with innovative shape, innovative combination and innovative function and only when association is unreasonable can we be imaginative.

2. Deepen the understanding of dialectical thinking

Dialectical thinking is a thinking mode, which is opposite to logical thinking. Its main characteristics are: things are universally connected, development and change, and the unity of opposites.

2.1 Understand the universal connection of things

In art education, through painting practice and art theory, we can help people understand common views. Each element of the picture in the work cannot exist in isolation, and each visual element forms an orderly and harmonious image. For example, when we draw a portrait, we can't observe the head in isolation, but also take care of the relationship between the head and the neck and shoulders; bananas and green interlining, these two unrelated substances, share the attribute of yellow in color sketching. That's why they have a connection and exist harmoniously in the same picture. If we want to learn painting, we have to find connections between different objects. Over time, in our subconscious mind, we will find the connection when solving problems.

2.2 Understand the development and change of things

Development and changes are the most intuitive impressions of paintings. The paintings of the Qin and Han dynasties are simple and vigorous; the paintings of the Tang Dynasty are brilliant and magnificent; the paintings of ancient Greek are harmonious and inclusive; the paintings of Renaissance are realistic and diverse; the paintings of modern times transcend nature. These artistic works are composed of visual elements such as colors, lines, and shapes, but they have formed images with different styles in different cultural backgrounds and historical periods.

2.3 Understand the unity of opposites

In painting, there is a relationship of unity of opposites, and the forms of expression are more diversified. In color sketching, there is reflection between yellow objects and purple interlining, purple is mixed on yellow objects, and yellow is also mixed in purple objects. Therefore, we use the reflection to harmoniously put two contrasting colors in the same image to show the unity of opposites.

3. Inspiration for design thinking

Starting from the target results, design thinking is to explore solutions to problems. Design is the product of rational thinking, but painting is often perceptual. The two seem to contradict each other, but design needs perceptual guidance and inspiration. In many design works, abstract lines and shapes are achieved through complex painting realism, which reflects the bridge between painting and design. The design works should have a sense of order and emphasize the beauty of form. Therefore, in the process of painting, the composition method and the rhythm of the picture should be reasonably controlled, in order to promote the design thinking.

4. Conclusion

The eternal theme of art education is innovation and expression. Cultivation and formation of thinking modes are affected by many factors. We cannot achieve this goal solely by relying on art education and painting activities. The essence of art education lies in the awakening and cultivation of individual self-character. Our long-term study of art education can help us get rid of prejudices, understand the world, and free ourselves from the state of self-closure. Only by looking at the surrounding things in an all round way can we make objective and effective analysis, obtain accurate and efficient information, and better take advantage of thinking mode.

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Illusion and Absurdity in *Who's Afraid of Virginia Woolf* by Albee

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Abstract: The paper explores the reality-illusion-absurdity matrix in Edward Albee's play *Who is Afraid of Virginia Woolf*. The characters escape reality with various tricks. The absurdity of the play is that illusion, though destructive, is eagerly needed by the characters to fill the void in their message and existence. Albee thinks that even though life is nothing we must have the courage to confront our emptiness.

Keywords: Albee; Illusion; Absurdity

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The play *Who's Afraid of Virginia Woolf?* by Edward Albee is an American classic and yet a much debated play. When it was first produced in 1962, some critics claimed it as "a sick play about sick people ... they really belong in a sanitarium for the mentally ill rather than on a stage" [Coleman 1962: 20]. The Pulitzer Prize Committee was divided in opinion whether to grant the playwright an award and eventually rejected it as it was a "filthy play." The play has invited an incredible number of interpretations. It could be intended as the existential situation of marriage, the failure of American Dream or the degeneration of the West, or the futility and absurdity of human existence. Its critical debates go on and on and each sheds light on the messages of the play. My paper will explore the major themes of illusion and absurdity in the play with focus on the characters. Albee's remark "Who's afraid of living life without false illusions" [Kolin 1988: 52] has most often been taken as a revealing line for the play's 'message.' Illusion, though destructive, is fearfully needed by the characters to fill the void in their marriage and existence. Illusion seems indistinguishable from reality throughout the play. It is hard to tell whether George's story about his past is true or fictional. Similarly, Nick and Honey's life is illusion-based. Nick Marries Honey for money not for love. Seemingly strong and virile, Nick is actually impotent. Absurdity of the play is that the characters live on illusion and take it as real. Different from O'Neill, whose *The Iceman Cometh* conveys the necessity to hide behind false illusions because reality is too painful to bear, Albee thinks that though life is nothing we must have the courage to face our emptiness without fear. "The banishment of the illusion is the first step toward spiritual regeneration" (Roudané 1990: 22).

1. Reality vs illusion

George and Martha's marriage is based on illusion. Martha married George not because of who he was but who she imagined he would be and who she could be by extension. She is married to the illusion that George would be the college president. George also accepts the illusion. Realizing that this is untrue and that George is actually a failure causes significant damage to their life. One of the play's biggest illusion is hinted at from the first scene, when George cautioned Martha not to talk about the kid. Although this is not clearly confirmed until the third act, their implicit argument about the child reveals that "the kid" is a fiction. He does not exist, but rather it is the couple's shared illusion. In act three "The Exorcism," both Martha and George admit that they cannot distinguish between fantasy and reality. In this act, Martha tells George, "truth and illusion... you don't know the difference," to which George responds, "no, but we must carry on as though we did" (201). Albee has said *Who's Afraid of Virginia Woolf?* means "Who is afraid to live without illusions?" At the end, after George sings it, Martha simply says, "I am" (242). Those are the final words of the play. Albee's message is that we have to live without illusions, no matter how much comfort they give us. When Martha propose creating another imaginary child, George says no, not another round of make-believe life.

To some extent, another happy couple Nick and Honey also live in illusion. Nick married Honey for money not for love; in order to gain power in the college, he is flirting with Martha, trying to achieve success by conquering women with connections. Honey knows her husband's intention but is not willing to confront, disguising herself as a naive woman, unwilling to face the unpleasant fact about her marriage. Each of the characters hide in their illusion to cope with failures in their life and marriage.

Who's Afraid of Virginia Woolf? is Albee's most affirmative work despite its depressive presentation of marriage. Near the end of the play George explains to Honey, "When you get down to bone, you haven't got all the way, yet. There is something inside the bone... the marrow... and that's what you gotta get at" (212). The "marrow" here refers to "reality." At this "marrow" moment George finally realizes that to redeem their marriage and their very existence, the son-myth has to be put away and the illusion governing their

life has to be purged. When Martha brings their fictional son to the public, George realizes that their private life has degenerated into a terrifying make-believe world. Psychotic dependence on illusion as truth and comfort blurs the distinction between truth and illusion.

This awareness finally brings George to exorcize the son-myth and place themselves in the “marrow” or the essence of their relationship. Catharsis precedes spiritual regeneration. The play challenges the sorts of illusions paralyzing the figures in *The Iceman Cometh*. Albee tells us, “It’s about going against the ‘pipe-dreams.’ After all, *Who’s Afraid of Virginia Woolf?* just says have your pipe-dreams if you want to but realize you are kidding yourself” [Roudané 1982: 38].

2. Reality and absurdity

The set of *Who’s Afraid of Virginia Woolf?* seems to be based on everyday, verifiable reality. In this play, Albee rarely provides stage notes. He simply describes the scene as “the living room of a small house on the campus of a small New England college.” All subsequent brief references to the stage set is realistic. However, despite the apparent realism, Albee deliberately disrupts the objective presentation by integrating the natural, verifiable world with an absurdist world.

Albee writes in the school of the Theatre of the Absurd, whose famous writers include Samuel Beckett and Jean Genet. One of the characteristics of absurdist drama is that the characters recognize the absurdity of existence, which alienate them from their surroundings, and they seek comfort in pipe dreams. Illusion is vital to the couple George and Martha as well as Nick and Honey. To expel illusion from their life is tantamount to an act of violence.

One of the characteristic concerns in the Theatre of the Absurd is the blurring of illusion and reality, which takes central stage in the play. Albee also explores the relationship between absurdity and reality. At first glance, George and Martha’s conversations seem to be realistic everyday dialogues between husband and wife. The meaningless topics and repetitious dialogues are ponderously boring. This repetition emphasizes the boredom and circularity of plight in their relation. Despite their extensive arguments and repetitions, George and Martha seem to have reached little understanding for each other. Dull and trivial talks occur throughout the play. In absurdist drama, profound truth of life is usually presented through the small and absurd details of life.

Albee’s description of modern marriage is definitely existentialist. The title of act one “Fun and Game” is ironic as the couple are engaged in a bloody war against each other. Characters’ talk about themselves are not reliable. For example, we don’t know for sure whether George is the boy who accidentally killed his parents in his story. Since we are offered with so many absurd and unreliable talks, readers have the feelings that what they argue about and whether their story is true or not are not important, and what is important is how they interact with each other, and how they choose to exist in this absurd and existentialist situation where they found themselves trapped.

3. Conclusion

Who’s Afraid of Virginia Woolf? is both an absurdist and existential play, combining realistic world and imaginary world. The characters have empty pursuit of life and are stuck in boring marital relation in which they cannot communicate with each other. Life is meaningless like their tedious argument. Like the characters in the play, many people in life have the same plight: illusion is necessity since reality is too unpleasant to face. Through George’s revelation and catharsis, Albee cautions us against living on illusion or getting lost in make-believe world, which is paralyzing and futile. No matter how difficult it is, we need to confront the real world with courage.

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Exploration and Practice of Campus Green Dormitory Construction from the Perspective of Ecological Civilization: Taking Bengbu University Town as an Example

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Abstract: Since the 18th CPC National Congress, the construction of ecological civilization has become an important strategy for the development of the Party and the country in the new era. Green campus construction is indispensable for future urban development. Green campus construction is not only conducive to talent training, but also conducive to scientific research and innovation. As a part of green campus, dormitory plays an important role in environmental construction. This paper aims to explore the campus green dormitory construction scheme from the perspective of ecological civilization, create a good green living atmosphere for students, and help the construction of urban ecological civilization

Keywords: Ecological civilization; Green; Dormitory building

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1. The proposal and significance of ecological civilization construction

Party since the 18th, the construction of ecological civilization as a whole to promote the “five one” the overall layout and coordinate advances the strategy of “four comprehensive” an important part of the layout, has carried out a series of fundamental, pioneering, a long-term work, put forward a series of new concepts, new ideas new strategy, ecological civilization concept is becoming more and more thorough popular feeling. The intensity of pollution control, the frequency with which regulations have been introduced, the severity of regulation and law enforcement, and the speed with which environmental quality has been improved are unprecedented. These efforts have brought about historic, transformational and overarching changes in environmental protection. It has always been our dream to realize the Great rejuvenation of the Chinese nation. In the process of realizing this great goal, we need to comprehensively plan and coordinate all aspects of economic and social development, advocate green development, build ecological civilization, and build a new concept and new path of harmonious development between man and nature.

2. The relationship between ecological civilization construction and green dormitory

The “green water and green mountain” of future urban development is inseparable from the construction of green campus. The construction of green campus is not only conducive to talent training, but also conducive to scientific research and innovation. As an important part of green campus, the environmental construction of university dormitory can not be missing^[1]. At present, the vast majority of schools in China have achieved fruitful results in campus greening, energy conservation and emission reduction and students’ environmental education, and achieved good ecological and social benefits. However, all kinds of waste of resources and damage to the environment on campus have not been cured. In order to truly realize the goal of green campus and make it a solid force to promote the construction of urban ecological civilization, the construction of green dormitory on campus can not be ignored^[2].

3. Three, Analysis on the current situation of green dormitory construction

3.1 Students lack the concept and consciousness of “green”

As the master of the dormitory and the direct participant of life, students should have realized the direct role of green dormitory in improving the environment, purifying the air and regulating mood, as well as the indirect role in improving learning efficiency and promoting the overall green development of the school. Unfortunately, the questionnaire collected from the students in Bengbu university town shows that more than 80% of the students say they are dispensable and do not pay attention to the green environment in their dormitories. The school also did not pay attention to ecological moral education, neither set up corresponding courses, nor widely carried out relevant social practice and various campus cultural activities, and did not make full use of the teaching resources and publicity media on campus to achieve the purpose of environmental education for students, resulting in the lack of “green” consciousness and relevant knowledge.

3.2 Lack of greening

Today, when the slogan of “Green University” has been put forward for more than ten years, ecological campus has long been

nothing new. However, the greening of campus environment in some colleges and universities only focuses on large-area public areas such as teaching and sports, but does not pay enough attention to the greening in students' living areas, especially in students' dormitories and apartment corridors. As a result, students have fewer opportunities to get close to nature, discover and appreciate beauty, and it is difficult to improve the air quality in densely populated places such as dormitories and apartments.

4. Research on construction path

4.1 Attach importance to curriculum education and vigorously publicize

In foreign countries, the popularity of environmental education courses in university education is very high. Environmental education courses are even set up as the core courses, and actively provide students with environmental services in line with real life. China's colleges and universities should learn from advanced experience, make full use of various teaching resources and social resources, and promote the gradual popularization of environmental education courses and practice.

In addition, colleges and universities should also closely combine environmental education courses with daily ideological and political work and social practice. On the one hand, they should help students establish a correct world outlook, outlook on life and values related to environmental protection through class meetings, group day activities and chat; On the one hand, we should start from the fresh and vivid social reality, organize students to widely carry out relevant practical activities, guide students to go deep into the reality of life, and participate in the investigation and research of surrounding environmental problems and recent social environmental protection hot issues. Deepen the impression through personal practice, urge students to get rid of bad habits, actively participate in the study of environmental protection knowledge and enhance their awareness of environmental protection.

4.2 Pay attention to green construction and increase investment

Students often spend a long time in their dormitories and apartments. Colleges and universities should strive to create a harmonious apartment environment for students. Especially in terms of beautification and greening, pay attention to the timely placement of flowers and evergreen plants in the internal space of apartments such as corridors, and pay attention to the coordination of green landscape, civilized slogans and environmental protection signs. While beautifying the apartment environment and improving air quality, it will imperceptibly make students realize that the bedroom and apartment are a warm home shared by everyone. The cleanliness and comfort of the home need to be maintained by everyone. In addition, colleges and universities can actively create conditions for students to greening their dormitories by building small flower platforms in their dormitories, or encourage everyone to pick flowers and plant grass appropriately in their dormitories in the form of selection of room flowers and building flowers, so as to closely combine green environmental protection with leisure life.

5. Carry out green competition and encourage green bedroom design

The key to creating "Green University" and "green dormitory" still depends on the active participation of students. In order to arouse students' enthusiasm, colleges and universities should explore new methods and ways of environmental protection education and adopt effective incentive policies to attract students. For example, establish a special fund for campus environmental protection and a student scientific research team, select practical energy-saving inventions and promote them in campus buildings and public greening areas, including student apartments, by organizing and supporting students to carry out green scientific and technological innovation and green scientific research. At the same time, students should also be encouraged to independently design feasible schemes for the construction of green dormitories, show their sense of ownership, realize the cooperation between students and schools, and jointly promote the construction of green dormitories.

6. Conclusion

The construction of campus green dormitory is an important way to realize the green development of the school and a powerful driving force to promote the construction of urban ecological civilization. This paper analyzes the current situation of campus dormitory construction and puts forward corresponding countermeasures, which provides theoretical basis for campus green construction. We believe that with the common participation of schools, teachers and students, and society, green dormitory construction will become a reality and contribute to the construction of ecological civilization and sustainable development of Our country.

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The Role of Teacher-Student Relationships in the Promotion of Student Wellbeing

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Abstract: With the development of the economy, people's spiritual needs have gained greater attention, in which wellbeing is one of the most important related factor. And many schools have been made efforts to promote student wellbeing (SW), such as improving the quality of school design and an enhanced understanding of the complexity of teachers' roles (Dudek, 2000; Woolner et al., 2010).

Keywords: Teacher-student; Relationships; Student wellbeing; Role; Influence

Aside from social, relationship, physical and mental health, the term of SW also included their experience of participating in life and learning (Cahill et al., 2014). Hence, student wellbeing could be defined as the main indicator of educational quality (Van Petegem et al., 2008). Besides, Holfve-Sabel (2014) identified that, as students' activities and needs primarily revolved around school, SW is closely related to learning and intra-student and teacher-student relationships (TSRs). According to Roorda et al. (2011), TSRs were particularly important to SW, as it is the most basic interpersonal relationship in schools. Positive TSRs promoted students' and teachers' motivation and participation in the learning and teaching processes. Conversely, a negative TSR produced barriers between the student and teacher, resulting in unhealthy communication within the classroom. Therefore, this essay will explore how TRSs influence SW in schools from four perspectives.

1. Factors that influence wellbeing

Diener (2000) stated that subjective wellbeing, such as one's environment and family, was a measurement and factor of wellbeing.

Wulanyani and Vembriaty (2017) indicated that some psychological factors, such as traits, needs, cognitive and social intelligence, coordinated to influence wellbeing.

Positive student-student relationships enable students to communicate and better cooperate with others while studying, influencing their wellbeing. Moreover, wellbeing improves alongside learning. For example, positive learning can help students better understand knowledge, while a better learning environment can make students happy. In addition, improved learning outcomes can provide students with greater confidence to continue their studies.

2. TSRs and SW

Positive TSRs indicate that teachers and students can conduct teaching activities with mutual respect and cooperation.

According to Drugli (2013), barrier-free communication occurred in the classroom when the teacher cared for their students and provided them with adequate support in their learning process. Positive interaction with teachers also developed a rapport with their students, thus bringing benefits to their learning ability and motivation (Hamre & Pianta, 2001).

With negative TSRs, conflict between teachers and students was inevitable, possibly causing students to engage in substance abuse, violence or truancy (Cahill et al., 2014).

3. Ositive TSRs and SW

In positive TSRs, students built a closer relationship with their surroundings including students, teachers and the school. This was beneficial to their learning experience and helped them engage with learning, thus improving their academic performance (Cahill et al., 2014). Besides, positive TSRs helped build efficient and effective communication between teachers and students. A positive communication process allowed teachers and students to freely share thoughts and deepen their understanding of each other. This was a virtuous circle that enabled students to experience a deeper sense of wellbeing in campus life.

Furthermore, positive TSRs helped disadvantaged students to achieve in the learning process (Jennings & Greenberg, 2009). Teachers were more inclined to assist students with difficulty when positive TSRs were established. For instance, teachers might change the course design, provide special learning activities. As a result, disadvantaged students progressed and SW is likely to increase (Cahill et al., 2014). In short, positive TSRs positively impacted on SW because of constructive interaction between teachers, students and the learning environment.

4. Positive teaching practices and their impact on wellbeing.

Positive teacher practices, such as encouragement, respect and patience, impact on teaching, irrespective of the teaching process, environment or outcomes. Such practices result in positive TSRs.

Jamal et al. (2013) found that positive TSRs were important for SW. They were associated with positive student outcomes, such as affective, behavioural and cognitive outcomes (Kidger et al., 2012), which were important elements of wellbeing. More importantly, students were less likely to suffer from depression as a result (Hughes & Kwok, 2007).

5. Stating implications and future actions

In my teaching context, my colleagues and I explored the role of TSRs on SW in developing countries. We used social and emotional learning (SEL) programmes, which included teaching students the necessary skills to increase self-awareness, self-management, social awareness, social management and critical and creative thinking (Cahill et al., 2014). And as suggested by Cahill et al. (2014), we adopted a whole-school approach such as building a responsible environment, using positive classroom management methods, supporting high-quality teaching exercise, adopting precise social and emotional skills teaching and providing more support to the necessary students. We believed that these methods were the key to increasing SW.

In terms of future action, we think the most crucial step is to attempt to establish positive TSRs. This was inspired by the educational context of developing countries, where it is the norm for many students to be neglected in the educational system, such as is the case in many underdeveloped areas of China. These children do not have parental support or lack a stable learning environment or adequate learning resources for the development of their wellbeing.

As positive teaching practice is beneficial to SW, I am determined to proactively promote emotional involvement, increase self-efficacy, facilitate effective communication with students to improve their wellbeing. Meanwhile, I intend to further my research for a theoretical framework and relevant expertise while adhering to the whole-school approach and SEL programmes. This will allow me to apply more knowledge to the promotion of SW.

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Application of Contemporary Art Language Form in Dongguan Traditional Food Brand Design

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Abstract: With the development of The Times, the progress of society and the continuous improvement of the level of science, technology and culture, the expression forms of artistic language are also diverse, and image symbols play an important role in the visual communication of People's Daily life. For example, image symbols such as advertising, photography, design, media and movies have occupied people's lives. Especially in the expression of image symbols, people are impressive in the traditional food brand design in Dongguan. Nowadays, a variety of art forms make the presentation of art more dynamic and complex. A variety of art works are presented in the public's view in different appearances. This paper studies the forms of contemporary art language to understand the elements and applications of art language in the design of traditional food brands in Dongguan.

Keywords: Contemporary art language form; Dongguan traditional food; Brand design

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1. Combining the meaning of contemporary art language form and Dongguan traditional food brand design

There are many classifications of language art, the classification standards are also very complex, and the application is also very wide. People prefer to receive and transmit visual images, and it is more widely used in advertising design. This phenomenon also extends to more areas. With the continuous development of finance and commerce, consumer culture is increasingly prevalent. Contemporary art language is also a major creative language form in the design of traditional food brands in Dongguan. This creative mode has been widely used in the creative inspiration of brand designers, whether it is blindly following the trend or successfully using symbolic forms to create. The rapid development of science and culture, to a certain extent, promotes the high prosperity of contemporary art, and also promotes the transformation of contemporary art language. The traditional food brand design of Dongguan integrates the artistic rendering of modern language art form, which can highlight the traditional food impression of Dongguan characteristics. The expression of modern language in the design concept of traditional food brands in Dongguan can not only break the old impression, but also show the people with a new look. For the future development and product positioning of the enterprise can better show its own advantages, to establish a permanent brand in the market share of a place. Through the propagation of new media, television advertising, brand logo design to establish traditional food brand image. Dongguan's traditional food represents not only a kind of food, but also a kind of feelings for several generations. It is of great significance to build dongguan's traditional food brands to make traditional food attract more young people and return to the public's vision.

2. Contemporary art language form in dongguan traditional food brand application form

The prosperity and development of contemporary art language reflects the richness and diversity of Chinese art culture. Different forms of art language can express different emotions. It also plays a positive role in the design concept of traditional food brands in Dongguan. First of all, the expression of artistic language and the style of dongguan traditional food should complement each other. Secondly, the positioning of dongguan's traditional food brands should conform to the aesthetic concept of the modern public. Dongguan has a long history of delicacies such as Qifeng cured pork, Li Quanhe, Ai Zixiang, Deng Deji and Xing Linchun. Among them, Dongguan's "love fragrance" sausage has been more than 100 years, it is the fifth batch of "Guangdong old name". In 2014 and 2015, the production technology of the tanchao was selected in the designation of the municipal intangible cultural heritage and the provincial intangible cultural heritage list. Based on the above image characteristics of traditional time-honored brands, the elements of brand design can refer to the characteristics of historical development as the reference basis, such as "Qifeng Preserved flavor", Qifeng Preserved Meat Factory was founded in 1954, producing and selling dongguan's specialties with strong local characteristics: sausage, preserved meat and preserved duck. For traditional food brands, it is necessary to consider market positioning and corporate image

from the aspects of the development history and historical events of the enterprise. It is necessary to showcase the corporate pulsation of enterprises, but also for a long time for the image of the future development. The elements of brand design can be integrated into traditional cultural elements, and it can also be integrated into the artistic language of Western classical culture. The purpose is to create a new impression of a new impression.

3. Contemporary artistic language and the implication of dongguan traditional food brand design

The concept of food brand design should be further studied in combination with the types and significance of dongguan traditional food. Different food brands are different from other industrial brands, and the design of food brands should meet the direction and positioning of food. In particular, traditional food is a kind of national emotion food bearing traditional culture and folk history. The concept of traditional food brand design should learn from the historical roots of urban culture. Actively reference domestic and foreign artists, sculptors, illustrators and architects to create projects, and use food as the theme of art language form. I hope that through the creation of designers and artists, exploring and excavating the creative inspiration of Dongguan traditional food brands, there are richer visual and auditory performance, breakthrough in traditional imagination, express food with contemporary art. The renewal and progress of the language form of Chinese contemporary art has the significance of The Times, which also shows that the art form of traditional culture is also developing constantly. Therefore, the perfect integration of contemporary art language and traditional culture conforms to the pace of The Times and society, making it the driving force of art progress.

4. Build brand image build brand confidence

Brand faith is a good feeling of consumers who have a long-lasting consumer for the brand through advertising, new media, public opinion and consumer experience. And get a spiritual enjoyment of pleasure and belonging after consumption behavior. Traditional food is a feeling of local characteristics, which often shoulders an important responsibility of a regional image and impression. The concept of traditional food brand design in Dongguan should adhere to the concept of inheriting traditional culture, innovating management concept and deepening image portrayal. Through the form of beautification and publicity in contemporary art language, there will be a traditional food of Dongguan's characteristics to the whole world, and the brand design of traditional food has promoted the formation of the faith of enterprises to establish national cultures.

From a historical perspective, we will find that the same brand has different characteristics in different periods, but the pursuit of excellence is the same. At the same time, the language of art and culture also affects the design style of products, the quality and taste of brands, as well as the competitive advantage and development of brands. Therefore, it is the most important thing for each brand to continuously improve product quality and provide consumers with high-tech, high-quality and high-grade products. If brand innovation is reflected in the depth of detail, brand loyalty will be significantly improved. As an entrepreneur said, if Chinese companies do not have a brand, they must have a brand confidence. The competition of the company is the competition of the connotation. Building brands into beliefs is one area. The ultimate success of a brand depends on whether the spirit and belief of its products are strong enough to touch the hearts of consumers, and whether it dares to innovate before upholding the belief. To enrich the brand beliefs through a variety of artistic languages, a single expression is far from enough, establishing a brand image is a spiritual fit, which can bring spiritual resonance to consumers. Let the brand establish a positive communication of a spiritual culture, give brand vitality.

5. Conclusion

Taking Dongguan traditional food as a clue, exploring traditional food and human feelings and close relationships of this city, and the cultural heritage and era of cultural inheritance behind the food brand are unforgettable. Modern art has shifted from form to performance art, decorative art, image art and new media art as communication media. Under the background of Chinese traditional culture, Chinese contemporary art language of its own creation of regionality and nationality, adhere to the open cultural position and judgment, and with the context of contemporary art and visual language form organic transformation, so as to achieve the perfect combination of art and traditional culture, show the spiritual world of human emotion and national history.

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Post--colonialism of Robinson Crusoe

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Abstract: Robinson Crusoe is a realistic fiction. From the perspective of realism, Robinson's perseverance, courage and never give up spirit on the desert island inspired generations of colonists and explorers. From the point of view of post-colonialism, Daniel Defoe reflected the imperialism and colonialism of that time through this work. Robinson's occupation, development and rule of the desert island is exactly the process of colonizers creating colonies, which is a true portrayal of colonizers' overseas expansion and occupation. This paper makes a deeper interpretation of Robinson Crusoe and analyzes the colonialist thoughts in it.

Keywords: Post-Colonialism; Colonialist Thoughts Expansion

1. Introduction

Post-colonialism is the central idea conveyed by Robinson Crusoe. Robinson is full of adventure spirit, he defies danger and overcomes difficulties with his bravery and wisdom, which is also the main characteristic of Britain during the Industrial Revolution of the 18th century. From transforming the desert island alone to saving Friday, taming him and submitting to himself, Robinson's series of activities truly reflect the need of the Industrial Revolution. At that time, Britain opened an era of foreign plunder and colonial expansion. With the rise of the bourgeoisie and occupying the dominant position in the country, Robinson Crusoe cater to the psychological and spiritual needs of the bourgeoisie and strengthen their ambitions for external expansion. Through the analysis of Robinson's 28 years of life and activities on the deserted island, this essay presents a vivid picture of conquest the nature from British colonists. Robinson Crusoe is a typical literary work describing colonialism.

2. A Brief Review of the Post-colonial Theory

Post-colonialism, also known as post-colonial criticism, started in the late 1970s, flourished in the mid- to late 1980s and late 1990s^[1]. After the end of the Second World War, with the decline of the colonial imperialist countries, the former colonies and semi-colonies gained political and military independence, however, colonialism did not die out. It continued to exist in the form of economy and culture. This theory has the following main characteristics:

Oppose Western-led narratives and advocate alienation narratives: Although the countries of colonies and semi-colonies achieved political and military independence after the end of World War II, the knowledge and theories about the essence of society belonged to the system of western colonialism which still influenced the colonial people who used them to analyze their own culture. The purpose of post-colonial criticism is to awaken people's subjective consciousness and completely eliminate the remnants of colonial culture.

Oppose Western cultural hegemonism and promote pluralist culture: Ending up with the World War II, the colonial countries lost the legal means to enslave the colonies and semi-colonies countries, which they used cultural infiltration, ideological indoctrination cultivating their own cultural elites to seek the dominant position in the world culture, and hoped to gain political and economic benefits through these means. The post-colonial critics strongly condemned the global cultural hegemonism, stressed that all national cultures had their own characteristics, the autonomy of each national culture should be respected in international society and firmly resisted bullying the weak in the culture field.^[2]

Connotation of post-colonial Criticism: The essence of post-colonial criticism is against Eurocentrism and revolts the cultural hegemony promoted by developed western capitalist countries to the developing countries.^[3] Post-colonial criticism focuses on the analysis of the methods used by the colonists to rule the colonies, the influence of the language, culture and religion of the colonists on the colonies, and the traces of the colonists leave behind in all aspects after the independence of the former colonial countries.^[4]

3. Disregarding for Friday's original culture

Robinson's cultural penetration: After living alone on the desert island for 25 years, Crusoe saves the cannibal -- Friday who is an aboriginal of the island founded in an American cannibals' meat feast. From then on, Crusoe carries out the cultural infiltration and influences to Friday. Culture plays a very important, really indispensable role in empire building.^[5] Robinson's cultural penetration to Friday lays a good foundation for establishment of the empire. Robinson rescues the victim, never asks his name, according to the European law, it is Friday, so he is named Friday, which actually distinguishes his hierarchical relationship with Friday. 'Yes' and 'No' demonstrate that Robinson's supremacy of hegemonism and Friday has no right to own his thinking and opinions.

First, I made him know his Name should be Friday, which was the Day I sav'd his Life; I call'd him so for the Memory of the

Time; I likewise taught him to say Master, and then let him know, that was to be my Name; I likewise taught him to say, YES, and NO, and to know the Meaning of them.^[6]

Robinson is based on the standards of European civilization to ridicule and disregard Friday's civilization unscrupulously, even the days of living with Friday completely denies his original culture. Between the conversation of Robinson and Friday, they talk about the creator of all things, which Friday believe that the one is old Benamuckee who is the omnipotent, and controlling their nation's destiny, however, Robinson contradicts his comments, believing it is a trick. Benamuckee is the sacred creator of Americans and the source of everything in the American culture, just like the God in the European civilization, but Robinson's disdain for American civilizations and slander of their deity reflect his disregard for American civilizations. Edward W. Said expressed in *Orientalism* that all cultures had organic and internal relations, which were bound together by certain spirit, natural atmosphere or national concept. Outsiders can only enter into a certain culture by means of internal identification of history.^[7] In fact, the religions and cultures of different ethnic groups have more or less common origins and kinship.

But I took it by another handle, and ask'd him who made the Sea, the Ground we walk'd on, and the Hills, and Woods; he told me it was one old Benamuckee, that liv'd beyond all.^[8] I endeavour'd to clear up this Fraud, to my Man Friday, and told him, that the Pretence of their old Men going up the Mountains, to say O to their God Benamuckee, was a Cheat.^[9] Robinson's cultural infiltration to Friday embodies all details of daily life. The first is to change his the original habits. Friday and his tribe have the custom of being naked, however, when Robinson bring him back to the place where he lives, he gradually cultivates his behaviour of wearing clothes and transforms his horrible way of eating human flesh so that Robinson take Friday hunting a sheep in order to let Friday taste the flavour of cooked food.

What would do there said I, would you turn Wild again, eat Mens Flesh again, and be a Savage as you were before? He lookt full of Concern, and shaking his Head said, No no, Friday tell them to live Good, tell them to eat Corn bread, Cattleflesh, Milk, no eat Man again.^[10]

Next is to train labor technology to let him know the meaning of work. Robinson teaches him to sift grains and tells him that they are used to make bread, after a period of training, Friday is soon able to do the things proficiently by himself. Thirdly, Friday is enlightened to learn English, which is one of the most important ways of Robinson's cultural penetration. Language is the most perfect tool of the empire and the carrier of culture.^[11] Speaking a language means consciously accepting a world and a culture.^[12] Due to master English, Friday can read the Bible fluently and become a devout Christian, it is all thanks to Robinson's wonderful cultural colonization. In short, for the attack of the original culture from Friday and vigorously promoting European culture, Friday gradually is reconstructed the product of European civilization, become the spokesman of Robinson and European culture, acts as the proper assistant for Robinson to establish the desert empire.

4. Development a desert island empire

During the 28 years that the protagonist stays on the desert island, he continues to expand the geographic space of the empire, weapons, the Bible, and European civilization have become powerful conditions for Robinson to enlarge its territory and increase population. When he leaves the island, he chooses an agent to manage it and establishes the embryonic form of the empire. Even leaving the deserted island, he has never stopped to supply his spiritual and material help, replaces agents, and further promotes the establishment of the deserted island empire. Finally, combining with violence and culture, helping with self-effort and agents, the building of a hegemonic empire on the deserted island is completed.

Build the island nation: On the desert island, the first step about creation of the Robinson Empire is to extend the geographical space and constantly learns the distribution of animals and plants. When contacting with others, he has always recognized himself owning the strongest culture, and consciously advanced European civilization, however, at the same time, the ancient American civilizations—language, culture, and religion which are regarded as otherness and Robinson makes lots of effort to obliterate them. The colonists not only control political and military to the colonies, but also devote themselves to destroy the native culture. With the growth of population, Robinson makes himself as the only dominator of the island so that his own colonial rule is founded originally, based on these that the grand blueprint of the island nation is beginning. By use of Friday and his father, the islanders grow in number progressively who must swear to the Bible and sign a contract to obey Robinson's rule. At this point, the embryonic form of the desert island empire is formed. After returning to a civilized society that is twenty-eight years away, Robinson still cares about the island, then eight years later, he sets foot on the desert island again with manpower, material resources and weapons, which he brings to the island that is not only the necessities for life and survival, as well as the future development needs of artisans, to ensure that the residents here can live and work in peace and contentment. Robinson, who comes to the desert island empire again, acts both as the governor of the island and a condescending bystander. The consolidation of the island nation's rule by violence is not directed by Robinson himself, but through his two-term agents. Through a fatal blow to America savages, a solid foundation is laid for the construction of the empire.

Here I stay'd about 20 Days, left them Supplies of all necessary things, and particularly of Arms, Powder, Shot, Cloaths, Tools, and two Workmen, which I brought from England with me, a Carpenter and a Smith.^[13] Besides this, I shar'd the Island into Parts with'em reserv'd to my self the Property of the whole, but gave them such Parts respectively as they agreed on.^[14]

Friday's speechlessness and acting as Robinson's agent: With the cultural infiltration of Robinson, Friday changes the original living habits, learns English, converts to Christianity, and becomes a civilized person of full European standards and the spokesperson of European civilization. Friday vows never to leave Robinson, would rather pays the price of his life than to return to the previous mode of life, moreover gladly to be transformed into the Robinson's lobbyists, and he follows Robinson's command, kills his own compatriots, but there is not mercy. Robinson's cultural penetration has achieved the expected effect results.

Other agents: The external factors of the empire tend to be stable supported by violence, as the area of the desert island is in a state

of uninterrupted expansion, Robinson relies on other agents to improve the internal factors of the empire—the cultural penetration of the imperial subjects and their conversion to western civilization. First of all, the original inhabitants of the island enlighten other thirty-seven savages; secondly, by the agent of the island to implement the influence of Christian ideas; finally, in order to avoid unnecessary disputes in the future, the agent distributes the lands fairly to everyone for cultivation, but they only have the right to use it, Robinson collects the rent. At this time, Robinson only needs to control the overall situation and no longer deal with trivial matters. He has totally become an emperor, in this situation, the desert island empire is completed with the combination of violence and cultural penetration.

5. Beautification and Demonization

About Robinson Crusoe, whites are rational, wise, and promises, while the black men are a combination of ignorance, barbarism and evil. The captain, Robinson meets during his first adventure who is full of reason and courage. The second captain he encounters who is generous and upright. The author uses lots of words to describe the third captain who is the Portuguese captain that not only saves Robinson, but also helps him raise funds, forms a large-scale plantation in Brazil, as an assistant manages it for a long time, even though Robinson is on the desolate island.

In contrast to this, the author demonized Africans, Americans and Chinese in varying degrees through Robinson's words. When he arrives in Guinea for the third time, Robinson is detained as a slave by pirates for two years. As he flees, he passes through the territory of Africa. Before he has seen and contacted Africans, Robinson had compared blacks to lions and tigers, who ate the flesh of his own compatriots, and was indistinguishable from beasts. In fact, this is the value judgment of Orientalism which is a prejudiced way of thinking or system of knowledge. The author disparages Africans, Americans and Chinese in the guise of what the protagonist has seen and heard, narrating them as the embodiment of ignorance, cruelty and indulgence, and providing an opportunity to publicize European civilization and rationality.

This Convinc'd me that there was no going on Shoar for us in the Night upon that Coast, and how to venture on Shoar in the Day was another Question too; for to have fallen into the Hands of any of the Savages, had been as bad as to have fallen into the Hands of Lyons and Tygers; at least we were equally apprehensive of the Danger of it.^[15]

6. Conclusion

Robinson Crusoe is not only an adventure novel, but also a colonial novel that condenses the development of the bourgeoisie. In order to beautify their behaviour of aggression, the colonists are spared no effort to prove to the world that what they bring to the world is civilization, enlightenment and the salvation of barbaric nations. Robinson Crusoe complies with the requirements of the times and beautifies the overseas plunder of capitalism. Through this novel, readers can clearly understand the nature of colonialism and the means adopted by the colonists in the process of colonization. The post-colonial theory is the thesis of this essay, mainly discussing cultural colonization and cultural hegemony.

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The Challenge to Patriarchy and Colonialism in *Wide Sargasso Sea*

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Abstract: In *Wide Sargasso Sea*, Jean Rhys illustrates Antoinette's experience and sufferings throughout her life. This article intends to focus on the challenge to patriarchy and colonialism in *Wide Sargasso Sea* by making a detailed analysis of the male character Rochester. This article can generally be divided into two parts. Firstly, it explores author's attempt to challenge the authority of the patriarchal society by depriving the male protagonist's right of name and exposing the ugly nature of this patriarchal mercenary. Secondly, it analyses the author's effort to subvert the authority of colonialism by deconstructing the male protagonist Rochester's identity as a white European colonist. This article argues that *Wide Sargasso Sea* demonstrates Rhys's revolutionary subversion of the authority of patriarchy and colonialism.

Keywords: *Wide Sargasso Sea*; Rochester; Patriarchy; Colonialism

1. Introduction

Jean Rhys was born in the West Indies in 1894. As an important post-colonial writer in the 20th century, she creatively writes *Wide Sargasso Sea* as the prequel to *Jane Eyre*, reflecting the subversive characteristics of the post-colonial novel. Jean Rhys demonstrates her superb writing skills and shows her ruthless disclosure to colonialism in *Wide Sargasso Sea*, making *Wide Sargasso Sea* a companion piece to *Jane Eyre* in both ideological and artistic terms.

Foreign scholars' criticism and analysis of the book mainly focus on race relations, slavery, women status, post-colonial discourse and so on. Domestic scholars mostly discuss from the perspectives of narrative strategy, identity of the other, feminism and so on, and few of them have conducted detailed analysis of the image of Rochester. Based on the current research situation at home and abroad, this paper will make a detailed analysis of the male character Rochester, so as to explore the author's challenge to the authority of patriarchy and colonialism in this novel.

2. The challenge to patriarchy

The spearhead of this book is directed at the patriarchal society, and the whole book is full of accusations and resistances to patriarchy. First of all, in *Wide Sargasso Sea*, the author deprives the male protagonist's right of name. According to Jacques Lacan's psychoanalysis theory of self-construction, the construction of self-identity lies not in the individual itself but in others, and "others' discourse" is very important for identity construction. In "others' discourse", the name is crucial. It is his or her call to the name of "I" that makes "I" align with this name and thereby confirm the identity.^[1] So the name is the most basic status symbol of one individual. In *Jane Eyre*, the crazy woman in the attic is not called Bertha until the end of her life, and she is unknown before. Besides, Bertha is not her real name. Rochester gives this name to her and insists on calling her this new name instead of her real name Antoinette. Therefore, in *Jane Eyre*, the crazy woman is deprived of the right of name. However, in *Wide Sargasso Sea*, Jean Rhys puts Rochester in the situation of no name. In this whole book, from the beginning to the end, Rochester's name never appears. The reader can only infer that this man is Rochester through the intertextuality of *Jane Eyre* and *Wide Sargasso Sea*. Antoinette plays a supporting role in *Jane Eyre* and her deprivation of name can make sense logically. But, as the male protagonist of *Wide Sargasso Sea*, the deprivation of Rochester's name is an unconventional treatment. Actually, by erasing Rochester's name, Rhys's real intention is to deprive the basic name right of Rochester, so as to defy and subvert the patriarchy.

In order to challenge the patriarchy, Rhys not only deprives the name right of Rochester, but also tears away Rochester's hypocritical mask of personality. In Charlotte Brontë's writing, Rochester is a gentleman who breaks the prejudice of aristocratic society in pursuit of love. But in *Wide Sargasso Sea*, Rochester's selfishness and cruelty are openly revealed. In this novel, we can see that Rochester is self-centered, alienated and cruel in his heart, and he has a strong desire for control and revenge. Therefore, the positive male image in the traditional patriarchal canon is no longer exist. Although Rochester is a white British man, he has no status in his country. As the second-born son, he is marginalized and rejected by paternal patriarchy system, so he is forced to come to West Indies to find wealth. From the very beginning of Rochester's appear in this novel, he is depicted in a downcast image. He has to come to the former colony to get married in order to obtain property. Although he feels resentful for this in his heart, he can do nothing to resist it. For his newly married wife, he feels that she has bought him. As a white British man born in a patriarchal society, Rochester's male dignity has been subverted. He is no longer a man of absolute authority, but a man of low status in a foreign land. Besides, he

has no independent thinking, and he is obedient to others mind. After receiving Daniel's letter, he becomes completely distrustful of his wife, thinking that she is a mad and unruly woman. At this point, his image has changed from the initial desolation to cruelty. He is cold and violent towards his wife, making the naive Antoinette hopeless. Besides, in the dominant posture of male colonist, Rochester also renamed Antoinette with the British woman's name Bertha, denying her self-identity and rights, in order to achieve a kind of control and oppression. In this regard, Antoinette sees through the truth, "Bertha is not my name. You are trying to make me into someone else, calling me by another name. I know, that's obeh too".^[2] It is Rochester's exploit, persecution and abandonment that directly cause Antoinette's madness. Thus the positive image and authority in the traditional patriarchal canon are overturned.

Moreover, Antoinette's pure and sincere love further emphasizes the ugly nature of this patriarchal mercenary. Antoinette yearns for true love. When Rochester appears, she thinks that he is the one who could let her rebirth. On the other hand, in Rochester's eyes, love and marriage are nothing more than cash cows. The so-called noble British man do not rely on his own abilities to earn wealth, but make woman as his source of money. Here, the irony effect is evident. At this time, the dignity of patriarchy is no longer exist, and the ugly face of Rochester is exposed clearly. In addition, because Rochester himself is a victim of the patriarchal inheritance system, his abjectness and ugliness are also caused by the irrational system of the patriarchal society, which also subverts the patriarchal authority from the inside.

3. The challenge to colonialism

The author attempts to challenge the authority of colonialism and hegemony by deconstructing the male protagonist Rochester's identity as a white European colonist. The first is the internal collapse of the authority of the colonist. The previous image of colonist is often brilliant, brave, powerful and full of ambitions. But Rochester, the colonist described by Rhys is humble, cowardly and hesitant. As the second son of the family, Rochester is unable to inherit property due to the British system of succession. He has to follow his father's arrangement to come to Jamaica to marry Antoinette, with the purpose of obtaining a dowry of 30,000 pounds, in order to avoid becoming poor. He is less as a colonist than as an outcast, and he is the abandoned son of his family and the British empire. This so-called noble colonist comes to the colony for money, while the rich colonial woman is extremely indifferent to money. There is a strong contrast in their need for money and their attitude towards it. The superiority and the inferiority are clearly showed. It is a heavy blow to the dignity and authority of the colonist of the empire. In addition, Antoinette once refuses to marry Rochester, and Rochester can only beg for mercy and speak good words to Antoinette in order to win her back, which also weakens the pride of the colonists. The power relationship is reversed here, and the controller becomes the controlled. Rochester don't have the initiative any more.

In addition, in West Indies, the colonist feels that the people, animals and even scenery on the island are against him, and he is disturbed all day long. He also thinks that "It seemed to me that everything round me was hostile. The telescope drew away and said don't touch me. The trees were threatening and the shadows of the trees moving slowly over the floor menaced me. The green menace. I had felt it since I saw this place. There was nothing I knew, nothing to comfort me ". Therefore, we can see that in West Indies Rochester not only does not show the heroism of colonists, but because of his cowardice, he feels that the people and things around him are all enemies. His series of inner monologues deconstruct the supreme authority and superiority of European white colonists from the inside.

Besides, Rochester is also threatened by the colonial "subalterns".^[3] As a black maid in West Indies, Christophine never shows fear and concession in front of the colonist Rochester. Instead, she has been fighting with him openly and secretly. The conflict begins as soon as the two meet. Rochester describes Christophine in this way: " She looked at me steadily, not with approval, I thought. We stared at each other for quite a minute. I looked away first and she smiled to herself...". In the first eye-to-eye contest, Rochester is at a disadvantage. Christophine takes the colonist down. In a conversation with Antoinette, Rochester admits that he is indeed a little afraid of Christophine. Later, he sees an introduction about obeah witchcraft in one book, and it makes him more afraid of Christophine and he worries that she would use witchcraft to turn himself into a "zombi". The West Indian "subalterns" actually put pressure on the colonist invisibly, although Rochester is displeased and even angry, he can do nothing to change this situation. Facing with Rochester's expulsion, Christophine holds her head high, with her hand on her hips, she responds: " Who you tell me to go? This house belong to Miss Antoinette's mother, now it belongs to her. Who you tell me to go"? At this point, the authority of the colonialism is no longer exist, and the colonist Rochester can only return to Britain.

4. Conclusion

Generally speaking, in this novel, from the intentional depiction of the white male image Rochester, we can find Rhys's attempt to challenge the patriarchy and colonialism that exist in the real world. *Wide Sargasso Sea* demonstrates Rhys's revolutionary subversion of the authority of patriarchy and colonialism.

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On the Effectiveness of English Teaching in Junior Middle School from the Perspective of the Creation of Situation

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Abstract: Under the guidance of constructivism learning theory and situated cognition theory, this study takes the teaching videos of high quality English classes in junior middle school as the research subjects. It is found that there are some problems in the creation of situations in junior middle school English classroom, such as the ambiguity of teaching situation, the simplicity of teaching situation and the inadequacy of communication in situation. Furthermore, it puts forward the corresponding and effective strategies to improve the teaching effect of the creation of situation. This study provides a reference for teachers to create a good teaching situation.

Keywords: The Creation of Situation; Junior Middle School; English Teaching; Effectiveness

1. Introduction

For a long time, “time-consuming and inefficient” has perplexed our foreign language teaching (Wei, 2015). It is motivating students to take the initiative and dynamically participate in the class that counts. However, some teachers’ clear understanding of the teaching content and objectives still does not solve such problems in terms of the hardware conditions created by the situation. As a result of the above background, the research on the creation of situation in junior middle school English language courses is brought up.

2. Theoretical Basis

2.1 Constructivism learning theory

In the 1990s, constructivism learning theory began to rise; Piaget and Vygotsky were the pioneers of the theory. They proposed the theory of epistemogenesis (Piaget, 1977) and the theory of psychological development^[1] (Vygotsky, 1978).^[2] As a further development of cognitive school, constructivism learning theory abandons the passive connection of students in traditional learning theory. In the constructivism learning theory, “situation” is one of the four elements of the learning environment (Luo, 2015).^[3]

2.2 Situated cognition theory

The “situation” of created situation is essentially an environment of optimization, which is an environment that encourages students to move in. William J. Clancey (1995) believes that knowledge is not an abstract concrete object, but an activity based on social context; knowledge is an interaction constructed in the process of interaction between the individual and the interactive environment.^[4]

3. The Problems Existing in the Creation of Situation in English Teaching in Junior Middle School

Lesson Presentation:

Ambiguity of English teaching situation

Teaching Content: Unit10 I’d like some noodles.

Present a picture of a certain restaurant to lead in the topic and some new words. The teacher presents food pictures and plays the tape. The teacher gives the basic sentence pattern. A: What kind of ...would you like? B: I’d like..., please. A: What size would you like? B: I’d like a small/medium/large bowl.

The teacher asks students to work in pairs, imagining they are in a restaurant. One person is the waiter, and the other one is the customer. Then let them perform the conversation in front of the classroom.

A: What kind of noodles would you like?

B: I’d like beef and tomato noodles, please.

A: What size would you like?

B: I’d like a small/medium/large bowl.

Show three bowls of noodles in picture. Ask: What ingredients are in these noodles?

In the introduction of western diet, western food culture and China should be compared, so as to carry out the conversion between

the two. Due to the lack of clarity in the teaching situation created by the teacher, students are still unable to really understand the knowledge points in the situation.

Simplicity of English teaching situation. Teaching content: Unit 7 Will people have robots?

The teacher shows some robots' pictures to students. According to these, let students make a sentence: I will have a robot in my home. And by copying the example, students make two another sentences when it is in the future.

Everything will be free. Books will be on computer.

From these three sentences, students can see the structure. Then, the teacher gives the definition of the simple future tense. That is, it indicates the action or condition of the future. Next, the teacher guides students to change all kinds of forms. The positive form: will + the basic form of verb + (object) + other elements

E.g. People will have robots in their homes. The negative form: will not= won't

E.g. People will not (=won't) have robots in their homes. The general question: put will in front of the subject of the sentence and end with a question mark.

E.g. Will people have robots in their homes? Yes, they will. / No, they will not.

Present some pictures to instruct students to make some sentences by using "there will be"

There are some deficiencies in situation teaching in this lesson. First, teachers' preparation for classroom materials is slightly inadequate. The second is that the situation creation form is relatively single, not combined with the game and other forms to create the situation. Third, situation teaching of some teaching links do not work well.

Insufficiency of communication in English teaching situation. The above activities are designed by the teachers are close to the students' life and current cognition. But the teacher does not grasp the time of the classroom activities well, resulting in a small number of students' participating. Communication's function is not well realized.

4. The Countermeasures for the Improvement of the Effect of the Creation of English Teaching Situation

4.1 Designing the situation according to the teaching goals and content

Creating situation is wished to seek for the shared effects and better realize the teaching goals for junior middle school, so the situation targeted is set up carefully, and combine closely with the content of the text to improve students' ability of autonomous learning and cooperative communication in the appropriate situation. According to the contents, the teachers create situations by the way of showing objects, pictures, models and other methods to inspire students' divergent thinking and cultivate students' ability of language perception.^[5]

4.2 Diversifying the creation of English teaching situation

(1) Using objects and props to create situations. If the teacher created the situation of ordering meals in this class, it attracted the attention of the students as soon as. It is close to the life experience of the students, and in line with the junior middle school students' cognitive level and psychological development level.^[6]

(2) Using excellent songs to create situations. It is very rapid for junior high school students in physical and psychological growth. For that reason, teachers should actively make the most use of these excellent songs to create situations, stimulating students' motivation, and helping students' concentration.

(3) Using game activities to create situations. Immersed into the game, all students excitedly participate in the game activities. In the game activities, teachers should create different situations, where they have learned unconsciously, and let students master language knowledge and use language knowledge in the game, which actively guide students to participate in situation's activities.

(4) Using role-playing to create situations. When using role play to create situations, teachers could organize students to perform in different roles which integrate the vocabulary, grammar and sentence patterns taught in the classroom into specific situations, where the students choose the roles they like in the situations created by teachers.

5. Conclusion

Based on constructivism learning theory, situated cognition theory and the analysis of the creation of the situation, the reasons for the above issues in situation's creation are that instructors do not appreciate the creation of situation deeply enough, the teaching task is too heavy, and the created situation's time is limited. Therefore, teachers should not only deeply learn and master the ideas and principles of creating situation, but also take students as the main body in the class of situation and constantly optimize the method of creating situations to erect a good learning situation for student.

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Research on Online Game Marketing Strategy Based on Consumer Buying Intention in Guizhou of China

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Abstract: With the rapid development of the online game industry, more and more enterprises have begun to attract more consumers to use their services and product. In Guizhou, the online game market could be one of the critical developments in the entertainment sector for the number of young consumers. This research focused on investigating how online marketing empowers consumers to market the products, study the various tools and techniques for influencing consumer purchasing decision and brand perception and suggest policies to game developers for game enhancement in the online game industry.

Keywords: Online Marketing Strategy; Consumers' Buying Intention; Online Game

1. Introduction

The current development of China's online game industry has gradually entered a period of conscious integration. Online game consumption is becoming more and more popular in mainstream games, consumer attitude to online games and its exploration behavior in Guizhou has not been due attention. It is highly challenging to market the proper online consumers with their interest in using the online game providers. The focus of enterprise development will shift to the original content. It is more and more critical for the operators of online games to explore the behavior of online players and provide these consumers with the proper programs based on their best interests.

2. Theoretical Basis

2.1 Model of Decision-Making Process (Wang and Ierapetritou. 2016).^[1]

There were five aspects to the consumer's decision-making process: Confirm demand, collecting information, assessment program, purchase behavior, after-purchase results. However, in decision-making, consumers produce consumer behavior based on internal and external actions, which are often influenced by individual factors such as motivation, perception, Experience, personality, interpersonal interaction, organization, and social, physical environment.

2.2 Model of Cognitive Evaluation Theory (CET) (Shi 2016)^[2]

A type of psychological theory that focuses on identifying external results' influence on internal motivation. CET puts forward the concept of "intrinsic incentive," also known as "intrinsic incentive." The theory suggests that when people have intrinsic motivation (such as enjoying the Experience), they are more likely to participate in an activity.

2.3 Rational Behavior Theory (Sarver 1983)^[3]

The concept of rational behavior theory could be used to predict and parse behavioral attitudes and their intents. The theory pointed out that the direct factor influencing the actual behavior of individuals is the intention of behavior. The behavioral definition refers to the individual's subjective probability of adopting a specific behavior, which feeds back the individual's willingness to adopt a particular behavior. The individual's behavior, attitude, and subjective norms affect the behavioral intention.

2.4 Technology Acceptance Model (Lee 2003)^[4]

The perceived usefulness and ease of use in the technology tolerance model replaced the subjective norms in the past rational behavior model. Cognitive ease of use has a positive impact on cognitive usefulness and usage attitude. The customer's intention to use is determined by the attitude, which will affect the customer's final usage behavior.

2.5 Concept of Immersion Theory (Csikszentmihalyi and Wong 1991)^[5]

The immersion experience is an emotional experience that an individual has a strong interest in an activity or thing and can express. Immersion theory initially focused on psychological research. Later, it has been widely studied in online games and pedagogy and has been widely used at the level of customer behavior

3. Understanding of Improvement for the Online Game Marketing Strategy Based on Customer Buying Intention

3.1 Investigate the way online marketing empowering consumers to market the products they feel about

purchasing:

The study explores the existing online game consumption behavior results and helps people better understand the influence factors of online game consumption intention and their mutual influence relationship.

3.2 Study various tools and techniques marketing managers use to influence consumer purchasing decisions and brand perception by utilizing consumers as their market assets:

Based on three different essential theories relating to affiliation identity that affect buying intention. A good understanding of the combination of cognitive evaluation theory, rational behavior theory, technology acceptance model, and immersion theory could explore the impact of immersive Experience and fun experience on customer willingness and online consumption from the game process.

3.3 Suggest game developers get the appropriate policy in enhancing online game future development:

The study will provide domestic network game operators with a set of operational processes to learn from the wishes of consumers and provide some suggestions for online game operators to segment consumers and implement targeted marketing programs for different consumers.

4. The Conceptual Framework for the Research Study

First The relationship between influencing factors of emotional Experience, game focus, positive attitude and self-identity, and immersive Experience; emotional Experience, game focus, positive attitude and self-identity, and fun experience; emotional Experience, game focus, positive attitude and self-identity, and buying intention; immersive Experience and fun experience, and purchase intention. Second Using regression analysis testing, all influencing factors are shown with significant influence on buying intention, immersive Experience, and fun experience.

5. The Countermeasures for the Benefits of Improving Online Game Marketing Strategy on Consumer Buying Intention

5.1 Emotional experience in-game flow

Emotional Experience refers to the exchange of emotions between the user and the incarnation in the game process. In the game, the user's home, through the manipulation of the game, a possibility to achieve the game match, the game incarnation experienced the scene, and the game results of the feelings brought about by the win or loss are through the game users behind him to bear.

5.2 Affiliation identity is positive for fun and immersion Experience

Enjoying pleasure refers to the user's Experience of comfort and enjoyment throughout the game. Incarnation is the user's life on all occasions, so the degree of affiliation identity is the basis of the game's fun. Because the attraction of the affiliation determines apostrophe recognition to a single individual and psychological satisfaction, if the affiliation can realize the user's psychological appeal, further enable the user to form an endorsement of the affiliation psychology, the incarnation can bring fun to the game users.

5.3 Fun and immersive Experience positively affect users' buying intention

The mediation effect analysis shows that having fun and immersing Experience is reflected in the prominent mediating role of affiliation identity on game users' buying intention and having fun. Immersive Experience appears in the effect of affiliation identity on game users' consumption willingness with chain mediation effect. This shows that in the impact of avatar recognition on game users' buying intention, part of it is directly affected by affiliation identity. The other part is affected by enjoyment and immersive Experience (Yang 2018).^[6]

6. Conclusion

The primary purpose of users through games is to get a sense of pleasure. Therefore, when users enjoy the game, they will increase the frequency of playing the game, and the possibility of purchasing game products will increase accordingly. Game essence is a crucial element of game fun. Users usually pay attention to the enjoyment of the game when selecting games. Therefore, game developers should pay attention to the creation of the game essence during game development. In detail, game developers should accelerate innovative game models to show users various game experiences; innovate game storyline design to increase user penetration; the current market should also pay attention to emerging games in the industry. Online gaming is an emerging trend that deserves future research. There are at least three marketing problems in online games: adverb games, hedonic consumption, and non-target market effects of games.

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The Study on E-Commerce Based on Agribusiness Model for Improving the Operational Satisfaction of Community Farming Business at Shouguang City, China

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Abstract: The rapid development of e-commerce changed consumer shopping habits and sales market structure. In the context of the rural revitalization strategy and the internet economy, more and more agricultural product sales companies utilized e-commerce platforms to expand their sales channels and hope to solve the problems of low efficiency and high cost of traditional e-commerce distribution and provide new channels for product sales. Due to the lack of standardization, enterprises' online and offline connections were not close enough for agricultural product circulation and customer satisfaction in the Shouguang City of Shandong Province, leading to the poor customer shopping experience and low satisfaction.

Keywords: E-Commerce; Agribusiness Model; Community Farming Business

1. Introduction

With the continuous improvement of people's living standards in our country, people have also put forward higher requirements for quality, safety, and greenness in agricultural products. Current agricultural industry management and supply cannot meet people's needs. This problem also needs to resolve a series of contradictions, including enabling small farmers and modern agricultural development to achieve an organic connection, promoting the practical improvement of comprehensive agricultural benefits, and further expanding the channels for farmers to increase income. The growth of China's agricultural industry e-commerce is still very lagging, and e-commerce can effectively promote economic development.

2. Theoretical Basis

2.1 Agricultural industry management e-commerce (Gao 2014).^[1]

The core of O2O e-commerce lies in its combination of online payment and offline experience, which allows the two to achieve complementary advantages. Under this model, the online platform and logistics supply chain have carriers and offline physical outlets, providing customers with more high-quality, rich, and diverse products.

2.2 E-commerce characteristics for agricultural industry (Doshi and Desai 2016)^[2]

Focus on localized marketing - the localized marketing model of O2O, convenient services can be provided to local communities and villages.

Deep fusion data analysis - the O2O business model, the database can ultimately retain the user's shopping traces and perform in-depth processing, combined with user behavior and business scenarios to predict customers' lives and provide each customer group's consumption preferences to the company.

The shopping experience continues to improve - the traditional e-commerce model, consumers can only judge the quality of the product through the description of the merchant and sharing of the shopping experience of other consumers and cannot intuitively see the effect of the product.

2.3 Model of Customer Expectation (Ma and Ren 2018)^[3]

Cognitive differences are produced under the combined effect of customer expectations and product experience, directly affecting customer satisfaction. In addition, customer satisfaction will be affected and influenced by customer expectations and product experience.

2.4 Satisfaction Index Model (Li 2019)^[4]

The three significant factors of product quality, value harvest, and customer expectations would all affect customer satisfaction. The sense of value that the customer ultimately obtains is determined by the combined effect of quality and expectations, which then directly affects their satisfaction.

3. Understanding of Improvement for the Operational Satisfaction of Community Farming Business

(1) Analyze the challenges under the local integrated agricultural management model in Shouguang City: The main difference between the dynamic and integrated agricultural systems lies in the management concept. In an integrated agricultural system, management decisions are predetermined, such as the type and quantity of commodities to be produced. In a dynamically integrated system, the best available knowledge is used to make decisions at the most appropriate time. As agricultural systems move up in the hierarchy, their complexity, amount of management required, and sustainability will increase.

(2) Search the factors influencing the agricultural industry's business satisfaction through website services, physical store services, perceived value, customer expectations, brand effects, logistics quality, and network trust: This research focuses on development background, analysis of extensive agricultural operation methods and problems encountered in satisfaction; customer demand-oriented, combined with website services, physical store services, perceived value, and other satisfaction factors to construct a relevant index system.

4. The Conceptual Framework for the Research Study

First The relationship between influencing factors of website service, physical store service, perceived value, brand effect, logistics and trust of the network platform, and satisfaction of agricultural operations management.

second Using correlation analysis testing, all influencing factors are shown a relationship with the satisfaction of agricultural operations management except brand effect significantly. It could interpret that the brand effect has less influence on agribusiness due to the sales of common food crops.

5. The Countermeasures for the Benefits of Using E-Commerce for Improving Community Farming Business

5.1 Market outlet diversification

E-commerce can expand the marketing channel portfolio for your business. Different outlets usually have high traffic and activity periods, followed by a low activity or inactivity periods. Although online stores can also experience these ebbs and flows, if you have a product supply throughout the year, it can also provide a stable presence, which can become very valuable. (Chen 2020).^[4]

5.2 Expanded customer base

Customer groups are usually targeted groups or people with similar interests, making them more likely to be interested in products or services. Repeat buyers in the customer base usually return to the company that successfully meets their needs. These repeat customers may make patronizing the company as a habit. These customers usually conduct free marketing through word of mouth, as long as they remain satisfied (Du 2014).^[5]

5.3 Business expansion

Other than customer base expansion, the business of agricultural products can also expand to different areas that more viewers can purchase products from the online platform. On the other hand, business operations can be extended not just by selling their products; it could also serve as an agent in mixing up with other popular products from third parties for increasing a more comprehensive range of product offerings.

5.4 Data collection

The data collecting on product sales would be precious in this generation. Through analytics, the history of sales, customer preference of price, service, and quantity would be serviced as marketing information that could improve future business promotion and marketing strategy (Negrao 2018).^[6]

6. Conclusion

The importance of corporate brand and product awareness in consumer decision-making has become increasingly prominent at this stage. Agricultural industry operators are more likely to remember those distinctive brands. Enterprises should focus on building brands in the process of operation and management. When the brand effect is formed, more and more consumers will remember and accept the enterprise's products. The marketing and promotion work can also be carried out more smoothly. High-quality products and services are the foundation for companies to cultivate their brands. Based on this, the public's sense of trust can be gradually built up to form a good reputation. Agribusiness enterprises should pay more attention to obstacles while cooperating, such as social issues such as economic incentives, strategic adjustments, conflicts between enterprises, and trust. There are no specific legal regulations on the legal use of consumers' personal information and transaction records and the security and authorization of service, which effectively protects customers' privacy and other legitimate rights and interests.

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Study of Consumption Intention for Household Appliance at Double Eleven Online Shopping Festival in Guizhou of China

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Abstract: With the rapid development of the Internet economy, consumers' intention to buy online increased. The Double Eleven online shopping festival had a significant impact on the annual sales of various e-commerce platforms. Based on the uniqueness of the online shopping festival, online consumers could only recognize products through virtual observation of the products and the feeling of the shopping atmosphere. By improving the sales performance during the shopping festival, merchants needed to increasingly focus on creating the atmosphere of the online shopping festival through various marketing methods. But how to make consumers having a good shopping experience in the atmosphere of the online shopping festival would be the development of e-commerce.

Keywords: Consumption Intention; Household Appliance; Double-Eleven Online Shopping Festival

1. Introduction

People's living standards have generally improved, and online shopping has accounted for a large proportion of consumers' purchase behavior. It has become an important way for people to shop daily. In the Context of the e-commerce market environment, the shopping carnival in online shopping is even more eye-catching. Cheap and affordable has always been consumers' inertial perception of promotional festivals like Double Eleven. After twelve years, Double Eleven has changed from the initial price war to the current experience war. The necessity of purchasing commodities and whether they match personal needs have become the core elements that affect users' final consumption. The user's shopping decision no longer takes price as the only reference factor but considers multiple requirements such as brand, quality, and service to make rational judgments.

2. Theoretical Basis

2.1 Model of the Influencing Factors of Online Shopping Atmosphere on Online Shopping Behavior (Gao 2017).^[1]

The consumer response to the atmosphere created by the e-commerce platform by analyzing the Tmall Double Eleven event in 2014 to test whether the division of online shopping atmosphere is reliable. The results obtained through in-depth interviews, combined with previous research conclusions, divided the shopping atmosphere of the Double Eleven online shopping festival into safety atmosphere, panic buying atmosphere, festival atmosphere, convenient atmosphere, preferential atmosphere.

2.2 Model of Online Purchase Formation Mechanism (Baker 2002)^[2]

The elements of the physical store atmosphere division constructed the online shopping festival atmosphere to model the relationship between promotion factors, design factors, and social factors among pleasure emotions, arousing emotions and online shopping behaviors. From the perspective of the online shopping festival atmosphere, this paper analyzed consumer online shopping behavior's influencing factors and mechanisms. The online festival atmosphere is classified into four elements: online festival promotion, website festival design, online festival interaction, and festival compensation promise.

2.3 Model of Online Promotion to Consumers' Panic Purchase Intention (Li 2014)^[3]

The panic buying atmosphere is that consumers who are entering consumer activities see that people around them are shopping, the time for shopping is limited, the remaining amount of goods in the event is announced, the transaction information is disclosed in time, the merchant's issue limited coupons, the amount of shopping is limited, and there are spike campaigns lead more consumers to purchase promotions.

2.4 Security Analysis Model of Online Shopping (Geng 2012)^[4]

The perceived usefulness and ease of use in the technology tolerance model replaced the subjective norms in the past rational behavior model. Cognitive ease of use has a positive impact on cognitive usefulness and usage attitude. The customer's intention to use is determined by the attitude, which will affect the customer's final usage behavior.

2.5 Stimulus-Organic-Response (SOR) Theory Model (Merrilees and Miller 2019)^[5]

The immersion experience is an emotional experience that an individual has a strong interest in an activity or thing and can express. Immersion theory initially focused on psychological research. Later, it has been widely studied in online games and pedagogy

and has been widely used at the level of customer behavior.

3. Understanding of the Consumption Intention for Household Appliance at Double Eleven Online Shopping Festival

3.1 Analyze the Double Eleven Festival online shopping platform relating to the current development challenges of household appliance sales in Guizhou:

Consumers who buy home appliances in the atmosphere of the Double Eleven online shopping festival as the target audience whether they are willing to purchase home appliances after being stimulated by the online shopping atmosphere of the Double Eleven.

3.2 Explore the influence factors of consumer purchasing intention and online shopping atmosphere derived from research on e-commerce behaviors affecting consumers' shopping behaviors during special events:

Based on the aspects related to consumer buying intentions of Guizhou online consumers through different influencing mechanisms from online shopping atmosphere, practical atmosphere for consumer, and promotional variables based on the popularity of the Double Eleven shopping festival.

3.3 Suggest improving the pre and after-sales service levels of e-commerce in the atmosphere of marketing activities for better improvements in various promotional stages stimulus-organism-response model (SOR) for Guizhou customers:

The online shopping atmosphere can be defined as the online shopping atmosphere is a marketing method that produces a specific effect on the customer's emotions through the design of the shopping environment during the online shopping process, thereby stimulating customers to increase purchases. Therefore, it includes any web interface components perceived by the individual and related elements before completing the entire shopping process after being offline.

4. The Conceptual Framework for the Research Study

The relationship between influencing factors of online shopping atmosphere, and online buying intention; online shopping atmosphere, and online buying intention; festival atmosphere, panic-buying atmosphere and secure atmosphere, and online shopping atmosphere; online festival promotion, web festival design, and network festival interaction, and festival atmosphere; limited-time buying, limited quantity buying, voucher offer, and red pocket grabbing, and pan-buying atmosphere; product and safety, commodity distribution safety and payment security, and secure atmosphere.

Using regression analysis testing, all influencing factors have a significant impact on online buying intention, online shopping atmosphere, festival atmosphere, panic-buying atmosphere, and secure atmosphere, respectively.

5. The Countermeasures for the Improving Marketing Strategy on Consumption Intention of Household Appliance at Double Eleven Online Shopping Festival

5.1 Meeting the individual needs of consumers

Consumers aged 25 and below have the lowest willingness to buy home appliances during the Double Eleven Online Shopping Festival, indicating that this group has little demand for home appliances. Looking at the entire online market, the younger generation is still the leading group of online consumers. They pursue a more convenient, fast, and casual way of consumption. In the use of products, they also pay more attention to the ultimate comfort experience, which profoundly affects the direction of the consumption pattern of home appliances.

5.2 Enhance consumer stickiness

Stickiness is an important indicator to measure user loyalty programs. It plays a crucial role in the brand image of the entire enterprise. Therefore, e-commerce companies should improve the combination of consumer loyalty, trust, and benign experience of the brand or product.

6. Conclusion

There are several vital points to the success of the online festival event: (1) The critical effect of personalization and gamification on the online festival consumers' behaviors towards the settings and atmosphere is observed, whereas the impact of those factors on emotional state may not be relatively significant. (2) The effect of emotion on consumer behaviors in online festival sales. Consumers' emotional state appears to play a critical role in determining online festival participants' behavior directly. Online festival managers should never overlook the importance of consumer relations. Here, an alternative, more sustainable way to increase online sales is to allocate more resources to manipulate consumers' emotional state towards the Double Eleven online sales event.

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An Empirical Study on the Impact Mechanism of Big Data-based Precision Push Models on Consumers' Online Buying Behavior in Southwest District of China

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Abstract: In the era of big data, consumers, as the main body of the economy, had been affected to a large extent by purchasing behavior. This impact would have mainly been reflected in the changes in consumer behavior, coupled with the development of the e-commerce industry in society. Consumers did change from traditional physical store purchases to online purchases as consumers' online purchases increased. However, in the face of many commodities, it would be difficult for users to find items of interest. The precision push model came into being the user's mathematical modeling based on the user's behavior characteristics for searching the user's possible feelings in items of interest to users. However, whether the matching of the precise push mode and the user interacted effectively, promoting and stimulating the consumption behavior of consumers would still face the problem of accuracy and efficiency.

Keywords: Big Data ; Precision Push Model ; Online Buying Behavior

1 Introduction

The business scope of e-commerce continues to expand, bringing more abundant service options. Many commodity types gather on the platform quickly, while the emerging technologies of the Internet of Things are fully developed and applied, and everything can be digitalized. The pace of people's lives is getting faster with the development of the economy. Although e-commerce platforms provide consumers with a large number of products to choose from and provide convenience for them, consumers have limited time and energy, and a large amount of product information disrupts people's vision. Information overload has become a norm, making it a burden for consumers to choose their favorite products on platforms with intricate details. According to surveys by relevant institutions, online consumers value the shopping experience on e-commerce platforms, and they are quickly submerged in the platform search due to a large amount of information about the products to be selected. This poor consumer experience leads to their willingness to buy not being assertive.

2. Theoretical Basis

2.1 Planned Behavior Theory (Bauer 2018).^[1]

The consumer response to the atmosphere created by the e-commerce platform by analyzing the Tmall Double Eleven event in 2014 to test whether the division of online shopping atmosphere is reliable. The results obtained through in-depth interviews, combined with previous research conclusions, divided the shopping atmosphere of the Double Eleven online shopping festival into safety atmosphere, panic buying atmosphere, festival atmosphere, convenient atmosphere, preferential atmosphere.

2.2 Technology Acceptance Model (Davis 1989)^[2]

The technology acceptance model suggests two main determinants perceived usefulness, which reflects the degree to which a person believes that using a specific system improves his work performance; perceived ease of use, which reflects a person's belief that it is easy to use a particular system.

2.3 Customer Satisfaction Index Model (Liu 2003)^[3]

The American Customer Satisfaction Index (ACSI) model, which was based on the SCSB (Swedish Customer Satisfaction Index) model, is a customer satisfaction index measurement model that is widely used or referenced. The models include six hidden variables: user expectations, perceived quality, perceived value, user satisfaction, user complaints, and user loyalty.

2.4 The E-Commerce Precision Marketing Strategy in Big Data Environment (Guo 2019)^[4]

Precision marketing has been around for some time as a hyper-relevance exercise. Now, advanced technologies such as machine learning have opened a new way for marketers to reach and attract customers. It is data-driven, enables marketers to make evidence-based decisions, and makes it easier to retain, cross-sell, and up-sell existing customers.

2.5 Offline and Online Shopping Decision Model (Sonwaney and Chincholkar 2019)^[5]

The process of making a buying decision is somewhat different from the offline and offline situation due to the conditions of the environment, offering, atmosphere, time efficiency, urgency, payment security, purchase condition, and so on. The traditional

consumer decision model generally starts with need and awareness, then information search, alternative evaluation, purchasing, and reviewing post-purchasing process. In terms of the online buying decision, customers are usually attracted by the stimulus such as online promotion, media attraction, and other related messages that increase awareness and confidence in buying decisions.

3. Understanding the Impact Mechanism of Big Data-based Precision Push Models on Consumers' Online Buying Behavior

3.1 Analyze the consumer purchase decision involving the mechanism of precision push on consumer purchasing behavior in Southwest of China:

The precision push is a stimulus variable for consumer buying behavior — the degree of influencing factors, according to the theoretical model of planned behavior and the evolution process model of consumer online shopping decision-making behavior.

3.2 Explore the influence factors on consumer online buying behavior when precision push is used as a stimulus variable through buying attitude, perceived value, and purchase intention:

The buying attitude is divided into three dimensions: perceived ease of use, perceived usefulness, and perceived risk; perceived value is divided into three dimensions: perceived quality, shopping experience, and user expectations; and purchasing intention is divided into two sizes: cognitive awakening and emotional awakening.

3.3 Suggest improving the advantages and disadvantages of precision push services and future development trends with providing better service to the needs of consumers:

The factor of precision push has a significant positive impact on purchasing behavior. When a large amount of product information floods to the online shopping platform, consumers will be more blind when making choices. Advantages and disadvantages will depend on how consumers evaluate the information they gain from the technology.

4. The Conceptual Framework for the Research Study

The relationship between influencing factors of purchase attitude, perceived value and purchase intention, and online purchase behavior; perceived ease of use, perceived usefulness and perceived risk, and purchase attitude; perceived quality, shopping experience, and user expectation, and perceived value; awareness awakening and emotional awakening and emotional arousal, and purchase intention; precision and online purchase behavior. Using regression analysis testing, all influence factors significantly impact online purchase behavior, purchase attitude, perceived value, and purchase intention, respectively.

5. The Countermeasures for the Improving of Big Data-based Precision Push Models on Consumers' Online Buying Behavior

5.1 The influence of virtual experience on product and service information search

With the high development of internet commerce, too much information may disrupt consumers' searching for the best information for their needs. In the virtual experience of C2C e-commerce, a good website design should accommodate the proper precision push mode associated with big data in offering the history of information viewing. It means consumers often sense and accept various products or services to obtain the most direct information for their needs.

5.2 The influence of virtual experience on personal evaluations of product and service alternatives

Consumers will no longer count on strictly evaluating product and service alternatives from business promotion compared to the traditional marketing environment. The help of big data by providing the correct information based on experience and track record will help the decision making by consumers.

5.3 The influence of virtual experience on online post-purchase behavior

As the learning of the buying process from the experience of product or service process, the evaluation of post-purchase of online experience would not simply be decided by the product and service features, but simply heavily on consumption experience and interaction. The influence mechanism of the precision push model will serve as one of the critical issues for consumers in reviewing their purchase patterns and performance.

6. Conclusion

Many impacts on consumer behavior will also need to be based on the credibility of influence for evaluating alternatives whether the demand and supply of certain products and services are limited. The credibility on impact for purchase decision mainly relates to price, quality, after-sales service, and that critical information may need the mechanism for verifying. The era of big data should make product information quantifiable, transparent, and accessible, and consumers can also independently collect information about intended products, read relevant significant data analysis conclusions, realize rational consumption, and realize expected utility value to the greatest extent.

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Study of the Influencing Factors of Sichuan Online Consumer Shopping Experience in Purchase Intention

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Abstract: Online shopping would have been viewed as a rapidly developing phenomenon in Sichuan, China. The general perception of the exponential growth of significant suppliers in the industry indicated that e-commerce showed great market demand potential. The convenience of online shopping made it an emerging trend for consumers, especially Sichuan residents. The prevalence of online shopping aroused concern among retailers in this area. The three focuses of this research focused on: exploring the influence mechanism between purchase intention and consumer shopping experience, verifying the types of online purchase attitudes and behaviors, and analyzing the impact of various dimensions of purchase intentions by selecting the online platform.

Keywords: Influencing Factors ; Online Consumer Shopping Experience ; Purchase Intention

1. Introduction

Improving service quality and finding new service methods have become new research directions for e-commerce companies. It is essential to guide and attract consumer behavior effectively. Those customers who often hang out on the website are excellent potential consumer groups. It is necessary to convert these possible consumer groups into loyal customer groups. Therefore, it is of practical significance to study consumers' purchasing behaviors and purchase intentions through the experience of consumers in the online shopping process and their emotional responses during the consumption process. In this context, this article will start with customers' emotional responses and use it as an intermediary to conduct an exploratory study on how online purchase intentions are affected by consumers' online shopping experience.

2. Theoretical Basis

2.1 Nicosia Model of Consumer Behavior (Jisana 2014).^[1]

The model has four major components: 1. Information sources to consumer attitudes, including the perspectives of enterprises and consumers; 2. Consumers conduct surveys and evaluations on products and form the output of purchase motivation: Information seeking and program evaluation; 3. Consumers take effective decision-making behavior; 4. The results of consumers' purchase actions are memorized and stored in the brain for future purchase reference or feedback to the company.

2.2 Kolter Model of Basic Consumer Behavior (Zhao 2018)^[2]

Factors that may affect consumer behavior are into four major categories: cultural factors, social factors, personal factors, and psychological factors. In addition, economic factors are also mentioned with consumer buying habits, and decisions greatly depend on the financial situation based on personal income, family income, consumer credit liquid assets, and personal savings.

2.3 Howard-Sheth Model of Consumer Behavior (Prakash 2016)^[3]

Three types of purchase decisions under the Howard-Sheath model:

(1) Extensive problem solving - When consumers do not have a specific brand preference, they must rely on extensive information collection to solve the problem, so consumers will spend more time collecting information.

(2) Resolve the finiteness problem - When customers are trapped in the lack of time or resources and may prefer some brands, consumers will purchase with limited resources.

(3) Routine problem solving - When consumers have developed loyalty to a particular brand, they will not collect and evaluate information. Therefore, they will rely more on their previous consumer purchasing experience.

3. Understanding of the Influencing Factors of Sichuan Online Consumer Shopping Experience in Purchase Intention

3.1 Explore and analyze the influence mechanism between purchase intention and consumer shopping experience and build a model of the relationship between consumer online shopping experience and consumer purchase intention based on related variables:

There are few opportunities to study the purchaser's intention in the virtual environment of the network, in the shopping experience, customer's emotional response, and purchase intention. Regarding the relationship between variables, scholars at home

and abroad have done certain relevant studies. These studies show that consumers' buying behavior and purchase intention are greatly affected by their consumer experience.

3.2 Verify the influence of consumers' online shopping experience attitudes and behaviors, and quantitatively analyze and explore the consumers' pattern of purchase decision:

The relevant research of main research dimensions evaluates factors influencing customers' online shopping intention, online shopping experience, customer emotional response, and purchase intention. The theoretical source of the scale: reading other research related to the three variables of the online shopping experience, customer emotional response, and purchase intention.

3.3 Analyze the impact of various dimensions of experience on consumers' purchasing intentions and explore the key factors that might improve consumers' purchasing preferences through the online shopping platform:

The definition of the relationship between the online experience and online shopping shows the convenience of the website, the relationship service of the website, customer trust, and customer cost to the consumer shopping experience.

4. The Conceptual Framework for the Research Study

First The relationship between influencing factors of network convenience, network relationship service, customer trust, customer cost, positive emotion and control emotion, and purchase intention.

second Using correlation analysis testing, all influence factors significantly impact customer purchase intention in online shopping.

5. The Countermeasures for the Influencing Factors of Sichuan Online Consumer Shopping Experience in Purchase Intention

5.1 The influence of various dimensions of online shopping experience on satisfaction emotions

Among the various dimensions of online shopping experience affecting happiness, the regression coefficients of the convenience of the website, the relationship service of the website, customer trust, and customer cost indicate that real estate companies want customers to be happy while shopping under the network environment. It must also pay attention to communication with customers and promptly respond to customer questions and opinions considering the problem from the customer's point of view.

5.2 The influence of various dimensions of online shopping experience on controlling emotions

The control emotion of the shopping website is mainly determined by understanding whether the shopping website has comprehensive online help, simple and easy-to-operate registration procedures and transaction procedures, continuous and consistent website design and guidance, and a wealth of product categories and resources (Pena-Garcia 2020).^[4]

5.3 The influence of happiness emotion on purchase intention

The two dimensions of customer emotions, happiness and control emotions, impact the shopping experience, but the two have slightly different explanatory powers for brand loyalty (Wu 2020).^[5]

5.4 The influence of online shopping experience on purchase intention

The effects of the four dimensions of online shopping experience on purchase intentions, from large to small, are the convenience of the website, the relationship service of the website, customer trust, and customer cost.

5.5 The mediating role of customer emotions

The shopping website should design customer experience elements to cultivate the customer's good emotional response from the customers' perspective to create the website, to improve consumers' love and willingness to purchase shopping websites (Ramya 2016).^[6]

6. Conclusion

It should be noted that website developers and providers should evaluate how and why online shoppers prefer to use their facilities. The shopping process or task will be the consideration of the site support. Online shoppers visit the web can be in different proposes. To achieve those tasks from the online platforms and the top-level management in cooperating marketing should assess the position of fulfilling the consumer's needs. Scientific online shopping methods are related to the characteristics of consumers, purchasing decisions, and factors that affect online shopping. In general, an online shopping experience designed to stimulate positive customer emotions is to pay attention to the psychological needs of customers and carefully plan and manage shopping websites for customer emotions, thereby enhancing customers' happy feelings and controlling emotions, ultimately affecting their purchase intentions shopping sites.

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Research on Female Consumers' Impulsive Consumption Based on Perspective of Consumer Purchase Decision Model in Sichuan, China

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Abstract: This paper integrated and analyzed the impulsive buying behavior of Sichuan female consumers in three objectives: the factors that promote or inhibit the impulsive purchase decision-making process, influencing factors of marketing stimulation, and suggestions of improvement for existing business strategies. Combining relevant theories and the characteristics of the Chinese shopping environment constructed a theoretical model of the influence mechanism of female consumers' impulsive buying decisions. In addition, herd psychology served as a moderating variable to observe whether it has a moderating effect on the original model.

Keywords: Female Consumer ;Impulsive Consumption; Consumer Buying Decision

1. Introduction

The market is different, characterized by increased competition, continuous innovation in available products and services, and more companies in the same market. In this case, consumers must be fully understood. Through the analysis of factors that directly affect consumer behavior, it is possible to innovate and meet their expectations. This research is crucial for marketers to improve their activities and reach their target audience more effectively. Consumer behavior refers to the direct participation in obtaining products/services, so it includes the decision-making process before and after these actions. Therefore, advertising information seems to cause an inevitable psychological impact, prompting individuals to purchase a particular product/service. In addition to emotional content, impulse shopping can also be triggered by various factors, including store environment, life satisfaction, self-esteem, and the emotional state of consumers at the time. Impulse buying can be stimulated by unexpected needs, visual stimulation, promotional activities, and a decline in cognitive ability to evaluate the advantages and disadvantages of the purchase.

2. Theoretical Basis

(1)Consumer purchasing decision model (Kolter 2017).^[1] The consumer's decision-making process is influenced by consumers' and external environmental factors, especially corporate marketing strategies. In this model, external environmental factors mainly include two types: marketing stimulus and external stimulus. All these influencing factors will eventually be presented through consumers' choices of products and brands and the number of purchases. (2)Model of marketing stimulus, brand recognition, and purchasing behavior (Wu and Li 2018)^[2]. When consumers face limited, time-limited, and sudden discounts, it is easier for them to make impulse purchases than commodities without such stimuli, especially when they are in a shopping environment. When it comes to unexpected promotions, his shopping impulse is more evident and difficult to resist. Some scholars have shown that when product advertisements increase the exposure of products, the greater the degree of savings that promotional activities bring to consumers, or the more significant the persuasiveness of salespersons or experts, consumers will be more prone to impulse buying behavior. (3)The Process Model of Consumer Impulse Buying (Sindhu and Kloep 2020)^[3]. Impulse buying has also become one of the hot issues in consumer behavior research. Especially in recent years, with the development of e-commerce, consumers' impulse has also increased. For example, the annual "Double 11", the Internet is full of words such as "buy, buy, buy" and "chop hands." The operators of significant enterprises have used their best to create sales miracles one after another. While observing consumers, crazy behind the shopping are often faced with many "trophies" that are of little use to oneself and regret it. Such impulsive buying behavior is not uncommon. Many studies have shown that female consumers are more likely to have impulsive consumption behaviors.

3. Understanding on Female Consumers' Impulsive Consumption Based on Perspective of Consumer Purchase Decision Model

(1)Analyze the factors that promote or inhibit the impulsive purchase decision-making process of female consumers in Sichuan: When studying the factors that affect impulsive buying decisions, the main focus is on consumers' related factors. It is believed that consumers' gender is an important factor influencing impulsive buying, and it proves that women are more likely to make impulsive buying than men. The difference between women and men lies in the degree of attention to fashion and fashion and yearning for

change. (2) Explore through marketing stimulation, perceived value, purchase emotion, and herd mentality, the factors that influence the purchase decision of female consumers in Sichuan: The female consumer's impulse buying decision-making mechanism model is based on the consumer's purchasing decision model and empirically tests the critical influencing factors in the female consumer's impulsive purchasing decisions. Based on ensuring customer satisfaction, various marketing activities stimulate consumers to make purchase decisions and purchase behaviors. (3) Suggest improving the existing business operators to meet market needs better and provide theoretical suggestions for product development and marketing strategies: Especially concerning the increasing consumption status of modern women, when the research paradigm for female consumer groups is not yet mature, such research is worth trying. With the rapid economic development, China has the world's largest consumer market, significantly where female consumers are constantly increasing. Understanding women's hearts, observing their impulsive consumption performance, and in-depth exploration of their psychological causes will help businesses formulate marketing strategies and occupy the market.

4. The Conceptual Framework for the Research Study

First The relationship between influencing factors of promotional activity and sales interaction, and marketing stimulus; purchasing cost, product quality and perceived risk, and perceived value; store stimulation and female factors, and buying emotion; marketing stimulus, perceived value and buying emotion, and consumer buying decision; herd phenomenon and consumer buying decision.

second Using correlation analysis testing, all influence factors significantly impact marketing stimulus, perceived value, buying emotion, and consumer buying decision, respectively.

5. The Countermeasures on Female Consumers' Impulsive Consumption Based on Perspective of Consumer Purchase Decision

5.1 Characteristics of current Chinese female consumers (Tan 2014).^[4]

Chinese female consumers receive higher education, obtain equal employment opportunities, and become increasingly economically independent. In the past few decades, their income distribution to the family has increased dramatically. These social changes have shaped the new thinking of Chinese female consumers (especially young women) and made them more ambitious in consumption. Unlike the traditional frugal lifestyle, Chinese women are more inclined to expand spending and reduce savings. The improvement of gender equality has also provided more Chinese women with opportunities to assume leadership roles in corporate management and entrepreneurship.

5.2 Understanding of the importance of raising women consuming power (Xiong and Jing 2010).^[5]

More businesses should start to adopt their business strategy from male-dominated to new family decision-makers relating to the female role. Women are the primary decision-makers in most Chinese households regarding daily household spending for the families. On the other hand, increasing independent functions such as work and management roles also change their spending and buying mentality.

5.3 Investigating female consumption pattern (Soodan 2016).^[6]

Companies should begin to understand household consumption patterns and the critical influence of women's buying characteristics. For example, buying a house always buys furniture, and in China, no matter who pays, the house decoration is always decided by women. Therefore, furniture manufacturers that cater to the tastes of female customers may have a better chance to increase sales.

5.4 The emerging female consumer power

The emerging female consumer power is providing local companies with a more nuanced picture of China. Although China is generally regarded as a big consumer market with a stated control policy, companies should better understand the dynamics of gender power in China and have conducted more research on the differences in behavior and psychology between male and female consumers. Comparing with men, women tend to shop more and spend more on personal care products and food. In addition, Chinese women are susceptible to brands and prices, while men usually pursue their favorite brands.

6. Conclusion

A good understanding of female and male consumption patterns will be the key to developing huge Chinese consumer markets. Even the significant development of Chinese consumer markets has only been developed in the last 20 years compared to other western countries. It seems the fast-paced growth of e-commerce can offer a more efficient shopping pattern and accuracy in data management for building the right marketing strategies as long as planning in encountering the right group of consumers.

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