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Discuss the influence and promotion of financial mathematics on modern financial market

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Abstract: The in-depth development of science and technology and the widespread application of Internet technology have promoted the progress of China's economic market. The status of modern financial markets is crucial to economic development. During the operation of the financial market, mathematical ideas are constantly infiltrating into them. As a result, financial mathematics has emerged and further developed. In the operation of modern financial markets, financial mathematics is indispensable. Through the analysis of the application of financial mathematics in financial markets, to explore the impact of financial mathematics on modern financial markets, and to further study how financial mathematics can promote the orderly development of financial markets.

Key words: Financial mathematics; modern financial markets; influence and promotion.

1.INTRODUCTION:

In the course of economic development, the status of modern financial markets is becoming increasingly important. With the development and progress of modern financial markets, financial mathematics is ubiquitous and an integral part of financial markets. Mathematics is everywhere in our daily lives. Financial mathematics, as a new discipline emerging with the financial market, has drawn increasing attention from all walks of life. Financial mathematics is mainly manifested in the fields of securities joint ventures and capital asset pricing. In modern financial markets, the main procedure adopted is to quantify the research object and establish a certain mathematical model to allow the data to be accurately calculated and analyzed, which is conducive to the optimal decision-making of the financial market.

2.DEVELOPMENT OF FINANCIAL MATHEMATICS

Financial mathematics is also known as mathematical finance, analytical finance, and Zhao financial mathematics can be understood as mathematical theories such as mathematical modeling ideas and the flexible application of modern science and technology in financial markets. It refers to the use of mathematical tools to study financial aspects, the use of mathematical modeling

ideas, and the use of relevant principles and rules of finance to guide financial practice. The widespread application of financial mathematics can make financial markets easier to understand and integrate into the lives of the general public. On the other hand, it can enable some economists to use financial mathematical tools to predict the development trend of financial markets, which can guide economic development^[1].

3.DEVELOPMENT TRENDS OF MODERN FINANCIAL MARKETS

The development and promotion of economic globalization, in the perspective of globalization, analyze the future development trend of modern financial markets. At present, in our country, the development of the financial market is stabilizing, and the market size is continuously expanding, which promotes the rationalization of the division of labor in the socialist market economy in China. The stability of the financial market provides an important platform for economic development. China's financial market is becoming more and more transparent, information is becoming more and more complete, and market mechanisms are becoming more and more complete.

4.THE IMPACT AND PROMOTION OF FINANCIAL MATHEMATICS ON MODERN FINANCIAL MARKETS

4.1.Strengthening the efficiency of financial services.

Financial mathematics has improved the efficiency of financial market services to a certain extent. The widespread application of science and technology has also realized the electronic processing of various financial services. Modern financial markets are gradually approaching the era of electronic finance. The application of financial mathematics promotes the development of modern financial markets, and financial mathematics is more common in people's daily lives.

4.2.Process data more accurately

Financial mathematics is characterized by modeling ideas and processing data. Banks are the main representatives of financial markets. The application of financial mathematics is more extensive in the processing of data business in banks. Financial markets are unstable and volatile, and financial mathematics can be processed with

precise language and data, so that the general public can obtain real and reliable information and accurately process bank business data. Financial mathematics uses an accurate model to describe the current development law of the market economy, better predict the economic development trend, and solve the problem of computational difficulties. In addition, it can help researchers in financial mathematics process data and promote academic research.

4.3.Promote economic construction and development

The extensive application of financial mathematics has, to a certain extent, promoted the optimization of decision-making by economic entities, and promoted the in-depth development of the insurance industry, the securities industry, and the stock market. Financial mathematics can drive the full capitalization of financial markets, and in the judgment of the economic situation, it helps economic entities to judge the development trend of financial markets and make development decisions. Moreover, some economists can make predictions on the state of the country's economic development, grasp the laws of economic development, promote the development of economic construction, and

ultimately make modern financial markets flourish. Conclusion: The economic situation is changing and market competition is fierce. Unlike the battlefield, the development of the market economy is also turbulent, and the development situation is changeable. In today's advanced Internet technology, various fields are infiltrated with each other. Among them, mathematical ideas are permeated in financial markets. The accuracy of the processing data and the speed of calculation have an important impact on the economic development of the financial market. Financial mathematics, through mathematical modeling thinking, searches the stored database, simplifies the calculation process to a certain extent, improves the processing speed, and makes the financial market stronger and more stable. However, financial mathematics is also a double-edged sword. While it brings positive effects, it also inevitably brings huge challenges, and risks and opportunities coexist.

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An Analysis of the Typical Workaholic Image in *The Company Man*

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Abstract: Taking *The Company Man* in unit 2, volume 3 of *An Integrated English Course* as an example, this paper analyzes the typical workaholic image — Phil and his tragic fate, and then analyzes the definition and features of workaholics, factors influencing workaholics, effects of workaholics, and the importance of right view on work to individual, family and society.

Keywords: The Company Man; workaholic; factors influencing workaholics; effects of workaholics; right view on work

1. INTRODUCTION

Since the 1970s and 1980s, under the United States' leading, countries vigorously developed the industrial transformation, the competition of enterprises impelled enterprises to make adjustments to adapt to the development, and the competition became more and more brutal. In various enterprises, many people who want to survive have to learn to compete, work hard, and then workaholics emerged^[1]. Taking *The Company Man* in unit 2, volume 3 of *An Integrated English Course* as an example, this paper analyzes the typical workaholic image and his tragic fate, and then analyzes the definition and features of workaholic, the factors influencing workaholic, the positive or negative influence of workaholic, and the importance of right view on work to individual, family and society.

2. PLOT OF *THE COMPANY MAN*

The Company Man depicts a typical workaholic and his tragic fate. The hero Phil worked six days a week, five of them until eight or nine at night, during a time when his own company had begun the four-day week for everyone but the executives. He lacks exercise and is 20-25 pounds overweight. He plays golf once a month, but it's also a job for him because he takes the opportunity to talk business with clients. He eventually died at 3:00 a.m. on Sunday. "In the end" tells us that his death is something everyone knows. At the beginning, everyone is afraid of his working methods, but for a long time, everyone is waiting for his death. "3 o'clock in the morning" shows the specific time of his death, whether it's early or late. This time is a normal time for people to sleep, but he works later than usual. It tells us that he works more crazily at home on Saturday, and highlights his workaholic image. At his funeral, the obituary said he died of coronary artery thrombosis, but his friends

and acquaintances knew the real cause of his death. They shook their heads and talked about him with a sigh, and then took a few minutes to reflect on their ways of life, which shows their sympathy for his death. They have no choice but to reflect on themselves' lives at that time. The same way of working may have the same end, thought of that, everyone became silent^[1].

3. DEFINITION AND FEATURES OF WORKAHOLICS

In this part, definitions given by different scholars and some main features of workaholics are going to be introduced.

3.1 Definition of Workaholics

If a person is a workaholic, he's got compulsive need to be driven to accomplish things. In the workdays, they just keep going, keep pushing themselves. And a lot of stress leads to many problems, such as anxieties and diseases. Most scholars think workaholics are individuals who are overindulged in their work, and neglect their life outside of work, and even caused damage to their health and social relations. In contrast, some scholars hold a positive view on workaholics. Machlowitz believes that workaholics work voluntarily and hard, and feel very satisfied with their lives and have higher efficiency. Snir and Harpaz regard workaholics as a subtype of high-intensity work investment. They believe that workaholics work crazily not because of external factors or passion for work, but because of addiction to work. Clark pointed out that workaholics are driven by internal pressure and think about work when they don't work. Even when faced with adverse consequences, they were addicted to work consistently which exceeds work requirements or basic economic needs. To sum up, most scholars think that the internal cause of workaholics is the internal drive that can not be resisted and controlled. When they don't work, they always think about work and can't get away from it, so they force themselves to invest too much time and energy into work^[2].

3.2 Features of Workaholics

Workaholics focus on work. They are not able to stop. Workaholics think about work constantly and, if unable to work, they feel panicky or depressed. Workaholics resist taking breaks or going on vacations. When he is approaching his goal, he needs another goal to work towards. Workaholics believe that, by working longer hours and completing more

projects, they will enhance their self-worth. Workaholics have high expectations of their work.

4. FACTORS INFLUENCING WORKAHOLICS

In this part, four main factors influencing workaholics will be analyzed one by one, they are personality characteristics, work motivation, social support, and organizational culture.

4.1 Personality Characteristics

Taris found that self-directed and social regulation workaholics have significant positive effects. Type A person shows strong initiative, aggression, hostility, self-confidence and sense of achievement, and it is easy to be nervous. Therefore, type A person is more likely to work for a long time, and shows workaholic behavior. Individuals with a high sense of responsibility are responsible and diligent, so they have strong ability of self-control, planning, organization and task execution, which can bring higher work performance and more prone to workaholic behavior. In addition, extroverts tend to show initiative and ambition, tend to feel positive emotions, and have higher job satisfaction, so they are more likely to lead to work fanaticism. Clark found that narcissistic personality has a significant positive impact on workaholics. Narcissists have a higher recognition of their importance and demand for power. They are more able to show their ability when they work, and they are more willing to overwork. Phil is right the representative of this type A person.

4.2 Work Motivation

According to Deci & Ryan, workaholics overwork not because they really like to work or to achieve organizational goals, but because they have negative emotions when they don't work, such as anxiety, irritability, shame and guilt. They have a strong desire to prove themselves so they indulging in their work to make up for their low sense of self-worth and insecurity. This self involvement is the characteristic of internalization. In addition, other people's appreciation and recognition can not only improve employees' self-esteem and self-worth, but also promote employees to overwork, which shows that external regulation is also a predictor of workaholics[2].

4.3 Social Support

According to the Theory of Resource Conservation, the more resources employees have, the less likely they are to lose resources, and the more likely they are to acquire resources. As an incentive resource, social support can help employees take into account multiple roles, avoid resource consumption and other stressful events, and then form the tendency of hard work. The higher the sense of organizational support is, the more concerned the organization is about the feelings of employees and is willing to provide timely help when employees need help, so as to reduce the occurrence of workaholic behavior; there is a significant negative correlation between social support and workaholic, and life goals play an

intermediary role between them.

4.4 Organizational Culture

According to Theory of Reinforcement, when organizations emphasize more on work input, give tangible or intangible rewards to overwork and implement the incentive mechanism of "winner is the king", employees will continue to repeat this work behavior to meet their needs and expectations. Yingwen Liang found that the organizational drive of encouraging work to take precedence over family and competition of colleagues had a significant positive impact on all dimensions of workaholics. The empirical research of Mazzetti shows that overwork climate has a significant positive impact on workaholics, and achievement motivation, perfectionism, responsibility and self-efficacy play a positive role in regulating the two. In addition, through the investigation of the Netherlands, Spain, Finland, China and Japan, Hu found China is characterized by collectivism and Confucian culture, emphasizing collective promotion and self sacrifice, the workaholic tendency of employees is more obvious than that of European employees.

5. EFFECTS OF WORKAHOLICS

Everything has two sides, and workaholics are no exception. There are both positive and negative effects of workaholics. More analysis can be found following.

5.1 Positive Effects of Workaholics

Based on the characteristics of workaholics, it is believed that workaholics will have a positive impact on organizational performance. First of all, workaholics love their career from their heart. They will show amazing perseverance in their work and help the organization to achieve the established development goals. Secondly, workaholics have high work input. They devote a lot of time and energy to their work, providing necessary guarantee for organizational development. Finally, workaholics enjoy the joy of work. Even in the face of difficulties and challenges, they can keep a positive attitude towards their work and strive to find solutions to the problems, which is conducive to the improvement of the overall performance of the organization. Zhongze Guo found that the work input of team leaders can effectively stimulate the work input of team members. Workaholic leaders are enthusiastic at work. Their positive emotions such as pleasure, happiness and excitement will be transmitted to other senior management team members through interpersonal interaction. Attracted and driven by the workaholic leaders, the team will actively learn to imitate the leader's words and deeds, showing a dynamic and positive working state. Song Meng found that leadership identity can increase the emotional attachment of subordinates to leaders and strengthen the demonstration effect of leaders. As a result, under the demonstration of workaholic leader, the team members will show stronger working motivation, and

become more focused and enthusiastic at the same time. In addition, the higher leadership identity will also urge team members to integrate the requirements and goals of workaholic leaders into their self-awareness system, keep pace with them, and devote themselves to the process of achieving organizational goals^[3].

5.2 Negative Effects of Workaholics

The negative effects of workaholics mainly include: first, workaholics are overdrift and have no exercise time, which likely forms overtime fat^[4]. Phil, the hero of the company, is a typical representative of overtime fat. In the introduction of the plot, it has been mentioned, "he works six days a week, five of which work until eight or nine o'clock at night. He lacks exercise and is 20-25 pounds overweight. He plays golf once a month, but it's also a job for him because he takes the opportunity to talk business with clients." Wearing sportswear on Saturday, it can be seen that Phil loves sports also, but he prefer to go to work instead of doing sports. Obviously, the appeal of sports is far less than that of work. Second, workaholics have irregular diet and unbalanced nutrition, which lead to long-term sub-health. Take Phil as an example, he always put work first, and life seems irrelevant. He always eat egg salad sandwich in front of the office table, which is also a hidden danger to Phil's health. Third, work is the whole of workaholics' life, they ignore the care of family members. When Phil died, people said to his wife, "you'll miss him." However, his wife said, "I'm always missing him." In fact, his wife has given up fighting with his job years ago when the children were very young. She had already accepted the fact

that her husband was a workaholic, and she was used to his absence.

6. CONCLUSION

With the development of the world and the progress of the society, the times need hard-working and progressive people, but to achieve long-term healthy and sustainable development, a modern scientific outlook on work is needed, that is, while focusing on work, people need to have regular diet, sports and rest, have a healthy body and mind, balance work and life, pay attention to their comprehensive and coordinated development, care more about family members, friends and colleagues, care for the society, and try to realize the three-win development of individuals, families and society. It is hoped that Phil's tragedy will no longer be performed again, and every "workaholic" could have a healthy and happy life as well as successful career.

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On the Problems and Countermeasures of Education of Left-behind Children in Rural Areas

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Abstract: As a new special group in rural education, left-behind children in rural areas is huge in number. The education of left-behind children in rural areas is a topic of great concern at present, and it is also an educational problem that we urgently need to solve. The education of left-behind children in rural areas is related not only to the healthy growth of children, but also to the happiness of a family and the stability of society. Of course, to solve the education problem of left-behind children in rural areas, we should not only rely on school education, but also have the cooperation of family members, as well as the support and help of all sectors of society.

Keywords: Left-behind children in rural areas; Rural education; Education management

1. EXISTING PROBLEMS

Through the investigation and analysis, it is found that the left-behind children have problems in many aspects due to the lack of family education, especially the lack of companionship and communication given by their guardians^[1]. Most of them have more or less problems in mental health, such as lack of security, depressed personality, lack of education in emotional experience and moral literacy. The specific performance can be divided into the following aspects:

- (1) They are lack of parental care, causing imbalance of their mental health.
- (2) The next generation education is inadequate and the behavior of guardianship is superficial.
- (3) For a long time, there is a lack of effective family discipline, poor self-control ability and moral anomie.
- (4) Their grades are generally poor, the personality is not sound, and they have a certain inferiority complex.

Children are the hope and future of the motherland. Their healthy growth and education level are directly related to the long-term stability of a country in the future. However, at present, the number of left-behind children in China is still high, especially in rural areas. According to the survey and statistics, there are as many as 20 million left-behind children in the compulsory education stage, and most of them are in relatively backward and remote rural areas. Most of them stay in their birthplaces, and are taken care of by the elderly. In the social vulnerable groups of our country, this phenomenon is widespread.

Nearly 90% of the left-behind children are 14 years old or below. This data is still growing. Most of the left-behind children live in rural areas. Therefore, to ensure the healthy growth of the left-behind children in rural areas and improve the education for them has become an urgent educational and social problem^[2-3].

The growth and education of left-behind children is related to the future development of the motherland and the long-term stability of society. It is a social problem that involves many families and members of the society. Therefore, it is necessary to do a good job in solving the education problems of left-behind children in rural areas. It is necessary to prepare for a long-term war, and it also requires the wide attention and support of all members of the society. At the same time, solving the education problems of left-behind children in rural schools is also the need of all aspects of our society today^[4-5].

First of all, to improve the education of left-behind children in rural areas is the need to implement education equity. Among the current vulnerable groups in China, left-behind children in rural areas and their families account for a considerable portion. The state promotes universal compulsory education so that every child can receive equal and fair school education. However, the effectiveness of compulsory education for left-behind children in rural areas in China is not optimistic. To solve this problem are not only related to children's future development, but also a manifestation of the demand for fair education of China. In the long run, it is also closely related to the stability of society and the long-term stability of the country. It needs the policy support of the government, the close cooperation of schools and families, and the active support of all sectors of society.

Secondly, to improve the education of left-behind children is the need to achieve a comprehensive construction of a well-off society. General Secretary Xi Jinping proposes the "Chinese Dream" on behalf of our nation. It aims to build our country into a well-off society in an all-round way. To achieve this magnificent goal, we need to improve the overall quality of our nation to make the country rich and strong. Improving the overall quality of the nation is indispensable for rural education in rural areas, especially for education of left-behind children. Otherwise the realization of our "Chinese dream" will

be impossible to come true.

In addition, the construction of a new socialist countryside requires rural schools to strengthen education for left-behind children. The emergence of left-behind children in rural areas is an inevitable phenomenon of social development. With the advancement of urbanization, many labor forces are pouring into the city, most of which are mainly young and middle-aged people. Most of these migrant workers go out of their families and leave their children to be taken care of by the elderly. With the development of society, the number of such left-behind children is gradually increasing. The construction of new socialist countryside is an important part of Chinese socialist construction. The education of left-behind children in rural areas is closely linked to the construction of new socialist countryside. The education problems of left-behind children in rural areas still need to be solved urgently. There are also many loopholes and deficiencies in their supervision and management. It mainly because that these left-behind children are highly mobile due to changes in the work of their parents. After that, local schools do not have exact statistics and targeted admission plans.

Furthermore, to strengthen the education of left-behind children is the need of optimizing school education. Most of the left-behind children have different degrees of psychological problems due to the lack of their parents' companionship and care. Some of them are taciturn and unable to communicate with others. Some of them are too extreme and tend to have hostility with their classmates and teachers. Many of them have lost interest in learning due to lack of supervision. Their academic performance is backward. They even play truant at will, fight outside the school and bully lower grade students. Most of their parents go out to work and fail to give their children enough care and company. Therefore, to strengthen the education of left-behind children, especially family education, parents should pay enough attention to children to improve the psychological and character defects of children and adolescents, which is also the need to optimize school education and improve the quality of teaching.

2. COUNTERMEASURES

(1) To strengthen the supervision and management of family members on left-behind children

The main reason for the problems of left-behind children is the lack of their parents' company and supervision. Of course, the best way is to keep their children by their parents' side. With the development of information technology, the network has broken the restrictions between regions. Parents who go out to work can interact with their children in a timely manner in the form of pegging, telephone or WeChat. Efforts should be made to change the concept of education. Children should not be completely placed

in school education. More care and protection should be given to children from time to time. Children's attachment to their parents cannot be replaced by any kind of education. At the same time, parents should reasonably allocate their time, instead of working all the time. They need to take full time and space to pay attention to children's learning and psychological state, and actively communicate with teachers to understand the situation of students in school. In general, the guardians of left-behind children are grandparents and other older people. Parents should often communicate with them to change the old education concept, so that left-behind children can enjoy fair education conditions and good growth environment.

(2) To improve school education for left-behind children

Schools need to pay attention to the education of left-behind children ideologically and guarantee the education in terms of systems and educational measures. Teachers should pay more attention to left-behind children and their subtle psychological changes, communicate with their parents more about their parenting methods, and help them to establish a positive and optimistic learning and living attitude in school life, especially for boarding students. They have not seen their parents for a long time, so they need teachers to fully understand them, such as children's physical and mental health, and children's weaknesses in learning, character defects, etc., so as to prevent children's psychological diseases and improve children's ability to resist setbacks. Of course, it requires teachers to pay enough patience and time. In the course of school, courses related to students' mental health should be added. And a mental health consulting room can be established, so that students can understand their physical and mental conditions, and they are able to treat the mental health by themselves. The education of left-behind children in rural areas also needs extensive support and attention from the whole society. We should also actively mobilize social forces and public resources. To strengthen the construction of student associations with left-behind children as the main body and enrich community activities in rural schools are effective ways to improve the quality of life of left-behind children.

(3) To formulate legal policies such as household registration system and school registration system for left-behind children

Most of the left-behind children come from rural areas. To build a new socialist countryside, we should tilt the spiritual and cultural construction projects to the left-behind children in rural areas, increase publicity and education, and promote healthy and active cultural concepts to prevent all kinds of pornography or violence from affecting the minds of left-behind children. In addition, we should do a good job in the follow-up and support of the left-behind

children's families, and care about the old, the weak and the disabled. Furthermore, it is necessary to establish and improve the household registration system for left-behind children to move with their parents, and the school registration system for them to move to school, so that they can learn on their own.

(4) To increase publicity of issue of left-behind children in the society

The issue of left-behind children will be widely publicized in the society to mobilize all sectors of society to pay attention to and care for left-behind children. However, the most important thing is to increase the care and love from the family. When parents go out to work, it is best to let the children enter the school with them, and try not to change the school at will. If they can't bring their children around, they must make proper arrangements to ensure that they can often contact and communicate with their children closely, study relevant education theories hard, and communicate with teachers to keep abreast of children's learning and psychological changes to provide timely psychological counseling and comfort to the children. In terms of the choice of

guardians, we should also be conscientious and responsible. It is better for parents to leave one person at home to take care of children.

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Analysis on the Application of Management Accounting in Enterprises in the era of Artificial Intelligence

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Abstract: With the continuous development of the information era and the rapid growth of social economy, the application of management accounting in enterprises has become increasingly prominent. Stimulated by data statistics and networking, the accounting field has successfully ushered in the era of intelligence. Based on an in-depth study of the issues of management accounting in the context of artificial intelligence, this paper discusses the opportunities and challenges of management accounting in the enterprises, and puts forward reasonable suggestions on how enterprises can promote the application of management accounting better.

Keywords: Management Accounting; Artificial Intelligence; Enterprise; Application

1. INTRODUACTION

The 21st century is an era of rapid development of technology. From Internet technology, big data analysis, cloud computing service to the current artificial intelligence and block chain, the continuous updating of technology and the continuous creation of resources will push us into the wave of times of technological revolution and innovation. In the area of business, accounting intelligent software systems and financial robots are emerging in an endless stream, which receives widespread attention from all the world. Operating intelligent software and robots to assist accounting work will save large amount of human resources. In fact, many national companies already have the technology to do so. Although enterprises have a great demand for management accountants, the advent of the intelligent era will bring new challenges to management accounting^[1].

2. BRIEF APPLICATION OF MANAGEMENT ACCOUNTING

As a branch of traditional accounting, management accounting has developed very rapidly in recent years. It combines management and accounting functions. The main work contents include analyzing and processing financial data and reintegrates these information to complete management work. Management accounting is not limited by generally accepted accounting principles in financial statement, and it can reflect any part of the company in detail and provide strategic information on certain matters. The main purpose is providing reports with

managers to guide them to make more rational enterprise decisions during production and operation activities, so as to strengthen enterprise management and expand investment benefits^[2].

3. PROBLEMS IN THE APPLICATION OF MANAGEMENT ACCOUNTING

3.1 Lack of attention from managers

Since the advent of management accounting, it has only been used in some large companies or international companies, but it has not been widely used in corporate management in China. Many managements of enterprises do not pay much attention to management accounting, they do not believe that management accounting can solve the company's crisis and even promote the company's progress, or don't want to increase costs of management accounting applications, which is limited by the vision and development goals.

3.2 Management accounting Talent Shortages

There are relatively few professional management accountants, which not only greatly restricts the deepening of management system, but also becomes a significant flaw in the application of management accounting. Because of lacking management accounting experience, most financial personnel cannot use management accounting tools effectively. In addition, due to the differences of individual needs, people have different requirements for the content of management accounting work and realizable functions, which leads to the loss of management accounting talent.

3.3 The impact of financial robots

With the development of technology and economy, the usage of financial robots has become a new trend in the era of AI. For some jobs which are single, repetitive and non-technical work, robots can completely replace it. For example, in 10 March 2016, Deloitte introduced artificial intelligence into the fields of accounting, taxation and auditing in coordination with Kira systems. In May 2017, PWC launched a robotic process automation solution. In October 2017, Kingdee International Software Group released EAS Intelligent Financial Robot. In December 2019, KPMG signed a \$5 billion Cloud Service co-operation agreement with Microsoft. There is no denying that the usage of financial robots has

led to the unemployment of some management accountants^[3].

3.4 Incomplete enterprise management system

Management accounting is a branch of the new enterprise management system and originated from Western countries. However, management accounting industry is in the development stage in China, and there are some loopholes in the management system, like insufficient authority and independence, imperfection of control system, deficiency of scientific and standardization, etc. If an enterprise adopts a management accounting system, but it has not been formed with strictness and high-efficiency, or the regulations have not been implemented, then the function of management accounting will not be perfectly showed, and it will still not reflect the role of management accounting.

4. SUGGESTIONS ON THE APPLICATION OF MANAGEMENT ACCOUNTING IN ENTERPRISES IN THE ERA OF ARTIFICIAL INTELLIGENT

4.1 Strengthen the education and training of financial personnel, and build a management accounting talent team. Managers should pay attention to the financial personnel' training, aim to strengthen these comprehensive ability. Meanwhile, The personnel department can take the opportunity of continuing education and training, and appropriately add the content of management accounting to expand the vision of financial personnel, cultivate professional competence, and gradually establish a high-quality team of management accountants to make management accounting better promote the development of the enterprise^[4].

4.2 Attaching importance to functional transformation, and conform to the development of science and technology. The first step is to break away from the role of traditional financial personnel in the past. Instead of being limited to the traditional manual accounting work, management accountants should analyze the actual economic significance from multiple angles with the help of big data. In addition, management accountants need to quickly adapt to the update of the technological revolution and reorient own capabilities and career plans. Under the new model of intelligent accounting, compound international accounting talents with strong ability of management analysis, strategic decision-making and value-creation will be in great demand^[5].

4.3 Optimizing intelligent management accounting software, and apply them according to own situation. The increasing development of network technology and computer technology allows us to design software that can achieve a variety of complex functions, but we must also fully consider the computer and network operation capabilities of operators. An excellent software is not only reflected in the realization of multiple complex functions, but also in the simplification of understanding and

operation. Meanwhile, it is also vital to improve and optimize reasonably in combination with the actual situation. For one thing, management accounting software saves the working time of the financial staffs and they can complete the goals more efficiently. For another thing, the application of artificial intelligence in finance has been continuously developed and promoted. Once an enterprise can apply management accounting tools more skillfully, its initiative advantage and adjustable space in management accounting application can be greatly improved.

4.4 Improving the management accounting system and strengthen control and supervision. Enterprises in many western countries have established professional organizations of management accountants, which promote the continuous development of management accounting. Nowadays, Chinese enterprises have also begun to follow the example of western countries' and set up talent teams. Besides, to promulgate decrees on management accounting, strengthen relevant professional concepts and set up qualification examinations for management accountants can ensure the integrity of the management accounting system. Furthermore, the control of management accounting includes planning ahead, in-process control, post-assessment and the general assessment, which help ensure the efficient operation of the enterprise. Again, management accounting departments are still subject to internal supervision, government supervision and state supervision^[6-7].

5. CONCLUSION

Nowadays, the development of management accounting is still at the initial stage of development and of a huge space for development in China. Management accounting, a new accounting function, has a long and complicated road to merge into enterprise management. It is a long-term and arduous task that not only to give full play to its management function, but also to consider its integration with the enterprise's own management system, and to examine its practical results. The influence of artificial intelligence on the accounting industry includes both positive and negative aspects. In the era of AI, management accountants can help managers analyze data much better than before, so as to effectively enhance work efficiency and save human and material resources. On the contrary, because of technological innovation and the shortage of experience, some have lost their jobs.

On the whole, the core of the application of management accounting lies in the introduction of talents and the application of management accounting tools, and its application value will be brought into full play. Only with clear objectives and scientific planning can management accounting grasp opportunities, overcome challenges, better integrate with the accounting system and bring benefits to enterprises.

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Three Realms of Young Teachers Cultivating Excellent Class Collectives

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Abstract: Excellent class collectives can significantly promote the development of students' physical and mental health by virtue of their clear struggle goals, sound organizational system, strict rules and discipline. This article starts from Mr. Wang Guowei's three realms of reading, and ponders the way for young teachers to cultivate outstanding class collectives, and strives to provide some humble opinions for newly appointed young teachers.

Key words: young teachers; class management; three realms

1. BEING LONELY ON THE LOFT, I OVERLOOKED THE ENDLESS DISTANCE

"Westerly winds withered trees up last night. Climbing up the stairs and being lonely on the loft, I overlooked the endless distance."^[1] This is the first realm proposed by Mr. Wang Guowei for reading, and it is also the first realm for the author that young teachers cultivate excellent class collectives. Mr. Wang Guowei believes that when he first studied, he felt that there were many difficulties, which just like an endless road to the end of the world. People who want to study and make achievements must have a persistent pursuit, ascend to the horizon, look at the path, and define the goal and direction, that is, "overlook the endless distance". The first step for a new teacher to cultivate an excellent class collective is to make its goals clear. For the first time, young teachers who have just stepped on the podium faced dozens of students with different personalities, different family backgrounds and different foundations. Although they have the experience of seniors, they have no personal experience. If there is no collective goal for the class, dozens of future-flowers of our country under the podium would just like water been splashed on the ground and flow towards different directions. So how should young teachers who just took office set class goals?

1.1. Collect ideas and cluster wisdom

Young teachers do not have the rich education and teaching experience of senior teachers and setting class goals by only consulting books is incomplete. In the final analysis, the goal of class is the goal that students can achieve under the guidance and assist from the teacher, so it must be set by the students. Young teachers should rely on their advantages of youth and vitality and go deep into the student group harmoniously. Hold class meetings, listen to students' ideas about class goals, and discuss the formulation

of class goals.

1.2. The stones of other hills may be used to polish gems

First, it is not easy for young teachers to cultivate excellent class collectives, which is largely because of lack of educational experience. At the beginning of the setting of class goals, young teachers can humbly ask head teachers and outstanding class collective teachers. Find out the nutrients suitable for the growth of the class collective through oral conversations with experienced teachers, sending e-mails for consultation, studying goals of excellent class collectives, etc. Second, young teachers are familiar with the Internet. When setting class collective goals, they are good at using network platforms to understand the excellent class collective goals of different schools, different regions, and even different countries. Don't stick to the school or be shortsighted but borrow the stones of other mountains to polish the gem in your hand.

The collective goals of excellent classes are complex. Class goals are composed of countless small goals, which should be easy to difficult, from shallow to deep, and step by step. How to grasp this difficulty level requires young teachers to have a deep understanding of students' academic situation.

2. THE BELT GETS TO LOOSEN GRADUALLY BUT I HAVE NO REGRET

Mr. Wang Guowei believes that studying and learning should be tireless. Although the belt becomes wider and the body is haggard, he still does not regret. It is the same for young teachers to cultivate an excellent class collective. After the class goals have been determined, we must use the determination and perseverance of Mr. Wang "Becoming loose are my clothes yet I regret not. For I languish and suffer for her willingly." How should young teachers achieve their class goals?

2.1. Establish prestige

Students are more willing to listen to the guiding of authoritative teachers. A prestigious teacher is the escort of the class goal realization process. Conversely, even if a perfect class goal is set, a teacher without prestige cannot achieve the class goal. So how can young teachers establish prestige in front of students? First, young teachers should improve their teaching literacy. The teacher's teaching ability is the foundation of the class management ability. Young teachers should use their free time to delve into pedagogy, psychology and other theoretical

works, properly use educational practices and theories to summarize their education and teaching experience, and sublimate them to properly express their education and teaching ideas.^[2] Young teachers should draw nutrients from teaching theories, create a classroom style that is popular with students, improve students' scores, and stand steady on the teachers' platform. Secondly, when interacting with students, we must learn to grasp the sense of proportion and play both hard and soft. One of the outstanding advantages of young teachers is that they are good at shortening the distance from students. They take the initiative to approach students, and the teachers and students are united and intimate. But in fact, this kind of teacher-student relationship is likely to cause difficulties in managing the discipline of the class, and the students' motivation to learn would be insufficient. Head teachers must maintain a certain distance in the process of interacting with the students, perform both hard and soft style. In the usual course of communication, be approachable, loving, and care about students, this is soft style. Be strict with students' study and daily behavior, give severe criticism to students who make mistakes, this is hard style. Only a combination of hard and soft can build prestige.

2.2. Form a strong class cadre group

The class is the student's own collective, which requires students to learn to manage themselves, educate themselves, and carry out various work and activities. To cultivate an excellent collective, we must complete the organization and function of it, so that it can run properly and play its due role. It is particularly important to form a cadre group^[3]. There are three main ways to select class cadres at the beginning of the semester: class election, self-recommendation, and class teacher appointment. Of course, these three approaches are not used alone. Only by using them in combination can we select excellent class cadres. For example, after the students vote, the teacher chooses the cadres among the top two or three with the highest votes. Class cadres are the bridge and link between teachers and students. The quality of class cadres determines whether this bridge and bond can play a better role. First of all, class cadres should have good ideological qualities. Class cadres should be an example for students to learn, and they can actively respect teachers and care about classmates. Second, as a class cadre, one must have a strong learning ability, including classroom knowledge, management experience, and the principles of dealing with others. Third, they must have a certain contract spirit. Class cadres should not be arrogant or unfair just because they are the organizers.

3. TURNING AROUND AFTER A LONG SEARCH, SUDDENLY SHE IS SHINING RIGHT BEHIND ME

"But in the crowd once and again I look for her in vain. When all at once I turn my head, I find her there where lantern light is dimly shed.", Mr. Wang Guowei thought that sanding and training after the first two realms people would suddenly feel bright and integrated. Even if young teachers cultivated an excellent class collective, determined class goals and strict rules and regulations, and built a prestigious leadership group. They cannot yet achieve the ease and comfort realm of "turning back suddenly, she is right behind me." A class collective, with strict discipline and orderliness, cannot be called excellent because the lack of love and emotions leave all education impossible.^[4] "Turning back suddenly, she is right behind me." The emphasis is on suddenly bright and well-integrated, which in the class management cannot be separated without the love between teachers and students. At the beginning of class management, the main reason for young teachers to quickly affirm their work is the love from students. Love is the lubricant that runs through the overall situation of education. Young teachers should cultivate excellent class collectives, and loving students is a career for which they strive for life.

4. CONCLUSION

It is a great undertaking for young teachers to cultivate excellent class collectives. This process is arduous and long. It requires young teachers to always be determined and pursue tirelessly. Adhere to the ambitious goal of "Climbing up the stairs and being lonely on the loft, I overlooked the endless distance."; adopt various measures to achieve the goal as the realm of "Becoming loose are my clothes yet I regret not. For I languish and suffer for her willingly."; use education of love to penetrate the whole situation, and finally reach the realm that "But in the crowd once and again I look for her in vain. When all at once I turn my head, I find her there where lantern light is dimly shed.".

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Research on the construction of quality assurance system in Colleges and Universities Based on total quality management

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Abstract: Improving the quality in an all-round way is the theme of higher education in the new era. The key to improving the quality is to have an effective quality management mechanism. By analyzing the connotation of TQM and according to the concept and principle of TQM, this paper expounds the construction idea of quality management mechanism in Colleges and universities, and puts forward the systematization of objective plan, the comprehensiveness of monitoring object, the diversification of monitoring subject, the three-dimensional monitoring method, the whole process of work supervision and control, the transparency of problem notification, the informatization of notification carrier, the normalization of work improvement, and the quality The construction path of quality assurance system of report institutionalization and annual assessment performance is to realize the excellent performance of colleges and universities.

Key words:Total quality management; colleges and universities; quality assurance system; excellent performance

1. INTRODUCTION

More and more colleges and universities have paid attention to improving the comprehensive competitiveness. The key to improving the comprehensive competitiveness is to improve the quality in an all-round way. Taking the concept of total quality management as the logical starting point, according to the construction idea of quality control mechanism, the quality assurance system is established through the specific and feasible implementation path, so as to achieve the excellent quality of colleges and universities.

2. CONNOTATION OF TOTAL QUALITY MANAGEMENT

TQM (total quality management) is defined by ISO international organization as a long-term way to achieve long-term success through customer satisfaction and benefits of all members and society of the organization. TQM believes that the product of higher education is service rather than students, that is, the service provided by the University^[1]. The essence of service quality is the quality of service

environment, service subject, service carrier, service process and service effect in Colleges and universities. Therefore, as colleges and universities, we must establish a comprehensive view of quality. TQM emphasizes "focusing on customers", that is, all quality should start from customers. Therefore, colleges and universities should establish the concept of serving students, parents, employers, partners, school organizers and the state. TQM regards management as a dynamic and active process^[2]. Colleges and universities should set up the "three quality concepts of customer center", that is, customer-centered, overall quality, overall quality and all staff quality. All quality should be customer-centered. Total quality means that every aspect of school service should be quality-oriented, that is, every service should have clear quality requirements. Total quality means that every link of every work should be quality-oriented, that is, every link should have clear quality requirements. Total quality means that every employee should be quality-oriented, that is, every employee should be quality-oriented Manager and responsible person.

3. THOUGHTS ON THE CONSTRUCTION OF TOTAL QUALITY MANAGEMENT MECHANISM

TQM emphasizes the principle of process approach, i.e. "a set of activities that transforms input into output by utilizing resources and implementing management.". Systematically identify and manage the processes applied by the organization, especially the interaction between these processes ". According to the concept and principle of total quality management, the basic idea of the construction of quality management mechanism is to define the monitoring object, determine the monitoring subject, monitoring mode, dynamic feedback mechanism, improvement and tracking mode of feedback problems, and make performance evaluation on work performance.

3.1 Define the monitoring object

The monitoring objects of institutions of higher learning should include all factors affecting the quality of the University, the process of work and the performance of personnel's duties. For example, monitoring the school's professional setting,

enrollment, freshman enrollment, talent training, employment, catering services, security, large-scale activities, etc., and monitoring the performance of duties, handling affairs according to procedures, and quality compliance of personnel at various posts.

3.2 Establish multiple monitoring subjects

Colleges and universities should set up quality control departments at the school level to comprehensively coordinate the quality control work of colleges and universities. According to the functions of each department, we should establish the monitoring of relevant matters, and the monitoring of the situation of teachers and students in the whole hospital from the perspective of teaching staff and students. At the same time, it is necessary to establish external government, employers, parents and other stakeholders to monitor the school. As can be seen from the above, the monitoring subjects of institutions of higher learning include quality monitoring full-time departments, functional departments, teachers' representatives, students' representatives, government, employers' representatives, students' parents' representatives, etc.

3.3 Establish multi-dimensional monitoring mode

For professional, curriculum, teaching materials, training places and other service carriers, regular evaluation can be used. For enrollment, enrollment, talent training, internship, employment, large-scale activities and other service processes, process monitoring can be used. For the staff of each post, the random inspection monitoring method can be adopted to check their work according to the procedures and the implementation of quality standards according to the work records. For the service effectiveness of Freshmen's registration rate, employment rate, and student satisfaction, quantitative monitoring of the achievement of quality objectives can be used.

3.4 Establish dynamic feedback mechanism

For the problems found in the monitoring within the responsibilities of the functional departments, the regular notification mechanism of the functional departments shall be established. For the problems found or reflected by teachers' representatives, students' representatives, employers and students' parents, the quality control department shall establish a regular feedback mechanism. The quality monitoring department shall also establish a weekly quality notification mechanism to report the quality of the whole hospital.

3.5 Establish problem tracking mechanism

Each problem related department shall report the implementation of the problem improvement to the problem feedback department, and the quality monitoring department shall track the problem improvement on behalf of the school, and establish a problem improvement notification mechanism.

3.6 Establish performance evaluation system

Based on the pursuit of excellence in quality improvement, the daily performance of each

department and each member should be evaluated. According to the daily monitoring records, make performance evaluation on the work quantity, work quality, work efficiency, work effectiveness and work efficiency of each department and each employee.

4. IMPLEMENTATION PATH OF QUALITY ASSURANCE SYSTEM CONSTRUCTION

Based on the concept of total quality management, explore the establishment of "quality management mechanism based on quality objectives" with characteristics of colleges and universities, and form a quality assurance system of "systematization, comprehensiveness, diversification, three-dimensional, whole process, transparency, informatization, normalization, institutionalization and performance".

(1) Based on the development of the school, the quality objectives of the school are established, and the four level objective system is formed step by step. According to the concept of total quality concept, the quality objectives of five dimensions of service environment, service subject, service carrier, service process and service effectiveness are determined, and a four level objective system of school objective, middle level department objective, department objective and personal objective is formed.

(2) Establish a four-level work plan system based on quality objectives. From the school to the individual, all levels formulate the specific annual work plan according to the quality objectives, and define the five elements of the plan, namely, clear objectives, clear tasks, clear time limit, clear responsible person and clear funds, so as to form the four-level work plan system of the school.

(3) Establish a comprehensive monitoring mechanism based on overall quality. Based on the quality objectives, work plans and responsibilities of each department, monitor the implementation of objectives, plans and responsibilities, so as to establish a comprehensive monitoring mechanism for all services of the school.

(4) Based on comprehensive monitoring, establish diversified monitoring subjects. Establish a diversified monitoring subject with quality management department as the main body and relevant functional departments, teaching staff representatives, student representatives as the auxiliary. The quality management department is responsible for monitoring the functional departments, the functional departments are responsible for monitoring the work within their responsibilities, and the teaching staff representatives and student representatives are responsible for monitoring the situation of teachers and students.

(5) Establish a three-dimensional monitoring mode based on the nature of the monitoring object. Establish a three-dimensional monitoring mode of routine supervision, special supervision and random inspection. Routine supervision is mainly to

supervise the daily performance of each department, special supervision is mainly to supervise the important work or large-scale activities, and random inspection is mainly to supervise the work objectives, work plans, temporary tasks, etc.

(6) Based on the whole process quality, establish the whole process monitoring mechanism. Monitor the whole process of talent training, such as the program formulation, program implementation, work procedures, etc. of specialty setting, enrollment, freshman enrollment, talent training, etc.

(7) Establish a problem notification mechanism based on dynamic feedback. First, establish a notification mechanism for functional departments. Second, the teacher and student representatives shall regularly feed back the problems found to the quality management department. Third, establish a weekly notification mechanism for quality management departments. Fourth, rely on the intelligent campus information platform to achieve "real-time feedback and timely rectification".

(8) Establish feedback tracking mechanism and quality annual report mechanism based on improvement and improvement. The responsible department shall propose improvement measures for the reported problems, and the quality management department shall track and supervise the implementation of the problem improvement to

achieve the quality PDCA cycle improvement. Based on the quality of the whole staff, all members of the school and each department write the quality analysis report based on data to form the annual quality report of the school and release it to the society.

(9) Establish assessment and incentive mechanism based on excellent quality. According to the quality objective system, the international advanced MBO, KPI and BSC performance appraisal methods are adopted every year, and the performance appraisal methods are formulated to assess the achievement, work efficiency and work effect of the annual quality objective, so as to achieve the excellent development of the school.

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The Role Descriptive Words Play in Character Shaping--Harry Potter and the Philosopher's stone as an Instance

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Abstract: In literary creation, especially for novels, character shaping is of great essence and significance. In order to shape the characters more specifically and vividly, using the descriptive words, such as adjectives and adverbs, is the most effective and convenient way. In addition to the direct description of the characters, action or language description, as well as the way and content of the characters' speech are usually used to refine the characters' images. Taking Harry Potter and the Philosopher's Stone as an example, this paper through interviews to analyze part of the plot and discuss the role of words in displaying different characters. By analyzing and showing the significance of descriptive words to characterization, this paper provides some references for the characterization in literary creation and the study of the characters in Harry Potter series.

Key Words: character shaping; descriptive words; Harry Potter

1. INTRODUCTION

1.1. Rationale

Harry Potter series as one of the most popular novels in the world, its greatness goes without saying. The specific and vivid character shaping is one of the reasons why it's so popular. Its outstanding character shaping also reflected in choosing roles for the movies of the same name. The casting of Harry Potter movies was considered as one of the best castings in the history, for you can identify every character at first glance without any introduction. This paper is mainly interested in how this novel can achieve such splendid character shaping and the important role descriptive words play in the process.

1.2. Objectives

Explore the method of character shaping in Harry Potter and the Philosopher's Stone, specifically focus on the use of descriptive words. Descriptive words contain not only adjectives and adverbs, but also nouns and verbs and other words that can be used to describe things. Through analyzing literatures and interviews, gather information of previous study and data of people's opinion about the effect of descriptive words using in character shaping.

1.3. Research Questions

Whether descriptive words have effects in character shaping, if so, how do descriptive words work in the process of character shaping and their

effects?

2. LITERATURE REVIEW

2.1. Research Background

Character shaping in literature creation and literature appropriation always plays an important role, especially in novel writing. This paper mainly takes Harry Potter and the Philosopher's Stone as an instance. Shi Yuting in her paper *The Charm of the Harry Potter Novel Series and Brave Image Analysis*^[1] through the comparison among the main characters, and also the practical significance the work contained, mainly discussed the character of braveness in the work. Jiang Yanan in his *Image Interpretation of Ron in "Harry Potter"*^[2], discussed the character of Ron through the comparison of the control of humanity and beastliness. Yang Huilin in her *An Analysis of the Characterization in Harry Potter in Combination with Hebrew Culture and Hellenism*^[3], through another different aspect, discussed the role in character shaping that Hebrew culture and Hellenism played. All the papers studied the characters in Harry Potter series from different aspects, and they all made clear and reasonable explanations for their theory. However, among all the works, there were few studied the role descriptive words played in the work.

2.2. Theoretical Framework

This paper mainly analysis the character shaping in Harry Potter and the Philosopher's Stone through the use of descriptive words. The method took in this paper is interview, which can help us comprehend the opinions that people hold about character shaping in the work and the use of descriptive words. The later study in this aspect may get a little reference through all the work.

Research Assumption

Descriptive words play a positive and effective role in character shaping.

2.3. Research Method and Data

In this paper, the main research method is interview. The reasons for choosing interviews are as followed:

(1) For analyzing literature words, there is hardly standards for the answers. Through interview we can get more open and creative answers.

(2) Research objects are limited. Although Harry Potter series are famous all over the world, when we narrow the range to the people around us, the objectives are rather limited.

(3) Interview is an easy and convenient way to carry out, especially when there are not so many objects and the answers that you are expecting are rather subjective and without a clear standard.

The total number of objectives been interviewed is 20, including 8 males and 12 females; 4 from age 12-17, 12 from age 18-22, 4 from 23 and above.

The interview mainly contains three questions:

(1) Do you think the character shaping in Harry Potter and the Philosopher's Stone is successful or not?

(2) If the answer to the first question is "yes", then what are the main factors in your understanding for its success?

(3) Do you think the use of descriptive words are important in character shaping? Why?

The results got from the interview are as following:

(1) 17 of the objects agree with the opinion that the character shaping in Harry Potter series is a success, 3 hold the opinion that its character shaping still needs to be improved;

(2) Among the 17 objects who agree with the first question, 10 of them think that the direct description is the main reason for its success; 5 of them think the reason could be the plot of the novel, from the specific incidents that the character had been through; 2 of them hold the opinion that the main factor of its success was the reader's recreation of the characters.

(3) All the 20 objectives agree that descriptive words are important in character shaping, and their reasons include creating direct feeling, detailed description and so on.

3. FINDINGS AND DISCUSSION

From the result of the interviews and the analysis of literature, we can see that most people agree with the idea that descriptive words play an important role in character shaping.

In Harry Potter and the Philosopher's Stone, there are so many distinctive characters. One of the most incredible things of Harry Potter series is that its writer, J.K. Rowling created a complete world with all the character in, and each of them are like a real person that lives around us, which makes us can't help but to believe that the magic world is a real world.

Next, this paper will include some exact instances to demonstrate the effect of descriptive words in shaping different characters. The materials select here are from Chapter 4, The Keeper of the Keys, narrates the story happened in the Dursleys, before Harry Potter went to Hogwarts School of Witchcraft and Wizardry (hereinafter referred to as Hogwarts), his uncle Vernon and aunt Petunia prevent Harry get his letter from Hogwarts. They took Harry to an isolated island, pinned their hope on Hogwarts giving up admitting Harry to the school. So, the keeper of the keys in Hogwarts, Hagrid, came to look for Harry by himself. In this chapter, the writer mainly describes Hagrid's anger when he found Harry knew nothing about magic, uncle Vernon's resolute opposition to

Harry's going to school, Harry's surprise when he found out that he is a wizard, and his dissatisfaction with his uncle's concealment of the truth from him. Through the description of these three emotions, the different personalities of the three characters are highlighted, which lays a foundation for the development of the following plot.

3.1. Harry

At first, when Harry didn't know what was happening, the main words used to describe Harry's language are the words such as asked, said etc. which are rather flat without emotional color, showed Harry's confusion at that moment, at the same time showed Harry's politeness and gentle attitude towards strangers; After he learned that he was a wizard, his language description changed, such as said Harry eagerly; Gasped Harry^[4], instead of being as plain as the previous, showed the psychological changes of Harry from the unknown calmness, to the incredulousness and surprise when he found that his life may change. In the description of Harry taking the letter from Hagrid, the text used stretch his hand instead of simply using take, which shows his cautious and incredulous when he takes the letter, which is very consistent with the psychology of an 11-year-old boy.

3.2. Hagrid

When Hagrid discovered that Harry didn't know anything about magic, he was extremely angry with the Dursleys, which is also clearly visible in the article. E.g. Barked Hagrid, thundered Hagrid. Compared with direct said He got really angry, or He yelled, or shouted, express the feelings even stronger, bark showed his extreme anger, even like a beast; Thunder, on the other hand, showed the huge noise he could make as a giant and his deterrent power. It also highlighted Hagrid's angry mood at that time, reflected his impatient personality, but also showed his pity and regret for Harry's ignorance, which showed the sincerity and frankness in his personality.

3.3. Uncle Vernon

Uncle Vernon in the book is an ordinary citizen image, he tried to be brave, but the actual inner cowardice, in this section there is clear: Uncle Vernon, who had gone very pale, whispered something that sounded like 'Mimblewimble... Uncle Vernon suddenly found his voice. When facing Hagrid's anger and query, he didn't dare to respond directly, but only muttered meaningless words in a whisper. He didn't say a word, but it took him a lot of effort and courage, which clearly showed his weakness.^[4]

Through interviews, literature analysis and discussion of the characters in Harry Potter and the Philosopher's Stone, we can draw the conclusion that descriptive words play an important and effective role in character shaping in literature creation.

However, since the number of the objects been interviewed is too limited, the results obtained will have a certain bias. Besides, the research in this area

is still deficient, whether about descriptive words or character shaping. What's more, the research method used in this paper is also limited, it cannot represent all the result that may appear.

This paper mainly did a research on descriptive words and character shaping, which may is of a little help in studying the language and understanding the character in novels and other forms of literature. Also, it is may considered as reference when analyze the character and other aspects in Harry Potter series.

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Aesthetics Research on ShuiPai Art Design Education in China

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Abstract: ShuiPai art design in China attaches importance to the art with Chinese characteristics, emphasizes that art makes the past serve the present, and makes foreign art serve China. And we should apply what we have learned to combine art with the development of modern design and integrate art into life. This paper starts with the basic content of Chinese ShuiPai art and the teaching philosophy of Water Sent Arts, and studies the aesthetics of ShuiPai art design education.

Keywords: Chinese ShuiPai art; Design; Educational aesthetics

1. INTRODUCTION TO CHINESE SHUIPAI ART

1.1 Chinese ShuiPai art

As a pioneer force in contemporary Chinese art and design circles, ShuiPai advocates the design process of playing art, designing, creating ideas, and becoming a brand. It developed from water droplet studio to water cloud design alliance, from POP studio to Water Sent Arts to ShuiPai art design school and ShuiPai brand calligraphy school. The development of ShuiPai marks the growth of modern art and design education in the east. ShuiPai is also the first design school in the world that was established solely to develop traditional oriental culture into modern art and design education^[1].

ShuiPai has always been known as the most influential and controversial art school in the 21st century. It is an artist garden that likes water culture, water thought and water spirit. It creates the educational concept of modern design of playing art, calligraphy and water life, and makes new achievements in the field of art design education. The course of ShuiPai is the course of the development of modern design, and also the process of the integration of hand-painted art and computer design. It integrates design art into business, art into life, calligraphy into practical and creative brand calligraphy, and cleverly integrates design aesthetics in various fields to continuously improve life^[2].

1.2 Viewpoints of Chinese ShuiPai art

In terms of design theory, the Chinese ShuiPai art puts forward three basic points:

- (1) Everyone can become a living artist. Just like water is a sketcher of nature, everyone can create art when he picks up a brush. It is more valuable to be creative and thoughtful in painting.
- (2) Brand design is based on love, and creators must have the power of maternal love, the spirit of love,

the determination to love. Brand design serves people, the purpose of design is to enable people to feel the charm of life aesthetics in a beautiful experience^[3].

- (3) Water benefits everything, and all things have spirits, so we should respect for nature. From ideal to reality, the design of ShuiPai has both rational scientific thoughts and artistic romanticism. In addition, we should advocate that works benefit all things and become classics^[4].

2. DEVELOPMENT OF CHINESE SHUIPAI ART

ShuiPai derives from the northern country. It is located in the north of the World Sculpture Park in Jilin Province, and is deeply embedded in the Pearl of Changchun, the classic works of Wang Jianlin, the richest man in China. It originated from water droplet studio in 1999 and developed into Shuiyunjian. The company was formed in Jilin youth Creative Industrial Park in 2009. The design of play of painting is inconstant, frozen, and traveled all over the world. Art is designed in every field of life and between heaven and earth. With the ambition of being a creative power, it has successfully served the brand leap of top 100 enterprises, covering brand design planning, beautiful decoration, brand packaging, book binding, and talent training, as well as cultural and creative communication. ShuiPai has completed visual communication marketing by beautifying life and commercial packaging to help high-quality customers and add value to brand design. It is committed to building a global Chinese brand and creating a brand for Chinese enterprises^[5].

Changchun Shuipai Art Design Co., Ltd. is a brand design organization with university teachers and practical design experts as the core. In 2011, it became a member unit of China Commercial Design Alliance. In 2015, it was rated as the "top 500 best emerging brands in Chinese brand design industry", and the most popular creative brand in Chinese cultural and creative industry. Mr. Yan Hui, the head of Play of Painting, is known as the father of Chinese brand creativity and the founder of Chinese Energy Recall. He was awarded the title of "Top Ten Design Masters in China" in 2009 and the honorary title of "Most Influential People in Chinese Brand Design Industry" in 2015. He has successively served as guest professor in 16 universities including Jilin University and Northeast Normal University, and cultivated 3000 students. Shuipai company has established business development platforms such as Shuipai design department, Shuipai art school,

Shuipai cultural and creative mall, focusing on cultural and creative communication. It integrates the essence of water culture with 10000 creative works and thousands of cooperative enterprises. It has successfully introduced brand planning and overall visual image system upgrading for many well-known enterprises, and its service fields include government agencies, education, publishing, real estate, clothing Medicine, food, tourism, agriculture, and construction. It has created huge business opportunities and benefits for customers, and is known as "design experts to build top 100 enterprise brands"^[6].

3. WATER SENT ARTS

3.1 Introduction to Water Sent Arts

Water Sent Arts is a senior private school of art and design in Changchun. It aims to spread the unique art of ShuiPai, advocate the teaching idea of "managing art in circles and designing life with art" with the purpose of "happy lesson". It puts forward the school running attitude of learn for writing, painting and creating to promote calligraphy and painting lovers who love art and design to relieve pressure through learning, release passion, realize artistic dreams, and shape the paradise of the soul. It is a place for many students who love art and design.

3.2 Research on teaching aesthetics of Water Sent Arts

(1) Teaching tenet of "happy lesson"

Water Sent Arts takes "happy lesson" as its teaching purpose, and believes that the progress of students is the success of teachers. In action, it insists the concept that the foreign language is used in China, the ancient is used for the present, and the knowledge is applied to practice. It has always been at the forefront of fashion, focusing on human emotions. In terms of creation, it believes that creation is to be caused by the mood. For instance, art works such as *Happy Water School* and *Youth Water School* are all built on the art of reverse thinking. In the process of teaching water art, artists are also committed to guiding students to break the original art and spreading the art style. ShuiPai art even tolerates the existence and development of every art form, such as simulation, plagiarism, quotation, repetition, etc. Under this teaching concept, the teaching of ShuiPai art is respected by the majority of students.

(2) Life is integrated into art, and art interprets life

ShuiPai art flows into everyone's heart slowly like water flow. Based on personal charm, fashion symbols, original materials, etc., water school art conveys the creativity and ideas of design to every student. From a certain point of view, Water Sent Arts not only conveys culture, but also makes students' lives more exciting and creates the art of life. It believes that the creation of works is also a compound process. Each artist is like a director, and carries out a montage collection of ready-made products. The philosophy of ShuiPai art is the life of art and is the art of life. It strives to let all people who come into contact with water art understand the good of ShuiPai art and feel its funny, so that they can participate in the study and application of ShuiPai art, and feel its "effect".

4. CONCLUSION

To sum up, water is the bond of life, embracing water, and letting natural water soothe the bones and muscles before it can release spirituality. ShuiPai art is to realize the dream of water that everyone needs and enjoys it. Chinese ShuiPai art unifies the life and creates its unprecedented artistic value by integrating life. In teaching aesthetics, ShuiPai art adheres to the correct teaching concept, advocates freedom and blooms its unique charm. It is a rare treasure of art field.

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Brief Talk on the Concept and Implementation of Key Competencies of English Subject

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Abstract: After 20 years of planning, implementation and adjustment, the curriculum reform since 2000 has indeed injected new vitality into education. Compared with the previous curriculum reform, the new basic education reform is more mature. However, the rapid development of society has brought great challenges to education. We should not relax and actively participate in the reform of core literacy education. The starting point of this paper is to help ordinary teachers like me understand the concept of core literacy and realize the importance of reform. After knowing the problems in the reform, readers can come up with their own ideas.

Key words: key competences, senior English teachers, concept and implementation

1. CLEAR CONCEPT CONNOTATION

1.1. Key competencies

In March 2014, the Ministry of Education issued the opinions on comprehensively deepening the curriculum reform and implementing the basic task of cultivating talents with morality, put forward the important concept of "core literacy", and required that the development and construction of students' core literacy system be the key link to promote the deepening development of curriculum reform^[1].

The research on the core literacy of Chinese students is in its infancy. The definition and connotation of the core literacy, the way to cultivate the core literacy, the evaluation methods of the core literacy and other issues are still under exploration in the academic community, and relatively mature understanding has not yet been formed^[2].

1.2. Key competencies of English discipline

The core quality of English subject mainly includes language ability, cultural awareness, thinking quality and learning ability.

Language ability refers to the ability to understand and express meaning through listening, speaking, reading and writing in social situations, as well as the language awareness and sense formed in the process of learning and using language.

Cultural awareness refers to the understanding of Chinese and foreign cultures and the recognition of excellent cultures. It is the cross-cultural understanding, attitude and behavior orientation of students in the context of 1.3. globalization.

Thinking quality refers to the ability and level of thinking in terms of logicity, criticism and innovation.

Learning ability refers to the awareness and ability of students to actively use and adjust English learning strategies, broaden English learning channels, and strive to improve English learning efficiency^[3].

2. THE IMPORTANCE OF CARRYING OUT CORE LITERACY EDUCATION

2.1 Social development needs

'Core literacy, also known as '21st century literacy', is a high-level ability and human ability to adapt to the needs of the information age and knowledge society, to solve complex problems and to adapt to unpredictable situations. If our students do not want to be eliminated by the times, they need to cultivate critical, creative and cooperative thinking particularly.

For example, the trend of using English to tell Chinese culture. As Mr. Wang Xin said, "Telling Chinese Stories in English" is a very broad goal. How to achieve this goal and fulfill the requirement of cultivating students' cultural awareness in the core literacy of English subject requires extensive English teachers to ponder and explore carefully in the light of teaching practice^[4].

2.2 Solve the lacking of students' abilities

Based on the core quality of English subject, this paper illustrates the lack of students' ability at present. Language ability: lack of listening skills, oral expression ability, reading ability and writing ability. Cultural awareness: Although students respect cultural diversity, are confident enough in cultural exchange and have independent thinking and value judgment on culture, it is very important that students have no interest in cultural exchange. Thinking quality: students lack critical thinking, logical thinking training and innovative thinking ability. Learning ability: students are not interested in learning, do not want to participate in cross-cultural communication, learning methods are not effective, and the ability to update information is weak^[5].

2.3 To Cultivate positive individuals

The contemporary training goal needs to pay attention to the individual's positive life mode and the basic conditions needed for the realization of life activities with high quality. This is because not everyone can be erudite, have a variety of skills, can always live in a normal, lucky, smooth. However, no matter what kind of people, some people with positive life modality will always live their own unique and bright life^[6]. Under the guidance of such education value, the core literacy cultivates students

in the new era.

3. PROBLEMS IN IMPLEMENTATION

3.1 The negative effect of stubborn belief

The impact of reform on our past knowledge and experience may even be a total negation. The reform has made our teaching disordered and made us lose the ability of education. With the implementation of the new curriculum reform, too many teachers become confused, as if they can't teach. The reform that deprives things of their nature is painful and threatening. Therefore, in order to protect the basic ability to understand and deal with things, we naturally avoid and resist reform^[7].

3.2 The lack of specific operation guidance in theory
China's curriculum reform is based on curriculum research and professional development, but from the reality of policy implementation and evaluation process, the level of research is lagging behind, for example, the lack of overall system, the lack of practical guidance of theoretical research. Teachers hope to have a set of framework about curriculum concepts and problems, according to which they can analyze curriculum phenomena, build curriculum implementation plans and outline curriculum reform strategies. And then, in reality, it's not^[8].

3.3 The lack of reform support resources.

Any reform is based on reality, not on nothing. The theoretical research before the reform, the theoretical promotion during the reform, the personnel training, the reflection and summary after the reform, the re-adjustment after the adoption of the suggestions, etc., all need the strong support of human and material resources. However, the reality is not ideal. In the face of great education, a large number of teachers and hundreds of millions of students, our investment in reform seems too small.

4. SUGGESTIONS ON PROMOTING KEY COMPETENCIES

4.1 Reconstruct key competencies of teachers.

Teachers should first cultivate their own core literacy. It is suggested that teachers have the following teaching abilities. Language teaching ability: including the ability of teaching design, teaching operation and teaching evaluation. Social and cultural ability: master the cultural background knowledge of English speaking countries, understand the connotation of culture, and have high-quality cross-cultural communication ability. Thinking ability: logical thinking, critical thinking, innovative thinking. Learning ability: the ability of lifelong learning, cooperation and communication, teaching and research^[9].

4.2 Attach importance to the exemplary role of teachers.

It is not right for us to be just aware of the importance of key competences to students and make a request on them because we are teachers. 'In order to better implement the core quality of English, teachers, as guides, should attach importance to self-teaching and

seriously consider how to improve their teachers' quality.' For our own sake, for our students, for the survival of the future, our teachers should actively respond to the education reform under the guidance of the core literacy concept.

4.3 Modern information processing capability.

The future society is a society with highly developed information. How to acquire and handle the information needed quickly and accurately is the core of all kinds of literacy. In the education reform, the development of information ensures the timely and rich education research and learning, but other education ideas, the discordant voice in the international environment also affect our cognition. The core literacy emphasizes the cultivation and improvement of thinking quality. The higher the thinking quality, the less likely people are to be lost in information.

5. CONCLUSION

To sum up, in order to promote the reform of core literacy, our teachers should first overcome stubborn cognition, recognize the concept and implementation of core literacy with positive modality, and do a good job in students' role model work. Secondly, facing the reality critically in the reform, we should constantly reflect and adjust our teaching practice. Finally, from the perspective of macro policy, more understanding and patience, more resources support for front-line teachers. Considering the reality of education, we can first train some excellent reformers and researchers, and then gradually promote them nationwide. After all, we all have such an educational belief, all for the development of students.

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Preparation and properties of TiO₂/PAM composites

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Abstract: A novel TiO₂/PAM composite material was successfully synthesized using PAM as carrier. polyacrylamide (PAM) was prepared with acrylamide (AM) as raw material and dibenzophenone as photoinitiator by aqueous solution polymerization. The results showed that the optimal parameters were as follows: monomer mass fraction 32%, TiO₂ dosage 2%, initiator dosage 0.05%, reaction temperature 30 °C, reaction system PH 6.5, purging with nitrogen (N₂) for 10min, illumination time 120min. The TiO₂/PAM composite material characteristic viscosity can reach up to 898 mL/g, which was determined by fourier transformation infrared spectroscopy (FT-IR), the prepared samples conform to TiO₂/PAM characteristic groups, and the catalytic degradation rate of methylene blue (MB) solution can reach above 98%.

Keywords: Polyacrylamide; TiO₂; Composite; Photocatalytic performance

1. INTRODUCTION

As a kind of water-soluble polymer, PAM is the most commonly used water-soluble polymer surfactant. In recent years, scholars at home and abroad have devoted themselves to the synthesis of PAM, especially to improve the properties of polymers [1-2]. The new type of PAM can be used in a wide range of applications by introducing nanoparticles and improving its properties [3].

Nanostructure TiO₂ is a kind of semiconductor inorganic functional material with unique photocatalytic performance, however, the powdered TiO₂ is easy to aggregate, easy to inactivate, and difficult to recycle, which limits the practical application effect.

Based on the above considerations, this paper developed a facile and environment-friendly aqueous solution polymerization route to fabricate PAM. The as-prepared PAM was used as a carrier of nanostructure TiO₂ photocatalyst to prepare TiO₂/PAM composite, and then the optimum monomer dosage and polymerization process were discussed to improve the properties of composites.

2. EXPERIMENTAL SECTION

Titanium potassium oxalate (K₂TiO(C₂O₄)₂, 98%), acrylamide (AM, 98%), absolute ethyl alcohol (99.7%), nitric acid (HNO₃, 68%), diphenyl ketone kind photoinitiator and methylene blue (MB, ≥82%).

All reagents were of analytical grade, and used without further purification.

Ubbelohde viscometer with inner diameter of 0.54 mm was used to measure the intrinsic viscosity of the sample, the FT-IR spectra were recorded on a Nicolet 380 from 400 to 4000 cm⁻¹ using KBr pellets that were prepared by pressing pellets containing 100 mg KBr and 1 mg of sample, the UV-vis absorption spectra were recorded on a DUV-3700 DUV-vis-near-IR recording spectrophotometer from Shimadzu Corp.

Preparation of TiO₂ the sol-gel process was used by imixing K₂TiO(C₂O₄)₂, C₂H₅OH, H₂O and HNO₃, the sol was aged, dried, ground, calcined, and then subjected to secondary grinding to obtain nanostructure TiO₂. The TiO₂/PAM composite materials were successfully synthesized by aqueous solution polymerization. A certain molar ratio AM and nanostructure TiO₂ were dissolved in deionized water, then magnetic stirring for 2h at room temperature, subsequently small amount photoinitiator was dropped into the solution, and vigorous stirring was maintained throughout the entire process. After purging with nitrogen (N₂) for 10min then sealed and placed it under the UV light irradiation for 2 hours, after completion of the reaction, and then dried and grinded.

3. RESULTS AND DISCUSSION

3.1 The optional experimental conditions

The initiator was 0.05%, the reaction temperature was 25°C, the TiO₂ dosage was 3%, the reaction system PH was neutral, purging with nitrogen (N₂) for 10min, and the light duration was 120min. These conditions remained unchanged, and the monomer dosage of the reaction system was constantly changed. The viscosity changes of the composite were shown in figure 1. The best monomer mass fraction was 32%. As the mass fraction of the monomer increases gradually, the viscosity of the synthesized TiO₂/PAM composite tends to increase first, then stabilize and then decrease. This is because the reaction system of monomer mass fraction increases, system's primary radicals increase gradually, increase the chances of polymer copolymerization and growing polymer chain structure, with too many to produce a large number of free radicals in the reaction system of monomer, easy to cause the chain termination occurs, is not conducive to the chain structure of the

composite materials increase.

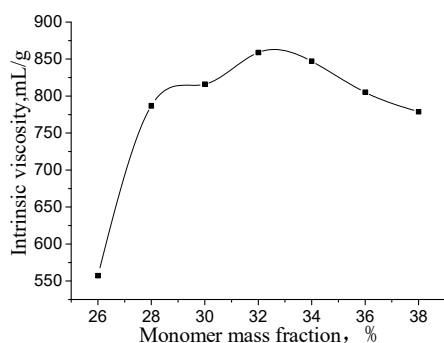


Figure 1. Effect of monomer mass fraction on polymer viscosity

Figure 2 shows the effect of TiO_2 dosage on polymer viscosity, the monomer mass fraction was 32%. Other experimental conditions were the same as figure 1. The optimal value was explored by changing the TiO_2 dosage in the reaction system. The result shows that the amount of TiO_2 for intrinsic viscosity smaller effect of composite material, the amount of TiO_2 is about 2% in intrinsic viscosity appeared the maximum value of composite material, which is because with the increase of TiO_2 dosage, the sol of the system gradually increased, the viscosity of the reaction system gradually increased, and the number of free radicals entering the micelles of organic monomers coated with inorganic ions decreased, leading to the increase of the characteristic viscosity of the composite material first and then decreased.

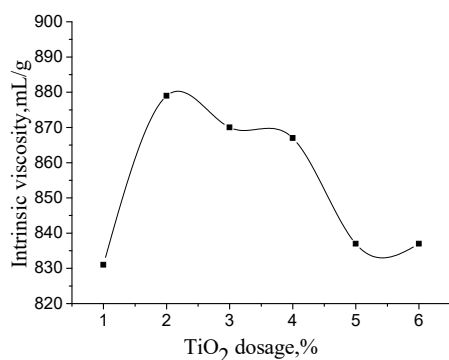


Figure 2. Effect of TiO_2 dosage on polymer viscosity

The influence of reaction system temperature on the polymerization reaction is shown in figure 3. The temperature of the reaction system has a great influence on the kinetic parameters of the polymerization, so it will affect the rate of the whole polymerization and the structure and properties of the reaction products. As the temperature rises, the characteristic viscosity of the composite material TiO_2/PAM increases until it decreases. This is because when the temperature is very low, the initiator is not active enough, resulting in slow reaction. As can be seen from figure 3, the optimal

reaction temperature is 30°C.

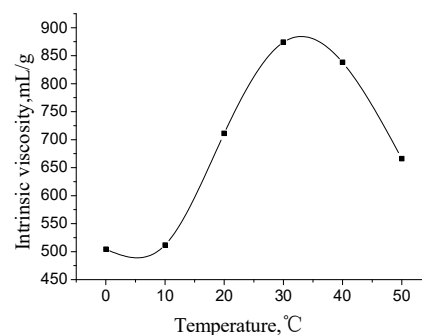


Figure 3. Effect of reaction temperature on polymer viscosity

Figure 4 shows that the effect of pH value on the characteristic viscosity of TiO_2/PAM . Under acidic conditions, AM and TiO_2 have a low rate of polymerization and are prone to self-polymerization, accompanied by intramolecular and intermolecular phthalimide reactions, forming branched chains or crosslinked products that are difficult to dissolve. Under alkaline conditions, AM is easy to react with NH_3 to produce chain transfer agent nitrogen tripropanamide, which is not conducive to chain growth. When the pH value is 6.5 to 7.0, the characteristic viscosity is the largest, the strong alkaline and strong acidic environment are not conducive to the copolymerization reaction, and the product's characteristic viscosity is poor.

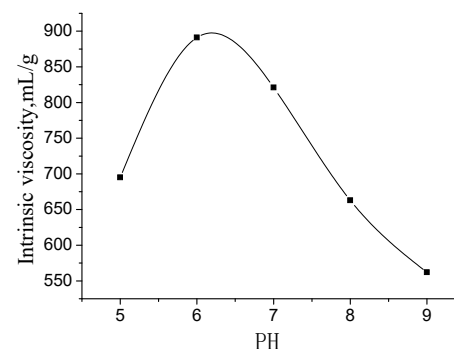


Figure 4. Effect of reaction system PH on polymer viscosity

It can be seen in Figure 5 that with the increase of the light time, the intrinsic viscosity of the composite gradually increases and then decreases. This is because the diphenyl ketone class under the irradiation of ultraviolet light initiator can continue into primary radicals, reaction system active center continue to increase, combined with monomer free radicals for chain, chain growth rate faster, intrinsic viscosity increasing of $\text{TiO}_2 / \text{PAM}$, but polymer is often grow to a certain degree of chain termination and chain transfer phenomenon occurs.

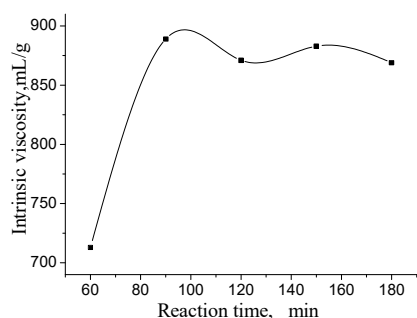


Figure 5. Effect of reaction time on polymer viscosity

3.2. Infrared spectrogram analysis

Chemical compositions of the samples were characterized by FT-IR spectroscopy (Figure 6). In transmission spectra of samples, the peak at 3400 cm^{-1} is characteristic absorption peak of N-H stretching mode of the amide; The peaks at around 2950 cm^{-1} corresponded to the $-\text{CH}_2$ telescopic vibration absorption; Ti-O-C vibration was caused by C-O-H deformation vibration at 1365 cm^{-1} and 1050 cm^{-1} , indicating that TiO_2 had been polymerized. All of peaks in FT-IR spectrum were in agreement with the experimental monomer.

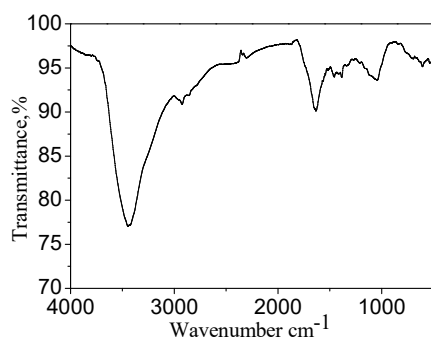


Figure 6 : FT-IR spectra of TiO_2/PAM composite

4. CONCLUSION

In conclusion, a simple and efficient aqueous solution polymerization route was demonstrated to synthesize TiO_2/PAM . According to the experimental results, it was found that the optimum reaction conditions: monomer mass fraction 32%, TiO_2 dosage 2%, initiator dosage 0.05%, reaction temperature 30°C , reaction system PH 6.5, purging with nitrogen (N_2) for 10min, illumination time 120min. The TiO_2/PAM displayed an enhanced flocculation effect and photocatalytic performance compared with nanostructure TiO_2 and PAM.

ACKNOWLEDGMENT

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Suggestions on the strategic design of the system and mechanism to deal with the aging population

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Abstract: China's aging population is increasing. the population of the olds over 60 in China reach 255 million by 2020, accounting for 17.8%. By 2050, it will reach 483 million, accounting for 34.1%, which have a significant impact on China's economy, politics, culture, society and ecology. The strategic design of the institutional mechanism to actively respond to the population aging is a major strategic issue to achieve the two centenary goals and the Chinese dream of the great rejuvenation of the Chinese nation. According to the requirements of the new era, we should take active measures to deal with ,such as Innovating new concept, overall design, Implement the strategy of healthy China.

Keywords: aging population, strategic design, suggestions;

According to the United Nations standards, the proportion of people over the age of 60 in the total population reaches 10%, which is considered as an aging country. by the end of 2016, there were 230.86 million people aged 60 and over, accounting for 16.7% of the total population^[1]. China's population structure is replaced by an old-age social population structure .Dealing with the aging population effectively is related to the overall development of the country and the well-being of hundreds of millions of people.

1.INNOVATE NEW CONCEPT.

(1)We should innovate ideas and break the traditional inherent system and mechanism mode. We should take a positive view of the aging society and the life of the elderly. We should not only improve the quality of life of the olds, safeguard their dignity, but also promote economic development and social harmony.We should build a culture of filial piety and respect for the elderly with national characteristics and the characteristics of the times. We should carry out education on the national conditions of the aging population, policies and regulations for the aging population, guiding the whole society to enhance the sense of care and self-esteem, self-reliance and self-reliance of the elderly.

(2). It is precisely designed around the core elements of the cause of aging. There is a huge demand for supplies and services for the elderly.We should actively develop the service industry for the

aged, promote the construction of the system, standards, facilities and talent team of the service industry for the aged, build a service system for the aged that is based on home, supported by community, supplemented by institutions and combined with medical care, so as to better meet the service needs of the aged. In terms of industrial structure policies, leading industries should be developed under the concept of active aging to optimize and upgrade the industrial structure.as for industrial organization policies, industries which should encourage competition and restrict monopoly should be promoted by competition and encourage specialization and scale economy.Wth the power of government economic policy, the formation of economic scale should be guided in time, and we realize the acquisition of scale economic benefits.In terms of industrial layout policies, we should know how to consider the optimal spatial distribution of the aging industry and how to make the best location planning for the industry and enterprises by using the advantages of their own resources and elements in different regions, what factors should be considered in the spatial distribution situation and regional combination of various departments, elements and links, and which policies can effectively stimulate the rapid development of the aging industrial ecosystem and so on .In terms of technological innovation policies, in view of the characteristics of the aging population, such as the decline of physical function and memory,It is necessary to use policy incentives to encourage technological innovation that can improve the production efficiency and quality of life of the elderly, to promote the implementation of "active aging" by means of science and technology.

(3) From the height of enhancing national competitiveness, the government, enterprises, society, communities, families and individuals should establish a smooth information exchange channel to realize the process of policy effect presentation, policy problem feedback and policy mechanism adjustment. The subject and object of social participation make positive response and change to build a mature and all-round social participation system.

2. OVERALL DESIGN.

The system, mechanism and strategy to cope with the aging of the population should be designed as a whole and operated in a global way. The impact of population aging is overall, involving population, economy, politics, culture, society, ecology and other aspects of human society^[2]. Therefore, the field to deal with the challenge of population aging is also all-round, which requires us to be prepared and comprehensively arranged in all fields such as population development, economic construction, political construction, cultural construction, social construction and ecological civilization construction. Coping with population aging is not only a national strategy. we should coordinate and restructure the system according to the strategic perspective of "social integration" and "long-term development"^[3]. we need to coordinate the functions of different systems to form a joint force. The only way to achieve this goal is to establish a normal rights organization, break through the administrative management system, integrate the functions and resources related to population and family planning, civil affairs, public security, health, human resources and social security, education, etc. At present, the aging policy at the national level is mainly limited to the level of ministerial regulations and normative documents, and rarely rises to the level of national laws and administrative regulations. The rule of law is the essential requirement and important guarantee of socialism with Chinese characteristics. We will make a good combination of policies and laws, and improve the system of policies and regulations for the elderly. we need to perfect the relevant policies and construct the corresponding policy system. On the basis of the mature policies, we need to legislate, revise and create the corresponding laws, and build the aging legal system. Finally, we need to form the policy and legal system so as to provide the policy and legal guarantee for the construction of the ideal aging society and walk the legal aging society.

3. IMPLEMENT THE STRATEGY OF HEALTHY CHINA.

China has both the double pressures of a large population and an aging population structure, as well as the characteristics of "old before rich" and "old before prepared"^[4]. In China, the historical tasks of modernization that should be completed in the period of industrialization and urbanization have not been completed yet. At the same time, the age structure of population has entered the old age type, and many new social needs and contradictions have arisen. The coexistence of these two kinds of contradictions is an important feature of China's aging society.

With the increasingly severe situation, pressure and influence of China's aging population, the impact on the political ecology, economic development, social transformation, cultural value shaping,

ecological environment construction and other aspects has been deepened. There are still some structural problems in the aspects of cognition and active response to population aging and the realization of the two centenary goals. We must not forget our original mind, keep in mind our mission, hold highly the great banner of socialism with Chinese characteristics, and take the spirit of the 19th National Congress of the Communist Party of China to "actively respond to the aging of the population, build a policy system and social environment for the elderly, filial piety and respect for the elderly, promote the combination of medical care and maintenance, and accelerate the development of the aging cause and industry"^[5]. we should start from the strategic overall situation of "concerning the overall situation of national development and the well-being of hundreds of millions of people"^[6], promote the overall layout of "five in one" as a whole and promote the strategic layout of "four comprehensives" in a coordinated way. Through the new great project of promoting the construction of the party, carrying out the great struggle with many new historical characteristics, promoting the great cause of socialism with Chinese characteristics, and finally realizing the great dream of the great rejuvenation of the Chinese nation. Adhere to the new development concept, adapt to the requirements of the times, innovate ideas, promote the transformation of aging work to active response, to overall planning and coordination, to strengthen people's life-cycle pension preparation, to pay attention to the good life needs of the elderly at the same time, and comprehensively improve the quality of life of the elderly. We need to improve the working mechanism of aging under the unified leadership of the Party committee, the administration of the government in accordance with the law, the close cooperation of departments, the active participation of mass organizations, and the coordinated linkage of the top, the bottom, the left and the right, so as to form a large pattern of aging work. Maintain the national strategic competitiveness and sustainable competitive advantage in the international competitive environment, and highlight Chinese characteristics and wisdom.

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Research on Role of Social Media in the Social Transformation of Southeast Asian Countries: Digital Empowerment

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Abstract: The emergence of social media poses new challenges to the governance capabilities of sovereign governments. It is an important issue that Southeast Asian countries need to consider that how to do a good job in government governance under the general environment of social media and maintain the balance between freedom and supervision. This paper discusses the role of social media in social transformation of Southeast Asian countries.

Keywords: Social media; Social transformation of Southeast Asian countries; Supervision

At present, Southeast Asian countries are in the transitional stage of democratic political development with sharp contradictions among their internal interest groups, and their internal political and economic development is greatly affected by external factors. The emergence of social media has become an important factor influencing their social transformation^[1]. Some scholars believe that "social media poses an indiscriminate challenge to the governance capabilities of sovereign governments." It is particularly important to analyze the impact of social media on the social transformation of Southeast Asian countries and find appropriate management means to maintain a balance between freedom and supervision in the virtual space.

1. DEVELOPMENT STATUS OF SOCIAL MEDIA IN SOUTHEAST ASIAN COUNTRIES

Southeast Asian countries are in the stage of rapid development of society and technology. Social media such as Twitter, WeChat, and Line are constantly appearing, and have been unanimously praised in Southeast Asian countries. Survey data in recent years shows that the number of Internet users in Malaysia has increased by more than 10 million in a decade^[2]. The number of Internet users in Singapore is rising faster than that in Malaysia, and people are getting used to watch magazines and videos with tablet personal computers and mobile phones. During the same period, the number of Internet users in Thailand has increased tenfold, and assisting social media to know external information has become the first choice for a new generation of people. With the continuous development of social media, it is inseparable from people's lives. Life services such as ordering goods, leisure entertainment, and information transmission can be completed with the

help of social media.

2. IMPACT OF SOCIAL MEDIA ON SOCIAL TRANSFORMATION OF SOUTHEAST ASIAN COUNTRIES

2.1 Positive impact

Social media provides a platform for people to communicate. It can be said that it has played an important role in information transmission. For instance, when it occurred severe flood in Bangkok in 2012, information about flood was transmitted to everyone in a short time through social media, and all people living in the dangerous area can be transferred in a short time, and the damage caused by the flood was minimized^[3].

It is particularly common in Thailand to use social media for information transfer, but it is limited to information exchange and does not have a substantial impact on social processes. However, as a tool for information transmission, social media will have an impact on the social process by transmitting information to specific people and events, such as the exchange of political personnel and the transmission of political information. It is said that many political parties in Thailand are using social media to convey information, gathering followers, propaganda policies, and leading supporters. The Governing Party is also using social media to do propaganda to expand its influence in the country. Pu, the former general manager, communicates with people through her Facebook homepage to establish personal prestige. To use social media to engage in political activities is particularly common in Thailand. Social media in Thailand is playing a positive role in social transformation from a certain point of view^[4].

2.2 Negative impact

At present, the negative impact of social media on the social transformation of Southeast Asian countries is mainly manifested in the vicious circle of "democracy - turmoil - autocracy - re-democracy - re-turmoil - re-autocracy". The main reason for this vicious circle is that the transition from autocracy to democracy is too fast and too fierce, and there is a strong rebound after the transition. And the emergence of social media accelerates the transmission of information between people, and the speed and intensity of this rebound have increased significantly.

In 2013, Democratic Party in Thailand organized a

political team, which opened the "spring of Thailand forum" with the help of social media. They published arguments and views that contradicted the government. These arguments and views were forwarded and discussed by many readers, and more and more people participated in it, which made the political team grow up and had a negative impact on the government. Consequently, some policies were forced to be revised, and some of the officials were forced to be replaced. Such incidents are common in Thailand and cause serious harm to individuals and society^[5-6].

People often call Southeast Asian countries "ethnic museums" and "religious museums". The main reason is that ethnic conflicts and religious conflicts in Southeast Asian countries are serious after World War II, and people's recognition of the country is relatively low. The emergence of social media inevitably aggravates more and more ethnic and religious conflicts.

Social media also delivers terrorist attacks to everyone quickly. Such bloody and violent pictures as firing houses and fleeing people, and extreme religious ideas have a negative impact on people who are not involved in the conflict, and also contribute to the recurrence or escalation of the conflict.

3. EFFECTIVE MANAGEMENT OF SOCIAL MEDIA

According to the national conditions of Southeast Asian countries, social media has a great impact on their social transformation. Therefore, countries must attach importance to social media and strengthen the supervision of social media from the perspective of their own security and stability.

Thailand first realized the negative impact of social media on the social process, and implemented effective measures to eliminate a large number of websites endangering national security. It build a large-scale science and technology center in a suburb of Bangkok to filter and audit all network information, so as to avoid unreasonable and illegal information flow to the public. Statistics show that the center has blocked more than 70000 Internet pages in four years^[7]. And in the daily use and management process, combining the actual content and theme of social media dissemination, can fully meet the needs of residents in the process of daily life for social media. While enhancing the overall efficiency of social media social use, it indirectly achieves the role of promoting social transformation. And combined with the current use of social media in Thailand, it can be found that its use efficiency and the role it plays in the daily lives of residents are further highlighted.

Singapore has put in place a more stringent social media regulatory system. It requires all users who purchase SIM cards to submit passport numbers and other valid documents. Without any documents, users will not be able to obtain SIM cards. With the purchase of a SIM card under the real-name system,

it can fully ensure the security of social media during the operation^[8-9]. Through corresponding social network supervision, timely detection and suppression of uncivilized and unhealthy social media behaviors can create a safe and civilized social media environment, which plays an important role in playing a positive role in social media and facilitating residents' daily lives. . At the same time, it can better guide social residents to use social media in a reasonable and healthy way.

4. CONCLUSION

In summary, the emergence of social media has a great impact on the social transformation of Southeast Asian countries. It is extremely important to deal with the impact of social media on the social process and the balance between freedom and supervision. From the perspective of the impact of social media on social transformation of Southeast Asian countries, positive and negative effects coexist. To control the negative impact and to fully expand the positive impact can enable Governing Party to gain trust and support of the people. It is significant for the social transformation of Southeast Asian countries, and is also an important issue need to be solved seriously.

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The Internship Enlightenment for Chinese Masters of English Education with the Background of Cultivating Excellent Teachers

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Abstract: Under the background of cultivating excellent teachers, excellent English teachers are required to have comprehensive quality, subject knowledge, professional ability and independent innovation ability. To achieve these qualities, the internship in the second year of professional master's degree of English education is the turning point for pre-service teachers to promote practicing competence. This thesis tends to give enlightenment for interns, hoping to facilitate the effect of cultivating excellent teachers.

Key words: excellent teachers, internship, master's degree of English education

1. THE BACKGROUND OF CULTIVATING EXCELLENT TEACHERS

In 2010, the Chinese Ministry of Education, in accordance with the relevant requirements of the *Outline of the National Medium-and-Long-Term Education Reform and Development*, implemented four talent training plans in some universities, namely, excellent teachers, excellent engineers, excellent doctors and excellent lawyers.^[1]

In 2014, the issue of the *Opinions of the Ministry of Education on the Implementation of the Excellent Teacher Training Plan* clearly stated that improving

the quality of teacher training is the most urgent task in the reform and development of teacher education in China. It requires the plan of training excellent teachers to cultivate a large number of primary and secondary school teachers with noble morality, solid professional foundation, outstanding teaching ability and self-development ability^[2].

In 2018, the Ministry of Education issued the *Opinions on the Implementation of the Excellent Teacher Training Plan*, emphasizing once again that the comprehensive reform of teacher education^[3]. Overall, the excellent teachers program mainly focuses on the training and cultivating of the professional knowledge and skills of pre-service teachers.

2. THE CONNOTATION OF EXCELLENT ENGLISH TEACHERS

Yang Yang(2014) thinks the requirements for excellent English Teachers include comprehensive quality, subject knowledge, teachers' professional ability and independent innovation ability^[4]. This thesis generally agrees with it and according to the four aspects, makes a new understanding of the connotation of excellent English teachers, as the following figure1 shows:

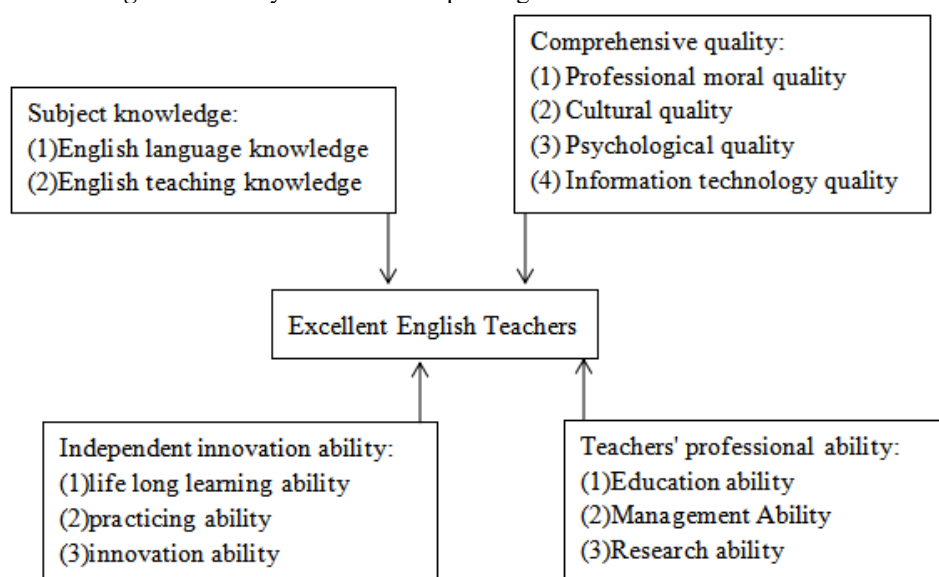


Figure 1. A new understanding of the connotation of excellent English teachers

As for comprehensive quality, the addition of information technology quality is based on the

background of the development of technology and the information society. The application of

technology in classroom requires teachers have the ability to adapt and wisely use information technology in education. In the independent learning ability, the plus of "life-long" in "learning ability" requires excellent English teachers to keep learning, even after retirement. Innovation ability indicates teachers make creation in teaching methods and also permeate the spirit of innovation in daily teaching to cultivate students' innovation awareness and ability at the same time.

3.THE PRACTICING COMPETENCE OF EXCELLENT TEACHERS

3.1.The Importance of Practicing Competence

To make students of English education become professional English teachers, the crucial step is to promote their practicing competence. On the one hand, as education is a social activity of cultivating people. The direct object of education is human, which aims to influence the physical and mental development of human beings and promote their unprecedented changes in educational activities^[5]. In school education, this goal is achieved by teachers who designing, organizing and carrying out educational activities. On the other hand, as students, what they have touched in school is mainly knowledge which should be combined with practicing. Thus the cultivation of teachers' practical literacy should be placed in an important position.

3.2.The Understanding of Practicing Competence

Teachers' practicing competence is a comprehensive concept with the characteristics of integration. It is not a simple development of knowledge, ability and quality of teachers' morality separately, but a performance of practical ability and practical wisdom based on teachers' morality and professional knowledge when facing the practice of primary and secondary education. The cultivation of practicing competence does not weaken the learning of theoretical knowledge. Although educational theory cannot be directly "applied" to practice, it can inspire educational practitioners, help them to reflect, and play a guiding role in the choice of educational value^[6]. The complexity of educational situation determines that teachers' educational behavior cannot be completed by simple procedures. In addition to skills, educational practice also requires teachers to make choices and judgments on values and aesthetics.

3.3.The Theoretical Basis of Cultivating Practicing Competence

Cultivating practicing competence includes reflection and cooperation. Reflection is the inner power of teachers to perfect and improve educational practice. In educational practice, teachers do not simply apply technology or principles, they also need to reflect what they have done and make revise and progress. What's more, cooperation is also an indispensable factor. The Constructivist learning theory believes that teachers' learning is not only to absorb the

knowledge of educational experts, but also to actively construct personal knowledge based their own experience and the interaction with the situation. Therefore, teachers' learning must be placed in the real educational situation, as the communication with students and other teachers is necessary.

4.THE CURRENT SITUATION OF THE EDUCATION OF MASTER OF ENGLISH EDUCATION

Since the proposal of the excellent teachers cultivating program initiated by Ministry of Education, universities and school have made a lot of changes on the curriculum of education majors. The master's degree of English education has been existed in China for more than 20 years, which aims at providing high-quality English teachers to primary and secondary schools.

The learning period for professional master's degree of English education is only two years in which students should complete learning the courses, participating educational practicing and writing dissertation. The courses include general education knowledge and professional English subject teaching knowledge. All the courses' learning should be finished in the first year and the second year is mainly about the educational practice. Students will go to the secondary schools, and at the same time, they should finish their dissertation.

Overall, the learning period is short and the aim of cultivating professional English teachers is clearly displayed in the arrangement of curriculum and practicing. In order to achieve the final goal and cultivating more professional pre-service English teachers, the educational practice is obviously an important step.

5.THE INTERNSHIP ENLIGHTENMENT FOR MASTERS OF ENGLISH EDUCATION

5.1.Combining the Dissertation with the Internship

As students should write their dissertation and make educational practice at the same time, it is effective and even necessary to combine these two. The combination of dissertation with the internship is no doubt a benefit attempt, in which the intern needs to deeply study the real problems encountered in classroom. In this process, realizing the confirmation of the pre-service teacher's education idea, the cognition of the teacher's role, the connection of the knowledge and skills are helpful for them to become professional English teachers.

5.2.Being Brave to Innovate

Being brave to innovate includes innovate the teaching methods and the way of class management. The internship period is a crucial time for them to know what the real education environment looks like, which largely determines their basic idea of this job and future professional development. As for interns themselves, maybe they have little power to change or choose the practicing place, but they can first bring their new blood into that environment. Keeping the

curiosity towards teaching and students, try to use new methods in teaching and don't be afraid of making mistakes.

5.3.Keeping Self-reflection

Only through personal experience can learners internalize this external knowledge into their own knowledge. Only the action experience that can trigger deliberation is the experience with educational value. Ways to keep reflection include keeping reflection diaries and participating seminars. In reflection diaries, interns can note down their thinking of the lesson they taught or listened, and some phenomena of students and teachers. In seminars, teachers and interns can discuss the lesson they have listened or designed together, which is capable of inspiring new ideas and thoughts of education and teaching.

5.4.Making an Interactive Developmental System

It is inevitable that interns come to the environment with a nervous heart in that all the things for them seem familiar but actually new. Under this circumstance, interns should know how to cooperate with others. Communicate and share ideas with experienced teachers who are able to give valuable suggestions. Communicating with students is also the most direct way to judge a lesson. Cooperation with other interns is also important for them to learn and develop together. All these can ease their anxiety and nervous feeling and help them develop better.

6.CONCLUSION

The plan of cultivating excellent teachers focuses on the education of educational majors. With the policy

issued by government and curriculum and condition provided by universities, majors should cherish the internship period to promote their practicing competence. Combining dissertation with internship, being brave to innovate, keeping self-reflection and making an interactive developmental system are effective ways to become professional English teachers.

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The effects of strategic alliances on SMEs internationalization Process

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Abstract: As the globalization draws interests from the entrepreneurs and gets more and more popular, internationalization is chosen as one of the most effective strategies for foreign markets expansion. It is important to understand the reason and how the small and medium enterprises enter into the foreign markets for international expansion. The organizational behaviors vary from different factors which come from industries and cultures. Hence, the qualitative methodology is selected for this research. Both primary and secondary data are used for the study and research logical reasoning. The research findings are crucial since this study clarified the internal and external factors affect the SMEs' behaviors and the process of the internationalization, as well as the effects of the each practical stage of the internationalization process. By understanding the process of the internationalization for SMEs, companies can make more proper decisions and strategic alliance with positive effects.

Key Words: SMEs, International Business, Strategic Alliance, Market Entry, Organizational Behaviors.

1. INTRODUCTION

International market is changing incredibly fast and getting more complex day by day. SMEs face up the diverse challenges coming from the consumption structure revolution, technology development, customer expectation, market rivalry etc. While going for global expansion, there are pressures from both domestic markets and international ones. Foreignness of the new place for business consists of the language barriers, cultural differences, business mindsets, political stability, as well as the resources and capacities^[1]. In comparison, domestic competitors have upper hands and more focus on the local market developments. So as to keep pace with the market growth and move ahead to gain more strength, SMEs must enhance the productive and operational capability quickly along with globalization. Therefore, strategic alliance shows great influence in the process of the internationalization, specially when SMEs have obstacles of the foreign market entries.

When the agreement among individual firms to cooperate in the manufacturing, business development, or sale of products and services or other objectives, the strategic alliance thereby forms. In other words, it is a managerial tie-up among

multiple entities in various of forms, including contracting, cooperative agreements which come from joint ventures, equity strategic alliance, non-equity strategic alliance. Relationships as license agreements, information exchange agreements, sharing minority equity ownership, and holding joint research and development (R&D) programs are commonly existed in strategic alliance cases. SMEs which choose to build up strategic alliance for internationalization is mainly to get the knowledge of the market and necessary resources, meanwhile saving the cost of the time and reducing the risks of the potential losses. Alliances solve the problem of the resource scarcity and technology "know-how", accessing to the capital and effective business networking, which blocks the rivals, focuses on competitiveness and survives in "red ocean" of the business challenge, and reaching the greater production and economical capability. These benefits persuades SMEs to overcome the challenges such as the foreign markets and customer preferences, cultural difference etc.

2. THEORETICAL FRAMEWORK

According to the literature review, the SMEs develop the internationalization in the following major stages: Primary Creation, Strategic Planning, Contribution, Alliance Management and Performance Evaluation. Each stage has specific elements and effects. The dynamic loop of the connections can be seen in the inward and outward flows in the process of the internationalization.

Stage 1: Primary Creation : Compared to the large companies, SME has limited resources to enter into the foreign markets and lack of the experience when facing up with new challenges. International alliances serves as the essential solution for SMEs which have difficulties in enlarging the market shares with limited resources^[2]. In order to gain more market shares and keep growing, companies have to find solutions to access the markets. With the support from the alliance partners in foreign markets, SMEs are getting more sales boosted (Robinson and Rejna, 2005). For small and medium companies, they are mainly to get stronger and more competitive abilities to win in the global challenges and integrate the resources by learning from the partners while working in the alliance with them together.

Stage 2: Strategic Planning: Carefully evaluating the

resources and goals is essential before choosing the partners. Setting up one international strategic alliance with right partner can increase the capability which leverage the company's performance. In addition, the company also need complementary resources during the internationalization process to seize the opportunities and reach the goals. Supplementary resources are required by the firms to get competitive advantage. Besides, the reputation of the partner companies is often considered as the trust and priority during the selection. On the other hand, SME must have necessary market insights and knowledge as well as the strategic planning in order to make correct decision. Datas of the partner companies and the potentials of committing to the alliance can be evaluated at the early phase. Each of the partners in the alliance should have a positive balanced dynamics and the ability to adapt in the continuously changing markets.

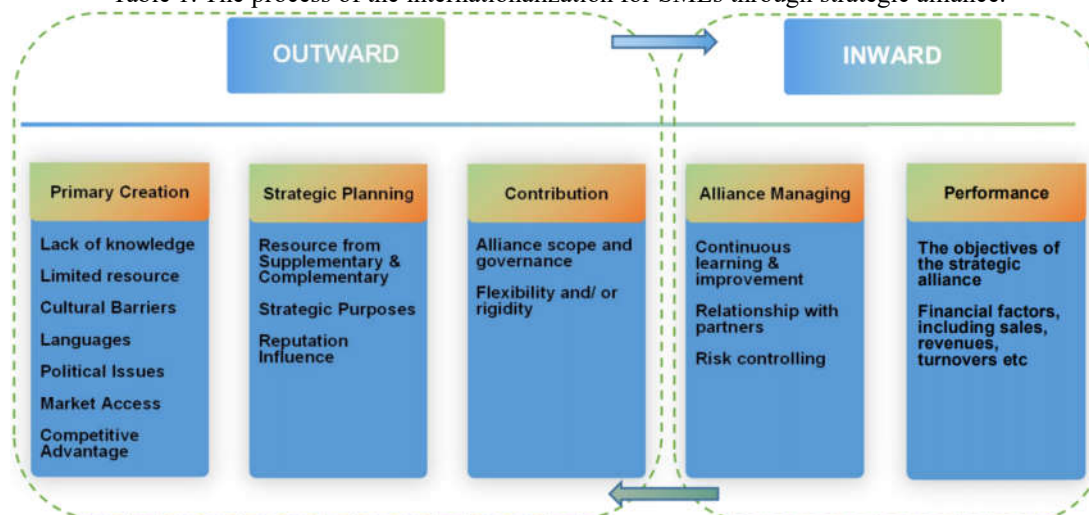
Stage 3: Contribution: There are many effects happening in this process, for instance, the human resources are incrementally needed along with the heavily operation; on the other hand, the strategic alliance requires the partners to adapt the organizational structure so as to fit in with the dynamics in global cooperation. This also applies to the marketing strategy. SMEs nowadays make efforts on making different brands and names or updating the product features in order to satisfy the customers. In order to achieve the biggest benefits of the strategic alliance, according to the capabilities of each entity in the alliance, the degree of the involvement for each partner in the alliance varies. The strategic alliances have the advantages such as flexibility to overcome the global challenge and the difficulty to collaborate the partners all the together. Therefore, SMEs as well as their partners in the alliance need to put efforts on the contribution to the alliance. One of the main factors which decide the company's contribution is level of the ownership of the joint venture, including both tangible and

intangible assets.

Stage 4: Alliance Management: SMEs choose the strategic alliance is mainly to increase their competence and strength in global markets, at the same time, to gain more knowledge and insights of the markets for future. It is vital to successfully manage the alliance. Firstly of all, the international strategic alliance often consists of the companies coming from different cultures, knowledge acquisition, financial capability etc. Keeping in a good relationship with risk control can reduce the cooperation risk which is harmful to the strategic alliance during the competition^[3]. Staying alert to the competitive market changes is the key to stay capable of improving internal working environments, process of the collaboration and the long-term development goals. SMEs also need to keep in pace with the development of the subsidiary companies for sustainable goals, maintaining the position and then level up the ownership in the cooperation.

Stage 5: Performance Evaluation: It is easily can be seen that for alliance management, keeping updates of both internal and external is essential for the long-term development. For both outward and inward of the movement of strategic alliance, the performance of this integrated methodological evaluation is reliable and credited. All the increasing changes in the marketing and sales are related to the strategic cooperation and integration of the "know-how"s. Methodology of the evaluation depends on the various criteria. The performance in the alliance varies according to the different perspectives of the partners. In conclusion, the overall performance can be affected by financial sector and market focused determinant. External performance such as the branding management compared with the competitors is also put into the evaluation. In addition, the political sectors including government legislation, political risks and stability are also into the consideration (as in Table 1).

Table 1. The process of the internationalization for SMEs through strategic alliance.



3.CONCLUSION

Strategic alliance is an integration of the different companies which come from various cultural backgrounds and capabilities. Management of the strategic alliance is important and is required in each stage. Selection of the proper partners is also essential for a successful management of the strategic alliance. SMEs must define the criteria for the selection. The main objective is to strengthen the competence and fill up the shortages. Either to choose the contractual agreement which is flexible and less involved or to go for joint venture whose process is longer and complex to deal with depends on the SMEs 'decision and capability. Operate and contribute to the strategic alliance and manage the relationships with partners. In addition, SMEs must

remember the initial purpose of forming the strategic alliance and keep committing, so as to stay competitive in the global challenge.

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The Requirements of Key Competence for "Excellent English Teachers"

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Abstract: In order to enhance the quality of education, many countries have been paying more attention to the quality of teacher. USA has proposed the concept of the excellent teachers as early as the 80s of 20th century. The Excellent Teachers Cultivating Program proposed by the Ministry of Education of PRC in 2010 stands for the comprehensive reforms of improving teachers' quality. Meanwhile, with the popularity of Key Competence in China, how to cultivate the Key Competence for English Teachers under the background of Excellent Teachers' Program becomes a hot topic. This paper's aim is to propose some suggestions for the fostering of "Excellent English Teachers from the point of Key Competence".

Key Points: Excellent Teachers, Key Competence;

1. INTRODUCTION

1.1. Proposition of Excellent Teachers

As early as 20th century's 70s, Krupka and John G firstly used the item Excellent Teachers in Report on Faculty and Student Evaluation of Instructor Patina Questionnaire^[1]. The item Excellent means that it is different from normal and more outstanding than it. In the 80s of 20th century, USA had began a series of reforms in teachers' team, like protecting the excellent teachers' resources and rewarding the Excellent teachers. National Board for Professional Teaching Standards (NBPTS) has actively developed and implemented American excellent education since its establishment, and has conducted the first professional Standard and certification system of Excellent teachers^[2]. NBPTS published the policy of What Teachers Should Know and Be Able to Do in 1989, which contained Five Core Propositions of the professional standards of Excellent Teachers. These Five Core Propositions consist of the important principles of the evaluated standards for Excellent Teachers^[3]. China has officially started the reform of teachers' team and pay more attention to the development of teachers' professional and creative skills.

1.2. Key Competence and Key Competence of English Subject

OECD published Definition and Selection of Competences: Theoretical and Conceptual Foundation in 2005, which proposed some key knowledge and skills related to the development of

individual and society in the future and also firstly push forward the realization of Key Competence. The definition of Key Competence can be defined as an individual's necessary qualities and skills in order to adjust to the Whole-life development and the development of society, which are the most important qualities during the individual's growing process^[4]. Key Competence of English Subject mainly includes Language competence, Cultural Awareness, Thinking Quality, and Learning Ability^[5]. According to the requirements of Language Competence, teachers should develop students practical competence, like listening, speaking. Learning Ability means teachers should broaden the learning channels of students. Another two competence are Culture Awareness and Thinking Quality. The former one means cultivating students' understanding of the different culture. The later one refers to foster students logical, critical, and creative competence.

1.3. Key Competence of Professional EFL Teachers

As we all know, good teachers have a positive impact on students. The Key Competence of English Subject is not just a series of requirements designed for English Learners. According to the demands of Key Competence of English Subject, English teachers should also improve their quality. Parkay (2006) once maintained that successful teaching involves both what to teach and how to teach it^[6]. This statement may give us some inspiration.

2. EXCELLENT TEACHERS AND KEY COMPETENCES FOR ET

2.1 Similarities and Differences

The similarity between the evaluation standards of teachers in China and the USA is that they all emphasize excellent teachers' performance in these three fields: subject knowledge, teaching research and youth training. Moreover, China also pay more attention to an excellent teacher's morality. Therefore, we can clearly see that these evaluation standards are similar to the Key Competence of EL in some way.

However, Excellent Teachers is the purpose of Key Competence for ET. Secondly, the former one is like a crown that every teacher want to get, once get this crown, a teacher must keep herself going ahead, or it'll fall. Key Competence for ET is some stable components for a excellent teacher's inner qualities.

2.2 Link between Excellent Teachers and Key

Competence of ET

Since there are some same requirements between Excellent Teachers and Key Competences for ET. Why do we not reconsider the underlying enlightenment for us to set a more comprehensive and more scientific quality standards for English teachers, especially for the Secondary School English Teachers. If we want to reset a reasonable Key Competences for English teachers, we should observe our China English teachers' developmental situations at current.

3. CHINESE ENGLISH TEACHERS' DEVELOPMENTAL STATUS

3.1 Lacking Comprehensive Subject Knowledge

Due to the influence of long-term exam oriented education, a large number of English teachers in China, paying less attention to other humanities and science knowledge. Although the slogan of "key competence" and "training excellent teachers" has been proposed for a long time, it is found that many English teachers are still lack of interdisciplinary knowledge, and have an insufficient knowledge reserve.

3.2 Lacking Lifelong Learning Awareness

As early as 1920s, the idea of lifelong education appeared in the world. The purpose of lifelong education is to promote people to form the concept of lifelong learning. Compared with the concept of lifelong education, the concept of lifelong learning embodies learners' initiative, which is more advanced than it^[7].

Many English teachers are often in a passive state in studying. Nowadays, information updating is going on all the time. If they don't maintain the motivation of learning, they will face a huge occupational threat^[8].

3.3 Lacking Cooperative Spirit

NBPTS proposed that excellent teachers should take part in the school's learning community, and communicate with other colleagues, in order to promote the development of the school. More importantly, they can make full use of the resources of the school community to develop their own knowledge and skills.

In reality, many English teachers do have the awareness to cooperate with other teachers, and there are a lot of English teachers' learning group in our China's Secondary School. However, there are a few people can really go to the surrounding community and share their subject knowledge with residents.

3.4 Lacking Teaching Belief

Borg (2001) said that teachers' belief is his or her opinions about the subject matter based on his or her individual class teaching activities. Only a teacher has his own belief through his reflection and practice in his teaching life, can he has a strong motivation and confidence of his country's education.

However, there were not only one English teacher said that Because my students will choose an artistic

road, so I should make the knowledge easier for them to understand. If a teacher does not believe his/her students' progress, how do he/she believe his/her teaching can take effect in education.

4. THE RECONSTRUCTION OF EXCELLENT ENGLISH TEACHERS' KEY COMPETENCE

4.1 Professional Knowledge

According to the requirement of 'Excellent Teachers', NBPTS proposed that teachers should have the knowledge of human and science, technology, curriculum management, textbook organization, teaching method, subject teaching method and assessment of students' learning knowledge. These aspects are all the necessary knowledge for an English teachers.

Therefore, English teachers should realize the responsibility they shoulder, study comprehensively, be familiar with periodicals of disciplines, broaden their knowledge vision, and enrich their knowledge reserves constantly.

4.2 Life long Study

Middle school English teachers should establish the belief of lifelong learning. They should take the initiative to lifelong-learning, fostering good habit, setting learning objectives, monitoring learning process, and evaluating learning results by themselves.

Teachers' post service education is an important way to realize teachers' lifelong learning. Some management leaders of Secondary Schools should provide more chances for English teachers to engaging in advanced studies, such as going to some famous school or abroad school.

4.3 Cooperative Spirit

Teachers should form their own learning community according to the subject areas they teach, reflect on what are their shortcomings in the teaching practice, so as to make up for them. Everyone in the group should consciously regard lifelong learning as a kind of work responsibility, a spiritual realm and a life pursuit, so that lifelong learning can be a positive and progressive way of life and work.

4.4 Teachers' Belief

Specifically, teachers can reconstruct the wrong teaching beliefs through these ways. Firstly, English teachers should reflect on whether their practice is scientific and reasonable, and then correct it immediately. Secondly, teachers should learn excellent teachers' experience around them. Thirdly, English teachers should always be student-centered to help students get self-development and growth in the recent development zone.

5. CONCLUSION

To sum up, in order to respond to the slogan of excellent teachers put forward by the state, pay attention to the quality of teachers and the quality of training people. English teachers should pay attention to these aspects: comprehensive knowledge; the consciousness of lifelong learning; cooperation spirit;

teaching belief.

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An Ecofeminist Reading of The Edible Woman

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Abstract: Attending to the themes of “Awakening”, “Imagination”, and “Dignity”, the thesis interprets *The Edible Woman* by Atwood from the perspectives of ecologism and feminism. The thesis analyzes how Atwood, by describing weather, environment, hunting experience and the destruction human beings, has brought upon the ecological environment. And how Atwood, by using imaginative expression and “mirror image”, displays that the development of social economy restrains females and tramples female dignity to embody females’ resistance and awakening of feminism. The thesis calls on people to self-examine the living environment and life value so as to reflect awakening of the consciousness of ecology.

Key words: Ecofeminism; Margaret Atwood; *The Edible Woman*

1.INTRODUCTION

The word “ecofeminism” or “ecological feminism” was coined as a term in 1974. From a viewpoint of convergence of ecological ideology and feminist thoughts, “ecofeminism” warns people should pay closer attention to women’s needs that have been neglected. The feminism in Atwood’s novel as study content is mainly related to the relations between women and historical tradition, the relations between woman’s living condition and natural ecology. *The Edible Woman*, which is the first novel of Margaret Atwood, shows Marian’s changes in the course of getting anorexia; even getting psychorrhexis. The thesis gives priority to digging out the deep connotation from ideology, writing skills, and characters’ relations from ecofeminism.

2.ON “AWAKENING” OF ECOFEMINISM IN THE EDIBLE WOMEN

Atwood wrote *The Edible Woman* in 1965 and the Third Wave of feminism began in the 1990s; the Third Wave was a continuation of the Second Wave feminism. Actually, ecofeminism is the most important branch of the Third Wave of feminism, and it is also a political and social movement. Therefore, the thesis holds that Atwood is influenced by women’s movements in two waves, and her first novel *The Edible Woman* promotes to the development of the Third Wave and the combination of ecologism and feminism.

2.1.Exploring “Awakening” of the consciousness of

ecology

Atwood’s ecological perspective comes from the childhood in northern Ontario and Quebec. By the end of the 1970s, Atwood would focus on the creation in the ecological protection awareness, such as her non-fiction *Survival: A Thematic Guide to Canadian Literature* that used nature in Canadian literature as the theme, the poem *The Journals of Susanna Moodie*, and *Surfacing* that displayed her love for the wilderness. So, the consciousness of ecology of Atwood run through her early works. Cheryll Glotfelty defines ecocriticism as literary critique about the relations between literary research and external environment^[1]. *The Edible Woman*, *Surfacing*, and *The Handmaid’s Tale* have exposed the ecological problems and the relationships between human and nature, and these novels convey Atwood’s thoughts of the cultural psychology and concerning about female in the writing (Xu Bin 34).

On the one hand, “Awakening” of consciousness of ecology is consistent with the core of the environmental protection movement -- “Human, as one part of the biosphere, makes closed relationships with other organism and live with each other”^[2]. Atwood thinks about ecological problems and abominates environmental destruction in *The Edible Woman*. From Marian’s description, the weather is always “sweltering”, and “thick golden haze of heat and dust”^[3]. Nature, as mother and cradle for human, also is enemy and battlefield for human. That is an contradict attitude embodied in human’s natural conception -- “back to nature” and “power over nature”^[4].

On the other hand, “Awakening” of biological conservation can help to protect biodiversity. By some crucial scenes, Atwood exposes human’s predation and condemns human for having no respect for life. Peter enjoys hunting and he is apathetic about life. It expresses that most people care nothing about nature and animals, which is a common view in the modern society. Peter’s story is a “mirror” to reflect that human is merciless and slaughterous; it is a real portraiture that human always ask for rights from nature but no gratitude; it is a real picture that we live in a world of duality, especially the contradiction between human and nature.

2.2.Exploring “Awakening” of feminist perspective
Atwood is adept at shaping female characters.

“Awakening” of feminism in *The Edible Woman* mainly attends to the relations between Marian and Peter, Marian and Duncan, Ainsley and Len.

Firstly, the process of losing appetite is the most manifest part of “Awakening” of feminism. Marian knows why Peter loves her, but when she realizes that she is only an accessory in Peter’s life and the one of condition match Peter’s career and identity, Marian wakes up. As time goes by, she is gradually disinterested in food even gets anorexia that indicates she starts to fear something wrong, and when she has trouble into psychorrhexis; it means she is clear about her true feeling.

Secondly, Duncan’s seduction makes Marian wake up from feminist consciousness. Duncan can be regarded as another Marian, as he guides Marian to reflect her own life and the relations with Peter, as he says Marian is “just another substitute for the laundromat”^[5] and “hunger is more basic than love”^[6]. Therefore, Marian may reexamine herself; she may ask herself “Is she a substitute for Peter?” or “what kind of substitutes?”

Ecofeminism awakens more scholars’ feminist consciousness and activates them to contribute to interpreting concepts of the relationships between women and nature, and point out the essence in the rules of duality, so as to call on people to reflect from a deeper philosophical theoretical level to think about the irrationality of male-dominated system and radical criticism of hypocrisy male model. Atwood hopes human transform thoughts that we should be cognizant of the condition of women and nature in the period of awakening.

3.ON “IMAGINATION” OF ECOFEMINISM IN THE EDIBLE WOMEN

To specify how Atwood presents ecofeminism in *The Edible Woman*, this part is to analyze the usage of “Mirror Image” to embody the beauty of women to reveal pros and cons of ecofeminism.

3.1.The role of “Imagination” in “Mirror Image”

In *The Edible Woman*, Atwood unites “Self” and “Other” in Marian’s body; Marian becomes the fusion of subject and object; the “subject” is herself and the “object” is “other”. The thesis argues that Atwood tries to metaphor some objectives that are attended to this novel to make language more fluent and understood more easily, and the writing features make a close combination between woman and nature. Therefore, the role of “Imagination” takes effect on “Mirror Image”.

When Marian looks Peter eating beef, she has the same feelings with cattle, eggs, carrots, and some other foods; she is afraid of touching them. That is to say, Marian depends on mirror images to shape “the Ego Marian”, so that she sees herself as equal to food in her mind, and the food can witness the consumers’ action and expression, and she sees that she is eaten by the people in her own eyes. Atwood applies in “food images” to map Marian’s inner

world, so Marian is “the edible woman”.

Marian has trouble into “Eating Disorder”. “Eating Disorder” is a peculiar feature in Atwood’s works. By using food images and food culture metaphor, Atwood makes a connection between heroine’s trauma and eating disorder. The connection enriches language and expands the meaning of metaphor. The thesis agrees that by “Mirror Image”, Atwood interprets that Marian is personified as food. And Atwood mixes “Self” and “Other” in a perfect way to illustrate her own ecofeminist views.

3.2.The role of “Imagination” in the beauty of women

“Female aesthetics” is the second point to embody the role of “Imagination” in *The Edible Woman*. In Atwood’s works, she doesn’t display the beauty of women directly, but she stands on other perspectives, or defaces femininity to mould the beauty of women.

In *The Edible Woman*, different characters with varieties of opinions about femininity. Femininity means the qualities of goodness, unobtainable, sensible, noble, and virtuous. Those features are premises to be a woman. However, the thesis claims that femininity only exists in human’s imagination of beautiful things and the femininity is the obstinate notion of Mother Earth.

In Marian’s eyes, she bakes a cake in shape of a woman -- “the edible woman”, as her replacement. The cake has been endowed with rich symbolic connotation -- femininity, beautiful appearance, sweet taste, and virginal symbol. Atwood designs the cake to emphasize the significance of femininity in man’s eyes. Atwood wants to classify that the implicit doctrines seem to control women to make them become “ladies” and endue them with definite aesthetic meanings, but they ignore the women’s individuality so that women don’t know what they should have to be.

Moreover, the thesis assumes that the cake, as the edible thing, is the symbol of “Black Madonna”. “Black Madonna” embodies the spiritual beauty of the beauty of women. As Molly Hite (136) analyses that “too much of a good thing may be the worst thing of all from the perspective of a value system that aims above all to control manifestations of the feminine.” So, Atwood tries to let women know that women’s love and power come from the Spiritual Mother by heart. Hence, the cake gives Marian power to relive from pressure.

3.3.The role of “Imagination” in the design of plots
Ecofeminists regard solitude, love, friendship, honest and mutual benefit as core value^[7]. Atwood mixes the core value in “runs away” three times. Each time Marian runs away always with complex psychological process and the process appear suddenly.

The first time when Marian ends up the gathering

with Peter, Ainsley and Len, Marian runs away. She runs away because she minds Peter's disregard, especially she imagines herself as "a stage-prop"; so she is in panic and tries to control her emotion. And she also notices the decoration of room; she thinks "the square elegant room crystal chandeliers was concealing things; the murmuring air was filled with a soft menace" (Margaret 84). Marian's ideas prove that she is trapping into the imaginary disorder. Therefore, Marian is panic, sensitive, and disappointed in the early stage.

The second time Marian hides under the bed in Len's house, Marian feels deflated and she is inundate with penitence, but she wants to be alone with Peter and be forgiven. But Marian gives up using language to communicate, so her "abnegation" becomes the "wall of language" that inverts and distorts the discourse of the "Other" for herself. Although the space seems uncomfortable, Marian is glad to stay there and regards the room as "up there"; herself is "underground"; she digs herself a private "burrow"; she feels "smug". By this token, the "Imagination" is rooted in the Marian's relationship with her own body.

The third time Marian runs away is at the engagement ceremony. When guests immerse in the happy and excited atmosphere, she feels lonely and scared. Atwood builds a sense of distance here, and the distance embodies in Marian's body but also embodies in Marian and others. Marian is afraid of being focused. She fears the outer world because it is full of aggression and massacre in her heart, and she may imagine herself as one of the edible preys. By this token, the "Imagination" is rooted in the Marian's relationship with her own body. Therefore, Marian is nerves, ambivalent, and afraid. The "Imagination" in the design of plots plays a role in "self-alienation" and "self-establishment". Marian "runs away" three times that are the construction of females' cultural identity of in the patriarchal society. Marian wants to stay at the space with solitude, love, friendship, honest and mutual benefit, but people around her can't understand her action. Atwood urges that women may lose self and be distorted by patriarchal society, only women's passionate revolt can impel their to break the shackles in patriarchal society and become new independent female.

4.ON "DIGNITY" OF ECOFEMINISM IN THE EDIBLE WOMAN

Karen J. Warren (363) suggests that women and nature belong to "Other" in the subsidiary position, and they are controlled by Male Chauvinism. And the core of ecofeminism is to link the oppression of nature in Male Chauvinism with the discrimination of women.

4.1.On the relationship between male and female

The thesis argues that oppressed nature by human is similar to the oppressed female by the male. They

make up binary opposition. For that reason, coping with one of binary relations is beneficial to tackle the other. Hence, saving the ecological environment should start from dispelling the oppression of sexual relations. The relationships between male and female embody in Ainsley and Len, Clara and Joe.

Firstly, Ainsley deprives Len of his fecundity, and denies Len's family role. Thus, breaking down the male is not the best way to achieve gender harmony. In contrast, making females and males equal is the most important. That is also a way to protect females' dignity. Secondly, Clara and Joe have three kids, Clara has beautiful appearance and is admired by others, and she thinks "no one loves their children till they start to be human beings" [8]. It seems that Joe ardently loves Clara, but actually, it is a kind of durance to Clara. Joe announces his proprietorship to Clara and forces her submit to women's fates and gives up living as a complete man.

Clara is unwilling to confront with the dilemma in marriage, but she still loves her kids and husband Joe. In spite of Joe takes the most responsibilities in family, Clara is treated like a queen and a meritorious statesman in her marriage; she possesses complete "dignity" of family status and women status in marriage. The experience of fission also reflects the demands of female position in a social field where they are subject to contrary forces and are expected to play plural roles [9-11].

4.2.On the relationship between women and nature Under the oppression of nature in Male Chauvinism, nature and female can't be parted. Each animal is living entity and they live on the earth with human. The ecological ethic norms require human "reverence for life" (NAN GONG Mei-Fang et al 163). In *The Edible Woman*, women show solicitude for nature more than men. And women are always concerned about nature and lives. For instance, the description of eating steak by Marian reveals that human eat animals for enjoying the flavor and getting protein, but they seldom think about the process of being killed, and they will not feel indebted when they eat them. Wang Nuo(129) points that "only human regards nature as individual subject instead of objective correlative, or symbolic object, or figurative bodies; only human realizes nature is unique and irreplaceable, so that human with individual identity gets on well with nature as non-human individuality, the inter-subjectivity can be achieved." However, women in this novel are edible things, that means women are consumed and take responsibilities of breeding, or supporting family. They are like food, but no "dignity".

1. CONCLUSION

The Edible Woman is not a feminist novel. Atwood combines the ecology of feminism and the

feminism of ecology in this novel. In this novel, Atwood highlights “Awakening” of ecological perspective and feminism. The “Imagination” of ecofeminism refers to Atwood’s writing skills. The “Dignity” of ecofeminism implies ecology dignity, female dignity. Atwood is concerned about the system of sexual rights and its inside “counter-discourse”. The Edible Woman with female perspective vividly criticizes the loss of “Self”, salvation, solitude and fragility in Canada. Under the background of existence crisis, helpless spirit, identity anxiety, conflict and harmony, Atwood appeals to Canadians to take responsibilities for individual duty and get rid of the tradition by “self-establishment”. In *Conversations* (1990), Atwood indicates that she wants to remove “W” from the word “woman”. The thesis argues that Atwood cares about her country and nation so that she wants to elaborate social condition in Canada by her national imagination. Atwood is a natural feminist.

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On the Factors Affecting the Social Adaptability of Children with Mental Retardation

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Abstract: Defective adaptive behavior is a typical feature of intellectual disabilities. All children with intellectual disabilities have varying degrees of adaptive behavioral disabilities. The development of adaptive behavior occupies an extremely important position in the growth of intellectual disabilities, and experts also pay more and more attention to the development of social adaptive behavioral capabilities for children, rather than just using IQ as the sole criterion for diagnosis and classification. Social adaptability firstly refers to adaptability, that is, the ability of individuals to actively adjust their body and mental state to maintain a balance with the environment during the interaction with the environment; secondly, it is a complex set of responses to changes in the social environment skills. Although the problem of intellectual loss of mental retardation cannot be changed, their adaptive behavior can be compensated by acquired education and training. This study is based on the theory of the ecological system of Urie Bronfenbrenner, discusses the factors affecting the social adaptation of mentally retarded children, and proposes reasonable countermeasures and suggestions.

Keywords: social adaptation; intellectual disability; influencing factors

1. FACTORS AFFECTING THE SOCIAL ADAPTABILITY OF CHILDREN WITH INTELLECTUAL DISABILITIES

1.1. Personal characteristics

1.1.1 Gender and age of children

Some studies believe that there is no gender difference in the social maturity of mentally retarded children, but it is also suggested that the social adaptability of girls is higher than that of boys. The research results of Yin Chengxi (2004) show that, there is no significant difference in performance in other fields except for the field of autonomy, according to the age of children with intellectual disabilities.^[1] Secondly, Ma Shasha (2013) believes that there are individual differences in the development of social adaptability of different children.^[2]

In summary, the gender and age of children have no significant impact on social adaptability; however, it is still necessary to formulate effective social adaptability training programs based on the

individual differences of children.

1.1.2 Order of birth

The research on the birth order of disabled children is mainly on the relationship between siblings of disabled children. It was found that having a brother with a disability would make the non-disabled one feel inferior to others, and even affect the choice of spouse in adulthood. In addition to these negative effects, there are contrary studies that believe that the positive impact of disabled brothers and sisters on the non-disabled party can help improve their life insight and social adaptability.

1.1.3 Repeating obstacles

Li Enzhen (2006) studied the types of disability and social adaptability, and distinguished them into physical disabilities, hearing impairments and visual impairments.^[3] The results show that there are differences in social adaptation according to the type of disability, especially in children with intellectual and emotional disabilities. Yin Chengxi (2004) analyzed the differences in the level of social maturity of children with disabilities based on the level of disability of intellectually disabled children.^[4] The results showed that the higher the level, the higher the level of social maturity.

1.2. Family environmental factors

1.2.1 Household income

Generally speaking, the socio-economic status or level is in addition to the income of the parents, and should also take into account the occupation and education level. The factors affecting adaptation crisis for children include the low socioeconomic status of their parents. Since the treatment and education costs of children with disabilities impose a heavy burden on the family, the reduction in other project expenditures has led that the family faces all kinds of difficulties.

At the same time, the occupation of the parents also has a certain impact on the social adaptability for children. Because the parents are busy while working, there is rarely enough time to communicate with the children, which is not conducive to the development of social adaptability for children to a certain extent.

1.2.2 Nurturing attitude

In the process of parenting, parents consciously or unconsciously implant their own thoughts and other characteristics into children. Therefore, the influence of parents in the growth and development of children

is huge, especially the parenting attitude of mothers. Most mothers of mentally retarded children restrict activities outside the children's home. The attitude of mothers in autonomous parenting has an impact on the development of children with intellectual disabilities in all aspects.

In the process of raising children, it will cause a lot of pressure to raise children, due to family relationship problems and fear of children's future. At the same time, parental parenting pressure is also related to the type and degree of the children's disability. Baker (2003) research shows that if parents show greater pressure during the upbringing process, the frequency of maladaptive behaviors of children with intellectual disabilities will also increase.^[5] Studies have also found that excessive parental pressure has a negative impact on social adaptability for children. The emotions, warmth, and understanding of parents have a positive impact on the development of adaptive ability for children, while parental punishment, harshness, rejection, and denial will have a negative impact on the development of adaptive behavior for children. At the same time, the level of parental stress also affects emotional and behavioral development of children.

1.3. Home-school collaboration factors

Sisi (1991) found that the school environment has an impact on children's intelligence. Children's intelligence test scores of the same age have a positive relationship with the length of school time. After the holiday, children's intellectual performance will decline. Children with inconsistent school time have a lower level of intelligence than those who continue to attend school, so many children with intellectual disabilities depend on their parents for life; home-school collaboration is very important for the cultivation and impact of children's abilities. When children are in school, teachers will constantly and repeatedly train their thinking ability, attention and other abilities, so as to improve children's intelligence and performance.

From all aspects of children's growth, development and learning, effective communication between mothers and teachers can help children's mothers expand their understanding of their own values, give more care to children, strengthen the cooperation between families and schools, and form a positive role in education. Most of the communication between mothers and teachers is conducted in the first two hours of children attending school and leaving school; but from the perspective of frequency and satisfaction of different types of communication, they are generally satisfied.

1.4. Social support factors

Social support refers to all positive resources available to an individual, including support from public relations such as welfare, medical and educational institutions.

Since the diagnosis of disabled children, parents will

receive formal services from the social service institutions at the core of the hospital. The opportunities for children's families to contact with the formal support system for special education and child rehabilitation will gradually increase. These institutions mainly aim to reduce children's pressure on the family, and to help them form a positive attitude towards life and other practical help. However, it is difficult for parents to find an institution suitable for children, due to the limitation of the number of welfare institutions (including education or treatment institutions) or the level of teachers. But with the increase of a large number of informal or official support systems, this problem has decreased.

2. CONCLUSIONS AND RECOMMENDATIONS

2.1. To strengthen home-school cooperation and attach importance to school education

School education has an irreplaceable role in the cultivation of social adaptability. While attaching importance to children's learning ability, teachers should also pay attention to the development of adaptive ability. Through the children's characteristics, targeted educational activities should be carried out, and the content of life skills should be continuously improved. According to children's behavior characteristics and parents' education background, and economic situation, a home-school cooperation program is formulated. Teachers should not only guide parents and actively cooperate in completing various learning tasks, but also guide parents to communicate with teachers in time about children's behavior and emotional performance at home, to achieve effective home-school cooperation, thereby promoting the progress of children in all aspects.

2.2. To be familiar with children's characteristics and maintain a good teacher-student relationship

To promote the development of their social adaptability, it's necessary to set different goals of social adaptability according to children's age, grade, and level of obstacles, and adopt effective education and teaching methods. For children with intellectual disabilities under different educational placements, different educational goals are set according to different situations. Children in the context of integrated education should also train their social adaptability from individualized education.

Secondly, active teacher-student relationship and peer relationship is an important factor to promote the social adaptability of mentally retarded children. Therefore, teachers should give full play to their roles, actively create a good class atmosphere, and promote the development of social adaptability for children.

2.3. To actively seek social support and establish a correct parenting attitude

The correct parental attitude of the parents is directly related to the development of the social adaptability of children with intellectual disabilities. Therefore, both parents should maintain a consistent attitude

towards parenting and agree on the performance evaluation of the children, so as to more effectively promote the development of their social adaptability. At the same time, parents should have reasonable expectations for actual situation of children, and expectations that are too high or too low are not conducive to the cultivation of social adaptability for children. When necessary, you can seek social support and help, such as, fraternities for parents of children with disabilities, psychological counseling activities, etc.

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Attribution Analysis of Female Postgraduate Students' Academic Motivation

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Abstract: This research is based on grounded theoretical research methods, based on interviews with 15 female graduate students, in the perspective of "gender theory", with the help of Nvivo analysis software analyzes the influencing factors of academic motivation of female graduate students, and finds that the academic motivation of female graduate students presents non-academic tendencies. mainly due to the lack of internal primary academic motivation of individuals, the influence of school atmosphere on external academic motivation, and social environment to limit academic investment

Keywords: female graduate students; academic motivation; attribution analysis

1. QUESTIONS RAISED

Motivation is a psychological tendency that induces and sustains a person's behavioral activity and directs it toward a certain goal.^[1] Regarding the definition of academic motivation, scholars elaborated separately. With reference to the research of scholars,^{[2] [3][4]} the author believes that academic motivation is the driving force for individuals in academic research and maintains sufficient academic enthusiasm and firm academic beliefs. This article focuses on the special group of female graduate students, and analyzes the academic motivation of this group from

the perspective of gender theory and qualitative research methods.

2. RESEARCH AND DESIGN

2.1 Theoretical perspective

This research is based on gender theory, a social concept of "role", "behavior", "activity" and "feature" suitable for men and women in social construction.^[5]

In actual situations, female graduate students as an important group of scientific research innovation, why do some female graduate students blindly pursue diplomas and lose academic interest? How does gender stereotypes affect their academic motivation? This article hopes to use the gender theory Explore the academic motivation of female graduate students.

2.2 Research methods and tools

The main reason for qualitative research in this research is that qualitative research is more suitable for a more in-depth and detailed description and analysis of social phenomena at the micro level, and it is easy to understand the complexity of things by conducting a case study on a small sample.^[6] This research data analysis tool uses computer-assisted qualitative analysis software NVivo11.0 to encode and analyze the original interview data.

2.3 Sample introduction

The 15 female graduate students were interviewed. The distribution characteristics of the basic information of the interviewees are shown in Table 1.

Table 1 Distribution characteristics of respondents' basic information

Numbering	Subject background	Interview location / form	Interview duration / min	Interview Log / Word
FO1	Humanities and Social Sciences	Study room	20	6588
FO2	science	office	21	6532
FO3	Engineering	video	18	5289
FO4	Humanities and Social Sciences	Study room	19	5204
FO5	Engineering	voice	22	6655
FO6	science	Study room	25	6744
FO7	Engineering	voice	17	5113
FO8	science	voice	18	5193
FO9	Humanities and Social Sciences	voice	23	6498
F10	science	Study room	22	6434
F11	Humanities and Social Sciences	Study room	20	6442
F12	Engineering	office	17	5165
F13	Humanities and	voice	24	6532

	Social Sciences			
F14	Engineering	video	20	6322
F15	science	office	19	6125

2.4 Research process

2.4.1 Interview

Before conducting the interview, the researcher set a semi-structured interview outline based on the existing research. The interview content of this research mainly includes four questions: 1. What do you think of your academic life? 2. What motivates you to write a thesis? 3. What factors influence your writing? 4. How do you evaluate your academic motivation?

2.4.2 Transcription and Encoding

A total of 15 original interview speech materials were collected after the interview. The transcription of the speech materials was done by the author alone. The encoded interview texts are imported into NVivo 11.0's internal materials one by one. First, the

interview texts are carefully studied to form a global framework and concepts. Second, encoding is the most critical process of qualitative analysis, and it is necessary to follow grounded theory. The coding process mainly relies on three-level coding: open coding, axial coding Selective coding.

3. SURVEY RESULTS AND ANALYSIS

After in-depth analysis of the interview data, the following conclusions were reached:

3.1 The academic motivation of female graduate students is non-academic

Respecting the principles of grounded theory, the core code of this research is defined as "the academic motivation of female graduate students is non-academic." As shown in Table 2

Table 2 Attribution code for academic motivation of female graduate students

Selective coding	Axial coding	Open coding
Non-academic tendencies in female graduate students' academic motivation	1. Insufficient primary academic motivation within the individual female graduate student	1.1 Reliance on Psychology
		1.2 Herd mentality-leading to broad research directions
		1.3 Low self goal setting
	2. School atmosphere affects external academic motivation	2.1 Nature of course tasks
		2.2 Internal evaluation mechanism
		2.3 Mentors ignore, men and women are not equal.
		2.4 Due to the high tuition fees of graduate students
	3. Social environment restricts academic investment	3.1 Invisible sex discrimination in employment
		3.2 Family traditions: stereotypes of strong men and weak women
		3.3 Academic Investment in Love and Marriage

3.2 Insufficient primary academic motivation within the individual female graduate student

Insufficient primary academic motivation within the individual postgraduates of female graduate students is a key factor that limits academic investment. However, in the interviews, most female graduate students did not Showing obvious primary academic motivation, Beauvoir suggested in "Second Sex" that women do not "consciously and voluntarily become objects and minors", but men "in the process of defining themselves as such Establishing the Other,^[7] Therefore, social and cultural expectations for female roles and behaviors are gentle, obedient, and good-tempered, and girls are labeled as "accessories" and "vulnerable groups", Leading to the girls

psychologically accustomed to rely on others and some female graduate heart is still not enough independence and performance of over-reliance mentor in learning, hinders initiative and motivation to learn, so much suffering at the graduate level.

3.3 School atmosphere affects external academic motivation

The impact of school atmosphere is a key factor of external motivation. According to the materials, 15 interviewees clearly felt the impact of school atmosphere on their academic motivation. First, the heavy curriculum tasks consume students' academic research energy. The imbalance caused by the inefficiency of students, limiting the academic potential of female graduate students. Second, the

internal evaluation mechanism of the school has stimulated external academic motivation to some extent. Third, The instructor's effective guidance meeting Increase the academic motivation of the students. Conversely, if the tutor fails to give the correct guidance, it will directly have a negative impact on the academic motivation of the students. Fourth, female graduate student not only faces economic pressure, but also Faced with academic pressure, it severely affected academic investment. Surrounded by various factors in the school field, female graduate students could not invest full academic enthusiasm for academic research.

3.4 Social environment restricts academic investment Social environment is an important factor restricting the academic investment of female graduate students. When female graduate students feel such invisible sexism, they will feel that their input and output are not directly proportional, which will result in a sense of inefficiency, reduce academic investment, and reduce academic motivation. Second, deep-rooted stereotype, making most female graduate students consciously use the traditional gender concept to regulate and regulate their behaviors and reduce themselves. Finally, because female graduate students in colleges and universities bear unique role clusters of daughters, wives, and mothers, they also have more special expectations and pressures than men, and need to face more role conflicts than men. Limited energy is broken down by "family chores". Under long-term psychological and fertility pressures, learning interest has been greatly reduced, and academic motivation is not strong.

4.THE MAIN FINDINGS AND REFLECTIONS

The academic motivation of female graduate students has its own type and uniqueness, so we need to pay attention to the internal academic motivation of female graduate students. To this end, this article proposes the following:

First of all, individual female master graduate students should increase their awareness of independence and cultivate their androgyny

personality characteristics, that is, a comprehensive personality type that has both male and female roles, and has both the advantages of male and female. Secondly, universities should provide female graduate students with appropriate work-study positions to alleviate their economic pressure; scientifically arrange courses and set up a management system to reduce the psychological pressure of female graduate students; mentors should pay attention to the training of female graduate students, give them patient guidance, and stimulate their interest in learning. Finally, in the employment aspect, we should increase supervision and eliminate employment in the form of law. Invisible employment discrimination in the unit. In short, we must pay attention to the internal primary academic motivation of female graduate students.

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Construction of practical teaching system for inorganic non-metallic materials engineering specialty

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Abstract: For the inorganic non-metallic materials engineering practice, practice is a very important link. Students must understand the concepts stated in the textbooks through the teacher's explanation and operation in the laboratory. However, not all schools can achieve the "theory + practice" teaching mode. For schools in higher vocational colleges, if they pay too much attention to theoretical teaching, students will be out of touch with social needs. Therefore, this article explores the existing problems in higher vocational colleges and puts forward relevant suggestions.

Keywords: inorganic non-metallic materials engineering; practical teaching system; construction; students

1. INTRODUCTION

The composition of practical teaching is composed of experimental operation and professional internship. Practical teaching is an important measure for cultivating application-oriented talents in higher vocational colleges. Students continue to deepen theoretical knowledge through the practical teaching system, and constantly strengthen students' practical skills and innovation capabilities. On the contrary, if they pay too much attention to actual operations and lack theoretical research, It will result in students being unable to use relevant scientific theories, blindly practicing, and having no good insights into theoretical knowledge, and there is no place for innovation in experimental research. Therefore, only by combining theory and practice can students develop better.

2. THE STATUS OF PRACTICAL TEACHING SYSTEM OF INORGANIC NON-METALLIC MATERIALS ENGINEERING

For a long time, the school teaching model has paid too much attention to theoretical teaching and ignored practical operations, resulting in the disconnection between students and talents in need in society. Inorganic non-metallic materials engineering is very focused on practical operations, which will lead to students in the future During the job search process, he repeatedly hit a wall. First of all, most schools focus on theoretical knowledge learning, and it is a one-to-many teaching model, which leads to

the lack of professional basic knowledge for some students. The courses arranged by the school are also taught to students through demonstration teaching programs and teachers' understanding of knowledge. Lack of practical operation, inadequate training of students' engineering practical ability, will cause students to be unable to properly solve practical problems. Students lack experimental operation ability, and it is difficult to understand research-based and innovative teaching content. Therefore, students' The ability to innovate cannot be effectively cultivated. Secondly, students are too formalistic in the process of professional internship. They did not go deep into the job position during the internship process, and did not apply the knowledge they have learned to the work. Finally, teachers lack teaching experience, and now the teaching team is getting younger and younger, and the internship experience of teachers in enterprises is very little. As a result, the process of explaining to students is only the knowledge in books, and rarely guides students to apply to real life.

3. THE PRACTICAL TEACHING SYSTEM OF INORGANIC NON-METALLIC MATERIALS ENGINEERING

3.1 Improve school infrastructure and build an experimental teaching platform for students

With the continuous development of Times Technology, the requirements for the school's infrastructure are constantly increasing, the requirements for recruiting personnel in the talent market are becoming higher and higher, and the demand for talents with professional skills is increasing. Improve the school's own construction and build an experimental teaching platform for students, which not only increases the students' hands-on ability, but also enhances the school's own image, providing favorable conditions for enrollment in the future. The experimental training room in colleges is not only a place to improve hands-on ability, but also a source of stimulating students' innovation ability. It is to help students deepen the content of textbooks through their own hands-on ability. With the introduction of quality education, more and more colleges and universities have to change teaching concepts, innovate the previous

teaching methods, improve talent training programs, and strengthen the requirements for students' hands-on ability and practical ability, because the experimental training room is Testing teaching achievements, conducting experimental research and generating innovative thinking is also an important base for cultivating students 'hands-on ability. Therefore, schools should build experimental and experimental training rooms to build a better teaching platform for students, so as to improve their skills and operations. Cultivate application-oriented talents for society.

3.2 Teachers should change traditional teaching methods

As an educator in disseminating knowledge, teachers must keep up with the trend of the times and constantly improve their teaching methods. Excellent teaching plan is an important way to cultivate students' engineering quality, engineering knowledge, engineering practice ability and innovative thinking ability. Therefore, in the talent training program, the school should have a certain number of professional courses every semester from the students' usual teaching content, so as to lay a good foundation for future graduation thesis. Doing so can help students accumulate relevant professional knowledge in the usual class. In the future experimental operations, through the knowledge learned, combined with the actual situation of the laboratory, through their own independent thinking, the knowledge is applied to the experimental operation Medium.^[1]

3.3 Teachers should innovate teaching modes

In the traditional teaching mode, most teachers have more theoretical content than practical teaching content. Students have been in the classroom for a long time, and they have little accumulation of relevant experimental operation experience. As a result, when students complete a course, Without their own independent thinking ability, they will forget for a while, this is very unfavorable for the long-term development of students. Teachers should change the teaching mode to "theory + practice". Through these professional experiments, on the one hand, students The knowledge gained is further consolidated. Experiments are conducted to find out their own deficiencies. Students are asked to solve problems by consulting classmates or teachers. On the other hand, students continue to improve their practical skills through experimental operations to further understand scientific methods in actual projects. Applications. In this way, not only can the basic knowledge be closely combined with the professional content, but also avoid the past too much emphasis on theoretical teaching and lack of experimental operation. Only by changing the teaching mode and increasing the professional experimental operation can students 'interest in inorganic non-metallic engineering major be stimulated, thereby enhancing students' practical

ability, and constantly improving the construction of practical teaching system of inorganic non-metallic materials engineering major.

3.4 Improve the internship system so that students can succeed in the internship middle school

Professional internship is to combine the theoretical knowledge and practice you have learned. Through graduation internship, you will continuously cultivate students 'own innovative spirit, improve students' practical skills, enhance social experience, and lay a solid foundation for future job search and professional internship. Schools should attach great importance to internship work, because internship is an important part of the teaching content and an important way to train students to solve practical problems. Professional internship is the source of students 'professional knowledge. Through professional internship, students can penetrate the society, Expand horizons. On the one hand, through professional internships, we have a deeper understanding of the content, nature of the profession, and the application in the social field, further understanding and consolidation of professional knowledge, and enhance the familiarity of the profession and interest. On the other hand, through professional internships, I have improved my professional skills, cultivated my ability to endure hardships and work hard and frustrated mentality, and developed good professional ethics. Finally, through internship professional internships, I have effectively learned the knowledge and working hours Linking up, enhances a comprehensive understanding of society, enriches one 's own social experience, and lays a solid foundation for future self-employment, and at the same time, helps oneself transition from a student to a social worker through a professional internship And, through the problems encountered in the internship process, continue to summarize and improve, improve their ability to express and deal with problems, and lay the foundation for future work development.

3.5 The school shall hold relevant academic vision lectures and organize students to visit the company

The school should hold some academic vision lectures on the inorganic non-metallic materials engineering major to enhance students 'professional knowledge, and by inviting well-known entrepreneurs to give lectures to the school, let students understand what the society requires of talents, or hold class meetings and invite seniors The school sisters share their professional knowledge experience, so that students have a further understanding of their professional knowledge. In the usual teaching process, students can be organized to visit related companies, understand the company's operating process, find their own deficiencies, and lay a solid foundation for the future employment process. At the same time, it is indispensable to hold relevant experimental team competitions, such as:

"Metallurgical Desulfurization Catalyst Regeneration Experiment", because this can enhance the teamwork ability of students, as well as the competitive psychology among students, and strengthen the learning atmosphere for professional knowledge. And through experiments, enhance the learning exchange between students, improve students' oral expression ability and cooperation awareness.

4. CONCLUSION

To sum up, the inorganic non-metallic materials engineering profession pays great attention to practical operations. Teachers should change traditional teaching methods and innovate teaching modes, combine theoretical content with experimental operations, and help students better consolidate professional knowledge. The school

should improve the school infrastructure, build an experimental teaching platform for students, hold relevant academic vision lectures and organize students to visit the company to improve the school infrastructure, and improve the internship system, so that students can succeed in internship middle schools. Students apply theoretical knowledge to practical operations to help students continuously strengthen their abilities and cultivate application-oriented talents for the society.

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Research on Effectiveness of Internet-based Education for Ideology and Politics in Colleges and Universities

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Abstract: As a new type of information media, Internet is an important way for teachers and students to acquire knowledge and receive various kinds of information, which has a profound impact on the way of thinking and values of college students. Therefore, education for ideology and politics has gradually developed from traditional method to Internet-based method. It is one of important ways to carry out education for ideology and politics in colleges and universities with the network platform.

Keywords: Education for ideology and politics; Network platform; Effectiveness

1. INTRODUCTION

As the age of Internet has developed rapidly, great changes have been taken place in social ideology, media and ways for information transmission, which has brought new opportunities to education for ideology and politics in colleges and universities. Therefore, colleges and universities should innovate their ideas and methods of education, and further improve their education with network media.

2. DIFFERENCES BETWEEN INTERNET-BASED EDUCATION AND TRADITIONAL EDUCATION FOR IDEOLOGY AND POLITICS IN COLLEGES AND UNIVERSITIES

2.1 Loose environment for Internet-based education

With the rapid development of information technology, network culture has brought a great impact on traditional campus culture and the working environment of traditional education for ideology and politics in colleges and universities. Under the influence of rich and complex information on Internet, campus culture has become diversified, and thoughts and values of students have also been affected by the media of mass communication. Although the traditional education for ideology and politics also advocates the way of persuasion, it is still carried out in one-way mode by face-to-face. And after network enters the campus, network culture enable students to contact the society more directly, understand more knowledge and receive more comprehensive information. Therefore, the education for ideology and politics received by college students is no longer influenced by parents and teachers, but by the society.

2.2 Lack of initiative in education

Network culture usually adopts open and loose management, which provides convenience to

different network functions according to different choices of students. However, some people with bad intentions will take advantage of the convenience of Internet to enter a certain function at will, and make false statements on network platform to mislead students^[1]. On network platform, there are countless electronic forums that can provide a lot of information for college students which is truthful and scientific, as well as fallacy and pseudoscience. After receiving a large amount of information with different concepts, which is difficult to distinguish between true and false, their thoughts will fluctuate greatly. It is extremely easy for students to fail to properly treat ideological education of the school and reduce the impact of ideological education on students.

2.3 Uneven information on the Internet

The configuration of each functional area on the Internet is unbalanced, which has led to the rapid development of some areas for entertainment under inadequate surveillance of universities, while areas for advanced culture and education technology have shown weak development, which has a great impact on establishing the right values for students. As an indispensable part of higher education, education for ideology and politics has a great impact on the future development of students. The uneven information on the Internet has an influence on students' ideas and ideology.

3. WAYS TO CARRY OUT INTERNET-BASED EDUCATION FOR IDEOLOGY AND POLITICS IN COLLEGES AND UNIVERSITIES

3.1 To adhere to correct guidance of public opinion

When carrying out Internet-based education for ideology and politics, colleges and universities should always adhere to the correct guidance of public opinion and follow three basic principles of Internet-based education, including the principle of activity, the principle of initiative and the principle of integrity. The principle of activity requires to correctly guide positive information and resist negative information to create a positive publicity atmosphere. The principle of initiative requires educators to take the initiative to receive information on the Internet and pay close attention to the trend of network public opinion to discover negative information in time and refute it, and fully grasp the initiative of public opinion. And the principle of

integrity requires that the information provided by the network should be comprehensive and objective, so as to ensure that the information received by students on the Internet is correct and comprehensive.

3.2 To train educators for Internet-based education

Colleges and universities should organize educators to carry out training to strengthen their network information technology, so that they can collect network information in time through the Internet, and screen and process the information. As a result, they have a certain ability to identify network information and use skills [2]. At the same time, educators can talk with students on the network to understand the actual situation of students, fully grasp the ideological emotions of students, and help students solve the ideological problems in time, so as to cultivate students' correct values and ideals and beliefs.

3.3 To strengthen Internet-based education for morality and laws and regulations

Network communication is anonymous, and people often spread some false information. This is an extremely irresponsible behavior and even makes people attacked. Therefore, when carrying out Internet-based education for ideology and politics, colleges and universities should first carry out Internet-based education for morality and laws and regulations through classroom teaching and campus network. In general, in the process of carrying out Internet-based education for ideology and politics in colleges, educators should change their teaching concepts, continuously innovate teaching methods, and keep pace with the times. In addition, they should combine Internet-based education with practical education through network advantages to enhance the effectiveness of education for ideology and politics.

3.4 To improve the campus network construction of education for ideology and politics in colleges and universities

When carrying out Internet-based education for ideology and politics in colleges and universities, the construction of campus network should be done well. First of all, all teachers and students in colleges and universities must have a clear overall concept and positional awareness [3]. The construction of campus network is not only the responsibility of educators, but also a major event for schools. Therefore, colleges and universities should integrate leaders, network technicians, educators for ideological and political education, and other teachers, so that all parties in the school become a whole to jointly improve the construction and management of campus network. Secondly, the content settings related to the ideological and political education column on the campus network must fully meet the personality characteristics of students, and highlight the fun and ideology of education for ideology and politics.

3.5 To strengthen the construction of network education team

In the process of building the education team, universities should integrate the advanced theory and technology effectively, so that the education team can have certain teaching ability. The construction of website needs special technicians and the most advanced technology to maintain the website. In addition, it needs the publicity team to spread the website's popularity through official account and other means. The team for website information collection and compilation should update the information in time to ensure the accuracy and richness of information related to education for ideology and politics disseminated in the website. And the team for platform interaction is responsible for the planning of the website, which will create an interactive world with interesting life, freedom and democracy, and in line with norms. In addition, colleges and universities should focus on cultivating the network audience team, so that students can actively participate in the website platform, and fully understand the website. Consequently, the visibility of the website can be further improved and the click rate of the website can be effectively enhanced. Therefore, when carrying out education for ideology and politics on the Internet, colleges and universities should first cultivate talents for website construction with strong theoretical level and sharp thinking to improve the ability of guiding public opinion on the Internet and enhance the effectiveness of Internet-based education for ideology and politics in colleges and universities.

4. CONCLUSION

From the above, the establishment of a new platform for ideological and political education in colleges and universities can effectively improve the pertinence and effectiveness of education, and further improve the education in colleges and universities. And with the help of Internet platform, it is of great significance to improve the ideological and political literacy of students and effectively cultivate the overall development of students.

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The Development of Community TCM Health Management for Diabetes

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Abstract: The core ideas of “prevention comes first” and “concept of wholism” in traditional Chinese medicine(TCM) are similar to the concept of health management gradually emerged in recent years. And it also plays an irreplaceable role in the diagnosis and treatment of diabetes. Long-term community-based interventions are more important for chronic diseases, such as diabetes. However, the popularity of TCM health management mode in community-based primary medical institutions remains low. This article discusses the possible obstacle factors and briefly proposes corresponding countermeasures to provide ideas for the development of related research in the future.

Keywords: diabetes, traditional Chinese medicine, health management

1. INTRODUCTION

With the aging of the population and the improvement of people's living, the population composition and lifestyle have undergone tremendous changes. China has become the fastest growing country with of 114 million diabetes patients in the world. Health management of TCM uses TCM concepts, methods and technologies to maintain and improve the physical and mental health, including TCM longevity preservation, public health, services of medical and rehabilitation^[1]. The State has issued a series of policies, putting forward related institutions should promote the establishment of diabetes health service model integrating the health management content of TCM. However, many studies have shown that, this mode has not been fully promoted in the community.

Situation analysis

2. THE ADVANTAGES OF TCM HEALTH MANAGEMENT IN DIAGNOSIS AND TREATMENT FOR DIABETES

When diabetes symptoms appeared, diseases usually have reached the middle or late stages. Some scholars have obtained study data: 50.1% of Chinese patients were pre-diabetic aged over 18 years; However, less than one-third (30.1%) patients were aware of diabetes^[2]. “Su Wen” pointed out that “The sage does not treat those who are already sick, but those who are not yet sick (prevention as it is now)”. For the diagnosis and treatment of diabetes, TCM health management has unique advantages. For pre-diabetes, Chinese medicine has a good effect on lowering blood glucose; for middle and late state diabetes, the

combination of TCM and modern medicine plays an important role in nursing measures that delay and control diabetes course.

3. BARRIERS OF PROMOTING CHINESE MEDICINE HEALTH MANAGEMENT FOR DIABETES IN THE COMMUNITY

3.1 Current institutional factors

At the grassroots level, the income of medical institution staff is still a traditional, fixed salary system. Under this system, it is difficult to stimulate the internal motivation of medical staff to truly implement the mode of TCM health management for diabetes. It is more difficult to set up a place to provide personalized treatment for patients.

The TCM health management for diabetes requires full-cycle care, and the system process is complex. So the increase in appropriation has become inevitable. However, the current state's support for this is mainly reflected in policy orientation. Chinese medicine accounts for less than 10% of the state's investment in the health field^[3], which makes it difficult for TCM health management to develop in depth.

3.2 Quality and quantity factors of medical staff

At present, most family doctor teams are non-Chinese medicine general practitioners. And it is difficult to recruit talents in primary medical institutions. There are various diagnosis and treatment methods for diabetes in TCM, and most of them are professional, which indicates that there is an urgent need to fill the gap in the number of TCM medical personnel in the basic medical institutions.

The level of diagnosis and treatment of Chinese medicine practitioners is uneven. As a whole, the number of “famous old Chinese medicine practitioners” is rare, and currently there are few emerging Chinese medicine talents who have taken the initiative to serve for primary medical institutions. Most of the health management service personnels in primary medical institutions are based only on previous training and examinations, which leads them to a low level of technology and little ability for continuous learning.

3.3 Resident factors

In lower-developed cities, grassroots residents are still in the state of “go to the doctors only when they are sick”, making it difficult to actively cooperate with the implementation of TCM health management. Secondly, the education level of residents served by grass-roots medical institutions is generally low, leading insufficient awareness of TCM diagnosis

and treatment for diabetes.

Economic factors are the main factors affecting the quality and quantity of medical services patients use. A cross-sectional survey shows that, due to the unwillingness to bear such important expenses, the vast majority of diabetic patients monitor blood glucose mainly through primary health care institutions such as community health service stations, rather than choose daily home self-monitoring^[4]. At present, western medicine is convenient to use in treating diabetes, and its price is more affordable than traditional Chinese medicine, with obvious effects and fast onset of action. Diabetes patients are more inclined to Western medicine. In addition, in some institutions that have already carried out diabetes health management, there are still a large number of patients discouraged for the high cost treatment which have not yet been included in the scope of medical insurance.

4. SUGGESTIONS FOR DEVELOPING COMMUNITY-BASED DIABETES TCM HEALTH MANAGEMENT

4.1 Government Macro Control

1) Improve the performance appraisal system of primary medical institutions, and increase the initiative of medical staff to provide TCM health management services for diabetic patients.

2) Increase economic investment in primary medical institutions and continue to improve the medical insurance system. In recent years, the Chinese government attaches great importance to Chinese medicine. However, from the perspective of overall distribution, investment in primary medical institutions is still insufficient. Most of the medical insurance includes acute and severe diseases, and most of patients seek help of TCM diagnosis and treatment for chronic diseases such as diabetes^[5]. Therefore, the Chinese medicine service project should be included in the medical insurance policy, the government could appropriately increase the support for commercial health insurance, and selectively drawing on the experience of other countries, such as American health maintenance organization (HMO), to gradually solve the problem of residents' high cost of getting medical treatment.

3) Build a TCM health management database. The quantity of grass-roots diabetic patients is large, and the types of diabetes syndromes are various from the perspective of TCM. The use of big data can improve the efficiency of the application of TCM health management and can regulate patient health archive management, and maintain a connection between the doctor and patient through the app or internet to effectively monitor the dynamic changes of the condition.

4.2 Institutional resource optimization

1) Primary medical institutions in various regions should effectively strengthen the construction of high-quality Chinese and Western medicine talents.

Correct and standardized health education not only improved the cognitive level of diabetes knowledge of diabetic patients, but also improved the biochemical indicators. In addition, regular blood glucose monitoring under the guidance of professionals can help patients with reduced glycated hemoglobin level^[6]. It can be used to encourage senior students in medical schools to enter primary medical institutions in order to strengthen the training of talents, fiscal measures and so on; besides, each institution can organize training on a regular basis to provide systematic teaching for primary Chinese medicine service personnel.

2) Establish and improve a community-based diabetes Chinese medicine health management process. Clinics may seek exchanges and cooperation from relevant institutions and schools.

3) Continue to practice the "Medical Union" mode. Enhance the role of central medical institutions in driving primary medical institutions will sink high-quality resources.

4.3 Active participation of residents

1) A family-centered management mode should be developed. Family members establish health beliefs for patients through encouragement and other methods, and try to avoid the loss of complications from psychological aspects for patients. Family members can also play a role of supervision and management for patients with diabetes. The survey showed that the blood glucose monitoring behavior scores of the married patients among the respondents were higher than those of the non-married patients^[7], suggesting that the reminder of the partner may promote the self-management.

2) Patients should change their own concepts, take an active part in the Chinese medicine health management for diabetes provided by the community, actively learn science-related knowledge about diabetes prevention and control, and learn appropriate simple Chinese medicine techniques for improving the quality of their life.

5. CONCLUSION

Traditional Chinese medicine is a treasure of traditional Chinese culture. TCM health management is the current lower-cost mode for diagnosing and treating diabetic patients, the adverse reactions of TCM methods are relatively light, and the patient's compliance is good. The reasons are discussed in three levels: system, medical staff and patients. However, there is still lack of related research. If we want to make TCM health management popular among community diabetic patients, we should increase the research intensity and implement it at all levels.

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Author contribution

Zhang Shiwen participated in the design of the study. Zhang Shiwen find informations. Zhang Shiwen participated in writing the manuscript. All authors read and approved the final manuscript.

Competing interests

The authors declare that there are no competing interests associated with the manuscript.

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An Analysis of Dilemma and Breakthrough Path of Core Literacy in Subject of Physical Education and Health

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Abstract: The most important topic discussed by the educational circles today is how to cultivate and develop the core literacy of the subject, because the cultivation of core literacy helps to resolve main contradictions and problems in the current school teaching reform. It will be conducive to their round development if students establish the teaching concept of core quality of the subject. With the continuous deepening of educational reforms, the cultivation of core literacy has gradually penetrated into the teaching of various subjects, including subject of physical education and health. This paper analyzes the dilemma of core literacy training in subject of physical education and health, and puts forward an effective breakthrough path to get out of the dilemma and improve the quality of teaching.

Keywords: Physical education and health; Core literacy of subject; Dilemma and breakthrough path

1. INTRODUCTION

The cultivation of core literacy is conducive to improving students' mastery of knowledge. The development of core literacy system must be carried out through teaching activities and implemented into teaching goals^[1]. Disciplines should combine their core literacy with characteristics of their own disciplines. They should not blindly and randomly serve the core literacy of students, but should give play to the differences between discipline of physical education and health and other disciplines to make contribution to the completion of the task of training students' core literacy.

2. CONCEPT OF CORE LITERACY OF SUBJECT

What is the core quality of discipline? Literacy refers to a person's knowledge, ability and way of dealing with others. Core literacy refers to the basic literacy formed in the process of learning content through subject education and teaching, including knowledge, skills, process and methods, emotion and values. According to the above core concepts and related literature, the core literacy of subject of physical education and health focuses on three aspects, namely sports ability and skills, healthy behavior and habits, and sports morality. Students are required to be able to exercise independently and form good habits. This kind of core literacy is consistent with the requirements of the subject, which is also the overall summary of the subject.

3. SIGNIFICANCE OF TRAINING THE CORE LITERACY OF SUBJECT OF PHYSICAL EDUCATION AND HEALTH

3.1 To promote students to form the consciousness of lifelong sports and guide them to keep fit independently

With the deepening of the new curriculum reform, educational concept of China requires to keep up with the trend of the times, and we must strengthen the cultivation of core literacy. It can guide students to pay attention to subjects other than culture courses, it is mainly because there are some students who only blindly learn culture knowledge, and are casual about their physical quality. The cultivation of core literacy of discipline of physical education and health can enable students to actively participate in physical education, and develop and cultivate all-round talents, so that they can improve their physical quality and master the method of independent exercise as well as studying cultural courses^[2].

3.2 To improve the health of students to a new level and enhance their ability to resist pressure

There is an educational concept that the subject of physical education and health is not a key subject, and most of students are not interested in physical exercises. They have no passion for sports and are hard to run 800 meters. The best way to deal with pressure is to do physical exercise, but students do not deal with it when they are faced with academic pressure, which results in the collapse of psychological quality of most students who are weak in pressure resistance, and the development of physical and health disciplines solves the problem. Physical education can help students learn how to deal with difficulties in the future, for instance, running can exercise students' perseverance and persistence, so that students learn and master the ability to adapt to society, and enhance their psychological quality.

4. DILEMMA OF CORE LITERACY IN SUBJECT OF PHYSICAL EDUCATION AND HEALTH

4.1. Influence of students' ideas

Most students are not interested in the subject of physical education and health, and hold the idea that physical exercise is tedious, time-consuming and meaningless. They also believe that the subject of physical education and health is not key subject. It is better to study than to physical exercise. Even if there

is spare time, it's better to spend their time on the Internet, online reading, and playing games. Students lack the awareness of physical education and think that it is of little use to carry out the subject of physical education and health. They have low athletic ability, have not formed good sports habits, and do not understand the actual value of physical exercise. It shows that students' attitude towards physical exercise and health needs to be changed.

4.2. Not paying enough attention to the subject of physical education and health and lack of teachers for physical education

For the sake of its own interests and reputation, the school blindly pursues the rate of progression to eliminate the subject of physical education and health. Students can only perform simple intercourse exercises once a day, and the intensity and time of intercourse exercises cannot be considered as physical exercises, which brings little benefits to students' physical health. It is not conducive to the overall development of students. The pressure of students can only be concealed in their heart, and the pressure is nowhere to be released. In addition to the serious shortage of teachers for physical education, they will not train students in physical education in a targeted manner, and ignore the education of physical ethics, resulting in students' lack of cooperation, hard work, and responsibility in participation in physical exercises.

5. PATH TO SOLVE THE DILEMMA OF CORE LITERACY IN THE SUBJECT OF PHYSICAL EDUCATION AND HEALTH

5.1 To change students' concepts

Teachers should guide students to understand the actual value of scientific exercise through corresponding teaching. Some people think that physical exercise will delay learning and waste time. They believe that it is better to do something meaningful than do physical exercises. In fact, effective exercise can give the brain a proper rest, and bring twice the result with half the effort to our work, study and life. Therefore, we should guide students to change their attitudes towards physical exercise and health and encourage them to actively participate in physical exercise. In addition, we must pay attention to improving students' athletic ability. The quality of athletic ability determines the long-term effectiveness of physical exercise. Only after mastering a certain amount of athletic ability, can students adhere to physical exercise for a long time and gradually develop habits. We should emphasize the importance of scientific exercise and guide students to recognize and accept appropriate physical exercise.

5.2 To improve the professionalism of teachers

Teachers are the organizers of teaching. In order to implement the core quality of discipline of physical education and health, teachers must be professionals and have unique teaching methods for the discipline. Teachers and students can create a pleasant classroom

atmosphere for students' participation through practical activities. In addition, the teaching of course of physical education and health can also be extended to curricular outside and inside the school, encouraging students to participate in physical education and health activities outside the school to cultivate their cooperation spirit, organization ability, communication and communication ability.

5.3 To focus on training students' athletic ability, health ability and sports morality

In the process of teaching, teachers should be able to optimize and innovate constantly according to the development characteristics of the times, and help students build a perfect knowledge system based on the teaching content^[3]. Besides, we need to strengthen the teaching of basic knowledge and combine with the corresponding sports training activities, so that students can learn in the actual activities and improve their physical skills. It is necessary to help students accumulate experience and improve their enthusiasm for physical exercises through teaching, so that students can actively and intuitively participate in the exercise and form the habit of doing physical exercises. And we should also guide students to realize the hidden moral character in physical education, which is not learned in books but is important to our development^[4-6].

6. CONCLUSION

In order to enable students to have the core quality of the subject of physical education and health, schools and students are required to change the educational concept in the actual teaching process. Teachers should improve their professionalism, help students to master athletic ability, develop healthy behavior, and form physical morality, so that students can clearly recognize the value of physical exercise in the study of physical education and health, learn to exercise consciously and actively, and form a good spiritual style, which is helpful to create an efficient physical education classroom.

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On the "heritage activation" of traditional villages in Lijiang and the nirvana and rebirth of tourism economy

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Abstract: "heritage activation" is the eternal theme of the development of traditional villages, which has become one of the important paths for the development of cultural tourism economy. Longquan village is a world cultural heritage site. Its natural scenery, folk customs, historical sites and multi-cultural landscape are the supplement and extension of Lijiang ancient city. Through the "heritage activation", its tourism economy will get another Nirvana and rebirth, showing the unique new charm of the deep integration of intangible cultural heritage culture and tourism.

Key words: traditional village; heritage activation; tourism economy; Longquan Village

1. INTRODUCTION

China has a splendid history of five thousand years and a brilliant cultural heritage, which shows the unique charm and rich heritage of the Chinese nation's historical and cultural resources to the world. Yunnan, with rich and colorful cultural heritage resources, is bound to improve the strong integration ability of the industrial chain platform, carry out spatial reorganization and innovative development of traditional villages, and form a modern industrial chain based on cultural resources in order to realize the efficient operation and high-quality development of the tourism industry in the future. Heritage economy will also become a booster for the development of tourism industry in the new era, and help the cluster development of Yunnan cultural tourism industry^[1].

2. OVERVIEW OF LONGQUAN VILLAGE

Lijiang, located in the northwest of Yunnan Province and the junction of Yunnan, Sichuan and Tibet provinces, is like a pearl in the palm of the hand, and an important channel of the ancient "Southern Silk Road" and "ancient tea horse road". Shuhe, Naxi "Shaowu", means "village under the peak". Longquan Village, located at the foot of Yulong Snow Mountain, is the core of Shuhe ancient town. It is inhabited by six nationalities, such as Naxi, Han, Tibetan, and Bai. The houses are scattered with beautiful countryside, clear spring water, willows blowing water, blue tiles and pink walls. It is beautiful and pleasant. In 2005, it was selected as "China's famous town of charm, the best charming town of living environment" and "national 5A tourist

attraction" by CCTV. It was listed in 2013. It is listed in the second batch of Chinese traditional villages with important protection value^[2].

3. STRATEGIC SIGNIFICANCE OF LONGQUAN VILLAGE AS A TOURIST DESTINATION IN ETHNIC AREAS

Longquan Village, an important birthplace of Naxi traditional culture, is the earliest settlement of Naxi ancestors in Lijiang Bazi and the birthplace of Mu chieftain. It is a living fossil of Naxi culture's transition from agricultural civilization to commercial civilization, a model of national opening to the outside world and the construction of tea horse ancient road cultural market Town, containing rich ecological culture. It is named after "eight sceneries of Shuhe River" and is known as "the paradise under the snow mountain" and "the mysterious ancient village of Naxi"^[3].

3.1 Naxi culture

Due to the closeness of Lijiang geographical environment and the respect and absorption of Naxi people for foreign excellent culture, the Naxi ancestors took the ancient gongzhipu as the inheritance medium, making the Naxi ancient music created under the influence of the Central Plains Civilization represented by Confucianism and Taoism culture enduring, which can be called the common precious cultural heritage of mankind and the living fossil of music of human civilization. There are buddhist frescoes painted in Longquan Temple Hall of Longquan Village, which are unique and self-contained. They are treasures of Lijiang frescoes in Ming Dynasty. Longquan village has formed a unique tourism element with multiple Naxi cultural characteristics, such as ancient pool, ancient temple, ancient tree, ancient bridge, ancient road, ancient street, ancient business, ancient music, ancient wall painting, etc^[4].

3.2. Ancient tea horse road culture

The ancient tea horse road started in Tang Dynasty, from South Yunnan to Lhasa via Lijiang. After more than a thousand years of development, Longquan village has become a famous "cobbler village" in the border areas of Yunnan, Sichuan and Tibet. Craftsman's footprints are all over every corner along the ancient road, which greatly promotes the economic and cultural exchanges of people of all ethnic groups along the road. There are six murals

with the theme of Chinese Buddhism in the Ancient Tea Horse Road Museum, and 526 related cultural relics are collected^[5].

4. "HERITAGE ACTIVATION" AND THE NIRVANA AND REBIRTH OF TOURISM ECONOMY

"Heritage activation" is the eternal theme of the development of traditional villages, which has become one of the important paths for the development of cultural tourism economy, and has become the "Darling" of more and more market subjects' investment and development. The traditional villages are rich in natural landscape, human landscape and intangible cultural resources, which are the foundation of regional national culture and folk culture. Around the tourism development goal of Yunnan, Longquan village plans the tourism economic development in an all-round, all-round and all-around way, from "resource development" to "conservation and inheritance", from "natural customs" to "cultural shaping", from "sightseeing" to "in-depth experience", and gradually forms a tourism product system of "scenery with characteristics, culture everywhere and perception from time to time". With the improvement of the quality and efficiency of the "heritage activation" in Longquan Village, the construction of tourism projects is speeding up, the product formats are more abundant, the brand image is continuously improved, the development environment is increasingly optimized, the public service facilities are increasingly improved, and the economic effect of "promoting agriculture by tourism and feeding agriculture by tourism" is increasingly obvious^[6].

At the same time, its development problems are increasingly prominent: first, the construction of cultural heritage homogeneity is prominent; second, the "excessive commercialization" and "excessive protection" cannot be effectively coordinated; third, the format is relatively single, unable to fully meet the needs of tourists for high-quality tourism products.

Yunnan, which has rich and colorful cultural heritage resources, needs to further explore the better path for the development of "heritage activation" of traditional villages, not only to retain the "form" and keep the "soul", but also to "live" the memory sleeping in the middle of traditional villages and ancient people, so as to ensure the effective transmission of its human, social, emotional, cultural and economic values. To realize the nirvana and rebirth of tourism economy. This is an effective way to carry forward the excellent traditional Chinese culture, and also a reflection of cultural self-confidence.

(1) Establish protection management mechanism and implement early warning and exit mechanism

We should establish and improve laws and regulations on cultural heritage, encourage the active

participation of indigenous people and the public, implement the responsibility and right system, formulate protection and development plans, establish files and books, improve the information management system, and implement early warning and exit mechanisms.

(2) Continue the humanistic value and protect the whole space form of cultural heritage

Comprehensively protect the historical elements of the cultural heritage of traditional villages, historical buildings and traditional houses, as well as ancient pools, temples, trees, bridges, roads, streets, merchants, music and murals, and continue to preserve the traditional pattern, style, natural rural landscape and other whole space forms.

(3) Promote social value and explore diversified protection system

Under the framework of laws, we should take advantage of complementary efforts to explore and innovate the mechanism of "socialization, corporatization and diversification", establish the system of claim and protection of traditional monuments, encourage social organizations, enterprises and individuals to participate in the protection through multiple ways such as donation, donation, investment, shareholding, partnership and lease, and flexibly adjust the transaction mechanism of traditional residential property market to meet the needs of market platform. Directly reflect the economic value and other demands.

(4) Condensing emotional value and enhancing tourists' experience

First, carry out historical and cultural research. Hold cultural salons regularly to give full play to celebrity effect, arouse tourists' interest, conversation and inspiration; extract highlights, increase interactive experience, "activate" history, let "intangible cultural heritage" return to the people, regain vitality, form brand matrix, and create cultural card of traditional villages.

The second is to prevent over commercialization. We should continue to do a good job in the planning of traditional village tourism, appropriately introduce non-commercial business forms with prominent cultural characteristics, make the business environment full of cultural atmosphere, and enhance the experience of tourists.

(5) To stimulate cultural values and promote "borderless" integration. We will strengthen the in-depth integration and balanced development of tourism, culture and business services, build cultural bridges, facilitate in-depth exchanges, and realize the development of the entire tourism industry chain. Combine the form of business with the local culture, create the "business, cultivation, learning, leisure, emotion and novelty" tourism products transformed from the material and non-material local culture; combine the form of business with the emerging or foreign culture, create a new

consumption scene, constantly tap the characteristics, and highlight the difference of the traditional village tourism form.

(6) Excavate economic value and create unique night economic and cultural quality

With the acceleration of consumption upgrading, night economy came into being. Although it can extend the economic activity time of traditional villages, stimulate cultural creation, increase social employment, improve consumption level and promote regional development, it also puts forward higher requirements for its public service capacity.

First, we should not only work hard on habits, capital and fields to avoid being mere formality, but also sort out the idle resources in the village and pay attention to the "night state" integration development of local cultural resources IP.

The second is to combine cultural innovation with "intangible cultural heritage", design tourism products in different levels and categories, increase cultural significance, make history fashionable, more friendly and easy to spread.

The third is to increase the consumption time appropriately, so that the tourists in the daytime can extend to the night. Let "four digit consumption" become the synonym of tourism shopping consumption.

Fourth, we should do a good job in the excavation, activation and manifestation of culture, prevent homogenization of night economic consumption field, and create unique night life cultural quality.

5. CONCLUSION

Whether it is to enjoy the tour of cultural buildings or the leisure vacation of enjoying the pleasure of mountains and rivers, high-quality business services can always make tourists happy in body and mind, better integrate into local life, create a unique tourism memory, which is also a sign of the mature development of cultural tourism. Longquan village is a world cultural heritage site. Its natural scenery, folk customs, historical sites and multi-cultural landscape

are the supplement and extension of Lijiang ancient city. Through the "heritage activation", the tourism economy will get a new Nirvana and rebirth, and tourists from all over the world can experience the unique charm of the deep integration of intangible cultural heritage culture and tourism in the "south of the clouds" from zero distance.

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Daoism and Nabokov--A Quest into the Convergence of Eastern and Western Philosophies

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Abstract: Through textual analyses, this thesis strives to prove similarities exist between Taoists and Nabokov on themes including fate, death and fate. Detailed discussion is conducted drawing relevant evidences from a diverse range of literature respectively. Therefore, readers could witness how eastern and western philosophies converge and combine in the form of literature.

KeyWords: Daoism, Nabokov, fate, death, individuality, philosophy,

1.INTRODUCTION

Acknowledged as one of the greatest formalists in the 20th century, Nabokov's exceptional command of language has left an indelible mark in western literature. Since the 1990s, some scholars began to probe into the philosophies behind his works. After systematically analyzing Nabokov's works, the author proposes that Nabokov shares some affinities with the Daoist philosophies and these similarities are mainly reflected in the following areas.

2. ON FATE

Fate has always been a prominent theme in Nabokov's literary world. He admits that "in commonsense with Pushkin, I am fascinated by fatidic dates"(Nabokov, 1980 p3)^[1]. The omnipotent hand of the author as the controller of fate hovers over all his characters. The narratives serve as theatrical stages characters as puppets and him, the puppet master behind the curtain (Appel, 1991)^[2]. Many of his protagonists are confined either in virtual prison or psychological ones, all of them desperate to escape but fail utterly. The word "fate" appears repeatedly in his first English novel *The Real Life of Sebastian Knight* (1992). In *Lolita* (1996)^[3] it even assumes a human form as Lolita's classmate Aubrey McFate. Humbert ascribes many occurrences to the unknown doings of McFate/fate. "It would have been logical on the part of Aubrey McFate" ; "One wonders if this sudden discharge, this spasmodic refund, was not correlated somehow, in the mind of McFate"; "As to me, although I had long become used to a kind of secondary fate" (Nabokov, 1996 p13-p77). The room number 342 in the hotel Enchanted Hunter is the same with Lolita's house number, and with the number of hotels, motels they have stayed during their journeys. All prearranged to mimic the doings of coincidence/fate.

Fate is also repeatedly referred to in his autobiography *Speak Memory*. "Neither in environment nor in heredity can I find the exact instrument that fashioned me, the anonymous roller that pressed upon my life a certain intricate watermark whose unique design becomes visible when the lamp of art is made to shine through life's foolscap"(Nabokov, 1999 p25)^[4]. Nabokov's awareness for the invisible hand is also reflected as the strong authorial hold upon his characters. It is noteworthy that unlike the fatalist Thomas Hardy, Nabokov's attitude towards fate is nothing but negative. Regardless of the verisimilitudes, he still concludes that " the world is not as bad as it seems"(Nabokov, 1999 p201). And this is akin to Daoist philosophers.

Starting from the "void", Dao takes the form of human body and this is the stage where it is realized, and life becomes a process of constant self-differentiation and complexity (clashes between opposites), and at the end of it, everything returns to the void. "Void" suggests "infinite and infinitely various creativity". In "Free and Easy Wandering", Zhuangzi contends that human beings shall liberate mind from all mundane concerns and desires by letting things be and total adaptation to fate (Cua, 2003)^[5]. This compliance is, like Nabokov's, not a negative one. "All things, after having emerged, are waiting to retire to it (Dao), here, waiting is not a passive kind of existence; rather, all things exist positively as waiting for the return to the Dao" (Cua, 2003 p359). Similarly, Nabokov claims "the break in my own destiny affords me in retrospect a syncopal kick that I would not have missed for worlds"(Nabokov, 1999 p195). He wouldn't want to miss any part of his life to avoid the ineluctable misfortune of his past. "He records the pangs of nostalgia, the anticipations of future loss that preceded them. And the compensations of memory, yet even here affirms the poignancy of his loss as a gain. A gain still more generously repaid once his destiny makes that surprise swerve to America" (Boyd, 1990 p.xiv)^[6] This view echoes that with Taoism as detachedness to let things be.

3. ON DEATH

Zhuangzi and Laozi put forward the idea of "life praxis" to counter the Confucian idea of "moral praxis". "Laozi conceives the cosmic process as

constituted of, first, the process of giving birth to all things, by the Dao and, then, the process of all things returning to the Dao (Cua, 1980 p357). Life and death are seen as indispensable processes to “the realization of Dao in the body...on the one hand, to live is to take the form of a living body...to die is the effect of dispersion of cosmic energy”(ditto). therefore, death to the Taoists is not the destination, instead, it is a part of the circular process to gain the ultimate Dao. This procedural understanding of death corresponds with that of Nabokov’s. “Everything will return in the way that in a certain time the hands of the clock come together again”(Nabokov, 1970 p72-73)^[7]. Thus,, life and death forms part of a spiral that “ceases to be vicious, it has been set free”(Nabokov, 1999 p145).

This view is detailed expostulated *Pale Fire* where John Shade states that “life is a great surprise. I do not see why death should not be an even greater one” (Nabokov 1990 p.256)^[8]. *Speak Memory* begins with a discussion on life, prenatal and postnatal existence. “cradle rocks above an abyss, and common sense tells us that our existence is but a brief crack of light between the two eternities of darkness” (Nabokov, 1999 p9). Contrary to the common sense he so detests, Nabokov states he is equally eager to know his pre and after lives (Bowers, 1980 p4). An almost identical view is found in Zhuangzi. “The great clod burns me with the form of body, pummels me with tiresome life, eases me in old ages, and rests me in death. So it makes my life good, it must for the same reason make my death good”(Zhuangzi, 2007 p89)^[9]. Death to Nabokov and Daoists are not the end, but a means for the beyond, and a joyful process.

4. ON INDIVIDUALITY AND PERSONAL FREEDOM

Individualism is an “ethical ideology where moral values are derived not from the rights of a collective good but from a respect and concern for the rights of every single individual--so long as that individual's aims do not encroach on the rights of the individuals around him”(Toker, 1999 p92)^[10]. Nabokov’s proclaimed repulsion against collectivism is a gesture to protect his own identity. Taoism explains this matter from another angle. The acknowledgment of individuality’s importance is based upon the precondition that people reckon it necessary to preserve it, and Daoism provides a reason for doing so. Unlike other major Chinese philosophical schools, it recognizes and stresses individuals’ importance. It views each person as an individual born with different talents, characters and temperaments. “The principle of nature dictates that everyone is endowed with a particular 'share' of vital energy, the creative power of Dao that determines one's physical, intellectual, and moral capacity”(Cua, 2003, p217). Taoism goes further to say that discrepancies are not grounds for discriminations and prejudices. In his commentary to *Zhuangzi*, the well-known Taoist

scholar Guo Xiang encourages people to cultivate one's natural endowments and in doing so, fulfill his destiny (Cua, 2003, p219).

It is precisely out of the intension to preserve one's individuality that renders Nabokov so aversive to “collective behaviors”. In *Speak Memory*, he describes “the constant pressure upon me to belong to some group or other never broke my resistance but led to a state of tension that was hardly alleviated by everybody harping upon the example set by my father”(Nabokov, 1999 p144). The negative influence of organized groups on individuality is always the material for parody in Nabokovian fictions. In *Lolita*, to taunt Charlotte's mediocrity, Humbert remarks: “she was, obviously, one of those women whose polished words may reflect a book club or bridge club, or any other deadly conventionality, but never her soul”(Lolita, 1996 p23). However, the tragedies encountered by his protagonists are all due to radical individualism, or, in other words, ego-centralism. Toker (1999 p92) categorizes Nabokov's characters into two groups, those who respect the rights of others to an independent identity (Martin Edelweiss, Fodor Godunov-cherdynstev, Timofey pnin, John Shade); and those who either solipsistically ignore that right (Ganin, Dryer) or actively violates it (Hermann, Humbert, Kinbote). And she discovers that the former are always in a defense position fighting off the encroachment of identity. The solipsists and violators are doomed from the beginning, and the defenders of individuality often face the domination from organized groups.

Laozi shares Nabokov’s antagonism towards all forms of domination, which, in his opinions, leads to people's loss of deep sense of the link between all men with the Dao, and they immobilize the spontaneous virtue of each individual. Thus, the Confucian ren, yi, li were merely alienated forms of spontaneous human virtue and it's ontological origin, the Dao” (Cua, 2003 p208). Chen summarizes Taoist ideas on personal freedom as follows: “1. Freedom from domination of any kind; 2, Freedom from the inhibition of all sorts of social mores and organizations; 3, freedom from all extra desires;4, freedom from all prejudices and quarrels of right and wrong”(2012, p44)^[11]. Domination of any organized groups disturbs individual's cultivation of his natural endowment, a process needed for the attainment of Dao. For Daoists, dominations impedes the search for Dao, whereas for Nabokov, it is a threat to the artist’s creative integrity and a doomed way to live as exemplified in his ultra-self-centered protagonists. And these two opinions are in essence the same.

5.CONCLUSION

Via comparing and contrasting the philosophical views presented in Nabokov’s works, this essay has managed to prove the existence of common ground in Nabokov’s philosophies and that of the Daoist. They both acknowledge fate as the puppet-master behind

people's lives, view death as a circular process to something higher and agree that individuality in its best form and shape, deserves to be preserved and protected. Nonetheless, limited by the scope of this research, more in-depth and detailed analysis could be carried out and hopefully this paper could serve as a stepping stone for more comprehensive studying the future.

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Research on Application of English Translation of Ancient Chinese Classics in the Teaching of Translation Course

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Abstract: Ancient Chinese classics are well-known internationally and are often translated into different languages. The development of modern languages and English translation have gradually become important, and it has practical significance for the English translation of ancient Chinese classics. This course is also set in modern university. The results of English translation will be different because of translator's own cultural differences and understanding. When translating ancient Chinese classics into English, certain limitations will inevitably appear, and differences will be caused during the communication process. The author elaborates on problems of English translation of ancient Chinese classics in the teaching of translation courses, and explored solutions to solve the problem.

Keywords: Ancient Chinese classics; Translation courses; English translation; Teaching; Application research

1. INTRODUCTION

The main tasks for English translation of ancient Chinese classics are to study and understand foreign languages and to introduce excellent ancient Chinese classics in a more cosmopolitan language, so that Chinese culture can go into the world. If foreigners are invited to engage in translation of classics, there will be limitations due to the large difference between English translation and the content of works. Therefore, it is realistic and significant to encourage Chinese to translate ancient classics into English. The author combines with his own experience and the situation of the brother school, comprehensively analyzes and sorts out the following problems and proposes solutions to solve the problems^[1].

2. PROBLEMS IN ENGLISH TRANSLATION OF ANCIENT CHINESE CLASSICS IN THE TEACHING OF TRANSLATION COURSES

2.1 Lack of guidance for translation teaching theory

Comparatively speaking, English translation of ancient Chinese classics is relatively new, and the corresponding master's degree in translation is also relatively new. Most colleges and universities are cautious in setting up the major of English translation of ancient Chinese classics, because it is a major combining the understanding of ancient Chinese classics with English culture, knowledge and language, and it is relatively difficult to teach.

Throughout the current situation, the teaching experience of this course is relatively small, and it lacks the guidance for translation teaching theory, and all schools and teachers are still in the state of Happy Valley Enclosure. Ancient books and records have certain difficulties. In addition to the requirements of English translation, the teaching is more difficult, and the knowledge involved is relatively deep. Ordinary teachers are also difficult to successfully complete the teaching task when they lack the guidance of teaching theory^[2].

2.2 Ignorance of the cultivation of students' comprehensive quality

When students are engaged in translation activities in the future, they need to have more subjective conditions such as physiology, psychology and language. The framework of knowledge presentation and knowledge expression is the prerequisite and foundation for students to become excellent translators. Translator's quality includes innate quality and acquired quality, which are both subjective and static knowledge. Of course, students with excellent innate quality are more gifted in learning, and have advantages in pronunciation, intonation, body and mind, etc., but teachers should pay more attention to other students in classroom teaching and cultivate their comprehensive quality. The acquired quality is the understanding of ancient Chinese classics, English culture and language, as well as the quality when facing translation pressure. All these need to be cultivated in the classroom. But in the modern teaching classroom, many teachers neglect the cultivation of quality and pay more attention to the teaching of knowledge^[3].

2.3 Poor basis of translation theory learning

In teaching activities, some teachers will ignore the importance of theoretical learning. Theoretical literacy also plays an important role in the translation ability. It is vital for students' translation in the future. It can help students master specific translation ability and general translation ability, and help students gradually improve themselves and translation ability in the future. Therefore, we should pay attention to the poor theoretical basis of students' translation in college translation teaching^[4].

3. APPLICATION OF ENGLISH TRANSLATION OF ANCIENT CHINESE CLASSICS IN THE TEACHING OF TRANSLATION COURSES

First of all, we should take the dual learning of Chinese and English as the norm, and put forward dynamic system theory for the lack of teaching theory. In the teaching of college translation course, we should aim to cultivate students' ability to master the connotation of ancient Chinese classics and English culture, and strengthen their familiarity with traditional culture and classics. We should also cultivate students' ability to master translation theory and transform it into practice. In addition, it needs to cultivate students' ability of cross-cultural communication and multi-cultural perspective, and cultivate students' language ability and basic translation skills. Butterfly effect will be also formed in the process of translation, so we should track students' translation ability in the process of translation, record and analyze each development track in detail, coordinate students' individual and common problems, especially strengthen students' self-study ability. And we can propose solutions to solve personalized problems according to students' situation^[5].

In addition, we need to learn from others and improve the theoretical basis of teaching. Although the translation of ancient Chinese classics started late, there are many successful cases and relatively advanced teaching theories abroad, which can be studied in-depth from the international perspective combined with the actual situation of translation courses in China, and gradually be accumulated into the theoretical content of translation teaching in China^[6].

What's more, it is necessary to evaluate and test students' translation ability and put forward some suggestions. According to the translation works submitted by students, a small English translation corpus of ancient Chinese classics is set up. In this corpus, the retrieval software is analyzed, and the statistical data is studied to get common problems of students. At the same time, with the help of questionnaire, we can find out subjective reasons from the commonly used translation mistakes of students and guide them to think and avoid them. The accuracy of the data can be improved by combining SPSS software properly, which makes the data more convincing^[7-8].

The teaching is completed by means of report and group discussion from the perspective of cultural introduction. Cultural introduction can well explain the relationship among literature, history and philosophy. It has practical significance for students to better understand ancient Chinese classics, and it is effective to enhance students' ability of understanding ancient Chinese classics by cultural introduction. And then we can encourage students to explore actively and stimulate students to study and try English translation from the perspective of report or group discussion. Computer-aided software can help students to recognize their basic mistakes. Teachers

should combine with the practice to encourage students to solve their problems as soon as possible and improve the quality of teaching.

4.CONCLUSION

English translation of ancient Chinese classics is a difficult process. In the teaching of translation course, teachers can try to unify three aspects of literature, history and philosophy, and encourage students to carry out independent learning from reports, seminars and other forms. They can choose scientific statistical software to make statistics on problems of students, and put forward solutions to the common and individual problems. In addition, teachers should also attach importance to the cultivation of students' comprehensive quality to enable students to have the foundation to become excellent translators and cultivate more talents for Chinese translation industry.

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A Cultural Interpretation on the Images of Women in the Bible

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Abstract: The Bible is the best seller in the world, which has taken up an irreplaceable position in literature and history. In the Holy Bible, the male description stands out. However, there are only 5% of all the figures narrated related to females. Though women images are much less than men's, they have still exerted a significant impact on the English literature and the social customs. Women images in the Book are classified into two kinds—one is virtuous like Ruth, Mary and Esther, and the other is evil like Eve and Delilah. This paper makes an analysis of these two types of women images with the examples from a cultural perspective. Furthermore, it also points out the awakening of feminine awareness, drawing the readers and researchers attention to reinterpret female's historical position and value from female perspectives so as to reestablish reasonable views on women.

Key words : Bible; women images; value;

1. INTRODUCTION

1.1 Brief Introduction to the Bible

The Bible is a collection of texts which are regarded as a holy production by Jewish people and Christians. Most of the writers are believed to be Jews, among whom their educational level, social status and vocations varied. From 1500 BC to 96 AD, during 1600 years, those writers are said to be inspired by God. Then, according to the revelation they have got from the heaven, they sat out to record it by hands. Until now, the Holy Bible still maintains its irresistible charming, which is not only a religious book, but also a mixture of history, culture, politics as well as economy. The Bible is the headstream of the Western culture, and it deserves the name Encyclopedia due to its largest circulation, the longest issue time and also the most translated versions. For many Christians the Bible is also infallible, and is incapable of errors in matters of faith and practice, but not necessarily in historic or scientific matters^[1].

1.2. Introduction to the Images of Women in the Bible

In the Bible, there are more than 3000 male images while only 120 females are included. Many scholars pay attention to the description of men, and accordingly put aside the analysis of women images. Nevertheless, women play an important role in the Bible and the real world. It is well illustrated in the Bible that there are two types of women—virtuous one and evil one, which aptly reflect the

contradictory images of women. As the time goes by, those images have been regarded typical and often referred to by different writers. For example, Delilah is seen as a contemptible woman who leads to the death of Samson. In masterpieces created by Chaucer, Shakespeare, Spence and Milton also make Delilah an evil image.

2. IMAGE ANALYSIS OF WOMEN IN THE BIBLE

2.1. Women of Goodness in the Bible

Unlike other parts of the holy book, Ruth is named after a woman. It tells a story about a Moabite woman named Ruth who decided to stay and accompanied her mother-in-law after her husband, brother-in-law and her father-in-law died. Without any complaint, she made a living together with her mother-in-law by picking up grains behind the harvesters. After a while, her filial piety and beauty came to spread even to a faraway place. Hearing the story about Ruth, her close relative Boaz would like to marry her. With the help of Boaz, Ruth got the property belonging to her home back. Finally, Ruth got together with Boaz and gave birth to a few children.

This text narrates a story that puts a woman at the discourse center, while men are placed on the margin^[2]. At the beginning of this part, it just tells us the name of Naomi's husband and sons, and the relationship between those men and the other women. Directly, the text points out the news that men died one by one. It is obvious to see that men are reduced to absence. The few words about them are used to serve as a foil to the greatness of women. Undoubtedly, it is a kind of overturn under the text of patriarchal power. When mother-in-law Naomi persuaded Ruth into going back to her own home, Ruth uttered the following words: "*Where you go I will go, and where you stay I will stay. Your people will be my people and your God my God. Where you die I will die, and there I will be buried. May the LORD deal with me, be it ever so severely, if anything but death separates you and me.*"^[3] The kindness and great independence have been a leading light and a living pillar for Ruth. When facing with difficulty and death, she was not fearful and never withdrew. Even in the modern society, the internal beauty still plays an important role in judging how a person is.

2.2. Women of Evil in the Bible

In the Judges of the Old Testament, there is a powerful man called Samson. To him, killing a tiger is as easy as killing a goat. He fell in love with a

Philistine woman in the Valley of Sorek--Delilah. Meanwhile, five leaders of Philistines asked Delilah to get the secret why Samson was so mighty, and agreed to pay her a large amount of money when she made it. Unexpectedly, Delilah agreed and made the deal. After several times of attempts, Samson could not help but speak out the secret, "If my head were shaved, my strength would leave me, and I would become as weak as any man." After hearing it, Delilah came to the Philistine leader and uttered the secret out. When Samson was sleeping on the leg of Delilah, Philistines shaved his hair. Though he tried to use his power, he had become weak because God left him already. Finally, Philistines caught him, dug his eyes out, and put him into the prison. Many people think that it was Delilah who caused the tragedy. Though there is no detailed description about Delilah's identification, her name seems to give us some clues. Her name means feeble and growing weaker. Based on this, the readers can clearly know that Delilah stands for the image that set obstruction on the career of men, and reminds men not to be deceived by women.

2.3 Connotation of Women in the Bible

In the world where men stand at the center, women are always put on the margin, treated as a low-down the Other. The noted feminist scholar Simone de Beauvoir from France has ever said that women are not innate but made later. It is the convention or social need that makes women^[4]. Such idea can be traced back as early as the creation of the Bible. In the holy book, it says that Eve is made out of one of Adam's ribs, which forms an opinion that women are attached to men. However, Eve became a sinner who betrayed God later, so she was regarded as a woman of loose moral. Since then, Eve and even women at large were seen as the initiator of evil.

Undoubtedly, the Bible has exerted a great impact on the history, the society, customs as well as the culture. When it comes to women, their names are often used or cited in literature. For example, Eve and Delilah symbolize evil, temptation misery and death, while Ruth and Esther become the representatives of goodness. The women images and the connotation analyzed in detail give readers a good reference for reading an English book about women.

3. FEMINIST AWARENESS AND THE REESTABLISHMENT OF FEMININE VALUE

3.1 Feminist Awareness

The creed of the holy book points out at the beginning that men and women are equal. Christianity holds the opinion that like men, women are also created according to God's appearance. Though they are assigned different duties, they enjoy the same dignity.

In the Proverbs, there is a chapter narrating the wife of noble character, among which a few words speak high of a woman--"*A wife of noble character who can find? She is worth far more than rubies.*"^[3]

Women can not only do housework, but also can do others a favor as it goes, "*She opens her arms to the poor and extends her hands to the needy.*" Besides, the women of kindness like Esther and Deborah give a presentation to the value of female, indicating that women can also do men's work. What is more, in the Gospels, Jesus's attitude to the women can better prove that Christianity advocates that men and women are totally equal.

3.2. Reestablishment of Feminine Value

In the patriarchal context, men misinterpreted the Bible and consequently made the women inferior to men. However, with the awakening of feminist awareness, women themselves come to reinterpret the holy book, which facilitates to reestablish the feminine value.

In Genesis, there are plenty of words describing how God created men and women--"*When God created man, he made him in the likeness of God. He created them male and female and blessed them.*" Therefore, many people, especially some feminists suppose that God is hermaphrodite. Eve is said to be one of Adam's rib while Adam is just made of dirt and a breath. As to the making material, women are more solid and creative. To the wording, God created the helper Eve means that Eve is regarded as a savior. Though she ever lured Adam to eat the forbidden fruit, she just did it out of good intention because she knew that after eating the fruit, she and Adam would be able to make a judgment. Therefore, it is not a story about woman's sin, but an inspiration of intelligence pursuing. Similarly, the other scriptures can also be reinterpreted the same way so as to reestablish the feminine value.

The Conclusion

The Bible is such a classic book that generations by generations have been influenced. Traditionally, women in the Bible are divided into two main types--the evil and the good based on the outdated value. With the awakening of feminist awareness, women begin to reinterpret the scripture, and come to realize that they are not the attachment of anyone. Nowadays, more and more women are sparing no efforts to live independently by pursuing their own career. Besides, it has become a consensus that both the wives and husbands are bound to share the housework and take care of their babies. Therefore, it is fair to say that if the holy book can be interpreted in a brand new way, women's social position can get a huge leap. However, there is much less study about women in the Bible than men. The whole society requires to notice the issue and try to reinterpret the Book so as to reestablish the feminine value.

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Pastoral Complex, A Passage to Connection?

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Abstract: It is generally agreed Forster's works are permeated with an unintelligible vagueness. Critics have suggested various distinctive interpretations, but few, seem quite convincing and concordant with being. This paper will first analyze some symbols in *Howards End* and *A Passage to India*, two of his representative works, and then confirm that the symbols reflect the writer's deeply-rooted pastoral complex and eventually conclude that his inclination to traditions and cultural heritage not only has negative effects on his prevalent motif of connection between cultural enforcement and material gains, but causes the vagueness in his works.

Key words: symbol; pastoral complex; connection; negative effects

Edward Morgan Forster, who has been devoting his lifetime to the mutual understanding and human completeness, offers the ideal of "only connect" as a solution to "the undeveloped heart" of the average Englishman, a way of culture as a counterpoise to a life of "telegrams and anger" outside and "panic and emptiness" inside^[1]. Does he succeed in this endeavor? There is a point that his works often appear difficult to understand and there exists a considerable vagueness in his stories.

To answer this question, this paper intends to analyze a number of symbols in *Howards End* and *A Passage to India*, two of Forster's representative works, which are the embodiments for traditions and cultural heritage used by Forster to develop "the undeveloped heart," and confirm just these cultural signs which are designed to contribute to the motif of the novels have negative effects on his motif and cause the vagueness of his works.

Howards End is the most famous of the four early novels of Forster. In the novel, the author mainly portrays two typical families of Britain at the intersection of two centuries, the Wilcoxes and the Schlegels. The Wilcoxes represent the upper class in England with their affected genteelness and hypocritical "good taste" while the Schlegels stand for petit-bourgeois intellectuals of part-foreign origin with their freer conduct and more sympathetic inclinations and broader artistic and cultural interests^[2]. In the novel the author attempts to relieve Henry, father of the Wilcoxes, from material desire by his marriage to Margaret, so that he could be rich in both substance and spirit. Thus, the theme of the novel, as is related by Margaret, is "only connect," i.e., the connection of the material creation and spiritual completeness.

As all of the artistic forms serve the topic, the setting in which most of the story happens contributes, without exception, to interpreting the motif. Concerning the setting in *Howards End*, it is entirely pastoral. It is a typical British farmhouse surrounded by meadow, garden, and fields. Such a house, as is believed, must be quite familiar to British readers and will certainly recall their memory to the unforgettable past.

How could this pastoral scene have survived the wave of industrialization? It attributes to two ladies, according to the author's intentions. One is Ruth, Henry's former wife. She is not only traditional, but also graceful and mild. In the novel, the author conveys his appreciation of nature and pastoral life through the wording and phrasing in depicting Mrs. Wilcox's sensibility, while there are fewer words for Mr. Wilcox and sons. They are sketched as indifferent and irritable. Unconsciously, the narrator shows his partiality for Mrs. Wilcox who is regarded as a patron saint of English traditional life style. This will surely increase the difficulty of the connection.

The other lady is Margaret, who is versed in literature, art and philosophy. This bestows her a good understanding of culture and rich imagination. She despises the Wilcoxes for their emptiness and arrogance. Although Ruth and Margaret are different superficially, their worship and comprehension of spiritual life draws them together and brings them sincere friendship. That is why Ruth chooses Margaret to be the spiritual heir of *Howards End*.

Different from Ruth, Margaret seeks for the "true" harmony of the *Howards End*. After a further contact with the Wilcoxes, she discovers that they are providers of the society. What they lack, according to her, is the enforcement of cultural heritage and traditions. She thus hopes the harmony will come into being. She tries to help Henry as he becomes her husband. Obviously this marriage is the embodiment of the combination of spirit and material. It is supposed to draw each other's merits for common progress. This is a good symbol of connection. The *Howards End*, a central symbol of this novel, is an embodiment of British traditional culture.

This novel is not very successful in creating the psychic and social harmony. Throughout the novel, the author condemns the idea of material supremacy, and advocates a natural life style. The final arrangement for the *Howards End* symbolically reveals that with the development of science and

technology, humankind is more and more estranged to the natural world.

While *Howards End* is a typical example that mirrors the writer's attitude towards pastoral tradition in the early years of his writing career, greatly influencing the clarity of the motif, *A Passage to India* should be the novel representing his feelings in the latter period. It is his last novel and acknowledged masterpiece. During the years, he has been to many countries, especially, India and Egypt. The scenes that are permeated with natural broadness and ancient culture arouse his respect and his feeling that human beings are nothing before nature. Besides, the visits also expand his view on human relationship. This understanding is deepened when he begins to write *A Passage to India*.

Essentially, the novel explores the difficulties with which men try to understand each other and the universe. To a certain extent, Forster still seeks a kind of connection, but it is much broader than that in *Howards End*. It mainly probes the understanding between the Indian and the English. In the novel, Forster thinks that Britain's injustice rule in India is due to the incommunicable officials with undeveloped heart. They are callous and arrogant. There is no hope to make them do any connection with the Indians. In order to channel the connection between these peoples, he arranges a character named Cyril Fielding, principal of the government college, to be a bridge of the Anglo-India relationship. When any problem arises, Fielding always to the writer's rescue.

Here, he is also a mouthpiece of the author, like Margaret in *Howards End*, and is active in communicating with the Indians and wins the respect from them. But, because of his treating Indians on the same footing, he is looked on as an "other" in the British circle. Yet, in spite of his identities, there is strong sense of "English" nature in Fielding. Fielding, as his name suggests, belongs to England's green and pleasant land. As a foreigner, he has a strong feeling to his own country which in his mind is a place of the "enlightened Englishman's tradition," and an England of which Wordsworth is the inventor. The inauguration of the "spot of time" marks the connection of time and space^[3]. What's more, on Fielding's way back, he finds in the natural and monumental Alexandria, in Greece and in Italy, the sources of his civilization's tradition of beauty of form, identified as foreign to India and Indians. In celebrating "the harmony between the works of man and the earth that upholds them, the civilization that has escaped muddle, acts as the spirit in reasonable form with flesh and flesh and blood subsisting." Here, the narrator indicates with highly self-conscious rhetoric that for an Englishman of Fielding's--and the narrator's--class, who has been well educated,

there is no choice as to the places that he will have imaginative access to, and will value. The suggestion is that the knowledge of and the way of seeing the "native place" are the forces which generate these patterns of understanding and valuing.

By contrast, Aziz sees India as shaped by "architecture of Question and Answer," but this perception is intermittent and--characteristic of the novel's construction of the "Oriental"--it lacks conviction.

The opening participle shows the reluctance and inevitability of this movement in its form and meaning respectively. The reluctance to admit failure is held in the opposition between the rejection inherent in "turning his back" and the sense of possibilities of "yet again."

In the novel, response to "the lakes" is also used as a symbol of the capacity to "connect." It is a point of connection for Mrs. Moore and Adela on the trip to the Marabar; their exchange shows vividly the English person's ways of seeing.

In this story, Englishness shadows not only on the Englishman like Fielding but also the Indians like Doctor Aziz. He plays an important role in the Anglo-Indian relationship. However, it is Aziz's "Englishness," his conformity to the ways in which the English liberal middle classes behave which make him accessible and attractive to Mrs. Moore and Adela, just as it is their determination to be guided by 'liking' which makes them assimilable into 'oriental' types by him. This aspect of Aziz is well depicted when he and Mrs. Moore encounter in the mosque. The narrator describes part of the mosque as creating the "effect...of an English parish church whose side has been taken out." At this moment the narrator may be speaking from Aziz's point of view, but the syntax and choice of words suggest that the narrator is fixing him, describing him, and calling on the English architectural vernacular to do so. This deprives Aziz from expressing his own opinion. The separation of perception is inevitable and brings with it a failure of sympathy.

The "connect" experiences a long way: the encounter of Mrs. Moore and Aziz in the mosque is a good beginning; the accident in the caves cut the connection. The last part is also the last chance for it. A ceremony is held in hoping that gods will spread to the world. Then, Fielding also returns to India seeking the rebuilding of his friendship with the India people, especially with Aziz. A heavy rain baptizes the world and the soles of the people. It not only brings back a bright and fresh world but a forgiving personal relationship as well. This is a good signal of connection. However, the renewed friendship has to be cut again with Fielding's leaving. During their last free intercourse, the author lets nature decide the future of this

friendship.

From *Howards End* to *A Passage to India*, we find Forster emerging from the domestic dramas of his earlier years and rising to the height of social criticism. Forster intends to achieve the connection by using a series of symbols such as: the *Howards End*, the hay fever, the marriage, Fielding, Grasmere, and the ceremony, but it turns out that his well-designed symbols have worked to no avail but wrecked his prevalent motifs and caused the vagueness, which is quite contrary to his original

intentions, we believe.

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Challenges Faced by German Majors in Higher Vocational Colleges in the Background of Artificial Intelligence--Take German major in Shenzhen Polytechnic as an example

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Abstract: Artificial intelligence is not only an innovation in the field of technology, but also an impetus to the development of human society. It has a far-reaching impact on all aspects of society, showing an irresistible trend. This article mainly discusses the challenges and opportunities faced by the German majors in higher vocational colleges when artificial intelligence is highly developed.

Key Words: Artificial intelligence, Higher vocational education, German Major

1. INTRODUCTION

In December 2017, the word “Artificial Intelligence” became one of the top ten catchwords in Chinese media in 2017. Artificial intelligence, abbreviated as AI in English, is a branch of computer science. Since its birth in 1956, its theory and technology have become increasingly mature, its application field has been expanding, and its influence on all walks of life has been increasing. In his article *How to Build a World-class Vocational College in the Context of Artificial Intelligence*, Chen Qiuming pointed out that “at present, a new round of world scientific and technological revolution and industrial transformation represented by artificial intelligence are exerting inestimable effects and influences on human society, which will overturn the existing forms, division of labor and organizational methods of many industries, realize accommodation among many fields, and reconstruct people’s way of living, learning and thinking, and even changing the relationship between people and the world.”^[1] Unconsciously, artificial intelligence has exerted an impact on all fields of human society, production and life, and put forward challenges to all walks of life, including the education industry. There are both challenges and opportunities. The application of new artificial intelligence technology brings new opportunities for education reform, and puts forward new requirements for the professional transformation and reform of higher vocational colleges^[1].

2. THE INFLUENCE OF ARTIFICIAL INTELLIGENCE DEVELOPMENT ON HIGHER VOCATIONAL EDUCATION

In 2018, the Ministry of Education issued the notice of *The Action Plan of Artificial Intelligence Innovation in Colleges and Universities*, requiring colleges and universities to implement it seriously. Undoubtedly, this is an opportunity for the development of higher education in the new era^[2].

The development of artificial intelligence has positive significance for higher vocational education: accelerating the innovation and application of artificial intelligence in the field of education, using intelligent technology to support the innovation of talent training mode, to reform teaching methods, to promote education governance ability, in order to build an intelligent, networked, personalized and lifelong education system to promote the balanced development of education, to promote education equity and to improve education. These are important means of quality and indispensable driving force and support for the realization of educational modernization^[3].

The Ministry of education put forward new requirements for higher vocational education in *The Action Plan of Artificial Intelligence Innovation in Colleges and Universities*: facing the opportunity of the development of the new generation of artificial intelligence, colleges and universities should further strengthen the advantages in basic research, discipline development and talent training, further strengthen the application of basic research and common key technology breakthroughs, and constantly promote the deep integration of artificial intelligence and physical economy cooperation and cultivate new driving forces for economic development. What is more, colleges and universities should continuously promote the deep integration of artificial intelligence and people’s needs, provide new ways for improving people’s livelihood, continuously promote the deep integration of artificial intelligence and education, and provide new ways for educational reform, so as to lead the scientific and technological innovation, talent training and technological application demonstration in the field of artificial intelligence in China, and to promote the overall strength of artificial intelligence in China.

3. THE INFLUENCE OF AI DEVELOPMENT ON GERMAN MAJOR FOR HIGHER VOCATIONAL EDUCATION

3.1 The current situation of German major in higher vocational colleges (taking Shenzhen Polytechnic as an example)

Since the enrollment of German major students in Business Foreign Language College of Shenzhen Polytechnic in 2000, it developed from International Business Five-year Junior German Major (the junior high graduates study in Shenzhen Polytechnic for 5 years) to the present Applicable German Major; At the beginning, there were only two teachers, but now there are five teachers. The students enrollment number has increased and faculty strength have been

further enhanced. Every year, the graduates from our collegewere favored by the market and the demand exceeds the supply.

It can be seen from *The Evaluation Data List of the Dynamic Adjustment Method for the Enrollment Plan of Shenzhen Polytechnic* in 2018 that the German major ranks top among the 80 majors in the college. In 2016, German major was also rated as a green brand major because it ranked in the top three in the school. The data of employment relevance also shows that the employment relevance of graduates of this major is high, and their unique language skill is their most prominent advantage for their employment(as in Table 1).

Table 1 List of Evaluation Data of Dynamic Adjustment Method of Professional Enrollment Plan of Shenzhen Polytechnic (part)

Name of Major	First choice admission rate in 2018 (%)	Employment competitiveness in class 2017(%)	Job Relevance for class 2017(%)	Comprehensive	Rank
Design and production of visual communication	100	82.3	70	86.92	1
.....					
Applicable German	66.7	78.8	87	75.6	13
.....					

*Data Source: Shenzhen Polytechnic Enrollment Management Department data statistics

There are also problems in regard of the current situation of German major. The goal of talent cultivation only highlights the ability of “language plus business”, but it has not fully kept up with the requirements of the times for talents. The teaching content is rigidly confined to textbooks and the teaching objectives are not clear enough; the teaching methods are not flexible enough and students learning is still passive; the teaching evaluation is still traditional and does not have an incentive effect on students; the structure of the teaching team is relatively single, teachers with only a language background are clearly not up to the task of professional transformation.

3.2 Challenges and Opportunities Brought by Artificial Intelligence

In recent years, intelligent voice technology has developed rapidly, and a number of intelligent speech enterprises, represented by IFLYTEK and Google intelligent translation systems, have continuously introduced intelligent speech translation systems. Artificial intelligence translation involves an increasing number of languages, at present Tencent intelligent translation can support 15 languages translation. At the same time, the accuracy of translation is also getting higher and higher. The Chinese-English translation engine has reached

the leading level in some fields such as news, studying, science and technology, and the acceptability of translation is over 93%. Although at the current development level, artificial intelligent translation systems can not completely replace the status of traditional human translation. But machine translation has indeed made technological changes, it also influences the development of traditional manual translation to a certain extent. It is not difficult to predict that in the near future machine translation will certainly have a place in all walks of life. So, with machine translation, is there room for human translation? Do students still have to devote a lot of time and energy to learning what the great American literary Mark Twain called “The terrible German” ?

Research shows that jobs that are mechanical, repetitive, and don't require creativity are most likely to be replaced by machines, while jobs that require emotional communication and constant innovation can not be replaced. Although the language capacity of artificial intelligence translation is huge, it is not yet able to accurately identify the speaker's feelings implied by the tone of voice. The German-speaking business talents with good communication, negotiation and innovation ability will not be replaced by artificial intelligence machines. We should not be afraid of AI, instead, we need to embrace it with our open arms. As creative human beings, we should be good at using artificial

intelligence technology to solve the difficult problems in our life and work.

Artificial intelligence is our good assistance, the role of artificial intelligence in the field of education is that students can better participate in teaching mainly through robots, computers, networks and teaching software. The robot can monitor the students' learning status, learning state and learning effect, and help the teachers to teach more effectively. The teaching robot can provide the suitable learning resources for the students. Although the application of robot is not universal at present, we can use some mature teaching platforms to monitor, statistic and analyze the students' learning, so as to make scientific and reasonable countermeasures. Intelligent tutoring is not to replace teachers, but to explore how to link teachers, students and technology together, so as to improve the efficiency of teaching and learning. In the time of artificial intelligence, "With the pace of technological iterations accelerates, graduates from higher vocational colleges will not only have to master a high-tech skill, but also the ability to expand their careers will become increasingly important." Combine vocational education with future career trends in professional development together to strengthen the education of innovation and entrepreneurship, we should focus on cultivating

students' practical ability and innovation ability, not only to cultivate students' relevant skills, but also to expand their horizons and improve their comprehensive ability. If we want to do so, we should change the traditional teaching idea and reform the teaching content, teaching form, teaching evaluation and so on.

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Research on Impact of Collaborative Innovation in Technology on Performance Management of Enterprise from the Perspective of Demand

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Abstract: Technological innovation for enterprise has been supported by national policies in recent years, which is developing in full swing. Different from the previous high input and high-risk innovation pressure, such policies as direct subsidies and tax incentives have vigorously promoted enterprise innovation and laid a solid foundation for innovation driven development. The above preferential policies belong to the supply side of technological innovation for enterprises. This article analyzes the impact of technological innovation on performance management of enterprise from the perspective of government procurement, and verifies the incentive effect of technological innovation on enterprise performance.

Keywords: Perspective of demand; Technological innovation; Performance management of enterprise; Impact analysis

The successful implementation of *the Outline of National Medium and Long-term Plan for Scientific and Technical Development (2006-2020)* ^[1] has enabled enterprises to receive technological support and incentives for technological innovation, which is a driving force for innovation and shines on the road of enterprise development. There are many reports on the impact of this policy on technological innovation of enterprise, but it is analyzed from the perspective of supply-side policies, but the demand will also play a role in promoting technological innovation of enterprise, and technological innovation will directly affect performance management of enterprises.

1. TECHNOLOGICAL INNOVATION OF ENTERPRISE FROM THE PERSPECTIVE OF DEMAND

Innovation is a vocabulary of the times. From the long history, we can find that the impact of technological change on social economy and the development of the times is deepening. For enterprises, society, and even the entire country, doing innovation is an important means to achieve sustainable development goals. From the demand side of government procurement, it is extremely important to promote technological innovation of enterprises. Research on technological innovation of enterprises is still in the stage of theoretical analysis

from the perspective of domestic demand, including innovation policy allocation and enlightenment from developed countries. There are few actual relevant analysis cases ^[2]. Liu Fengchao used score matching method to analyze technological innovation of enterprises from the perspective of demand, and studied the data method. Government procurement can greatly reduce the investment of enterprises in technological innovation and ease restrictions of funds on technological innovation of enterprises. The technological innovation of enterprises is based on the synergy theory proposed by foreign scholars, which is often used to indicate that the overall benefit of the system is greater than the comprehensive effect of components in various regions.

2. INFLUENCE OF TECHNOLOGICAL INNOVATION ON PERFORMANCE MANAGEMENT OF ENTERPRISE

2.1 Impact of technological innovation on performance management of enterprise

As early as the 1980s, American enterprises had carried out the research on the impact of technological innovation on performance management of enterprise, and comprehensively analyzed the investment of technological innovation and analysis of enterprise profitability and growth ability. The final research data shows that technological innovation can positively enhance enterprise profits and promote the growth rate of enterprise profits. Then in the 1990s, foreign scholars collected data of 244 enterprises from Japan and the United States, including the provision of new products, the growth of enterprise sales, etc., and used regression analysis to study the relationship between them. The final analysis results also show that updating old products and providing new products would increase the annual sales of enterprises ^[3]. The main reason for this kind of situation is that technological innovation of enterprise makes the old products replaced. And the short-term renewal widens the sales path, which is conducive to mobilizing the market competitiveness of the products and greatly improves the performance of enterprise. In 2005, domestic scholars chose Chinese high-tech enterprises as the research object. Through data collection, we found that technological

innovation will also affect the annual sales of high-tech enterprises, but this impact has a certain lag. In the following ten years, domestic scholars carried out research on the impact of technological innovation on performance management of enterprise. According to the comprehensive research data, under the domestic environment, technological innovation of enterprise has an impact on performance management of enterprise, but there is a certain degree of property heterogeneity between state-owned enterprises and private enterprises. State-owned enterprises carry out technological innovation with lower investment in research, while private enterprises obtain higher economic benefits in technological innovation. It is worth noting that, under the influence of research methods and samples, some scholars' research results show that technological innovation has a negative impact on performance management of enterprise, and the correctness of this result needs to be examined.

2.2 Impact of technological innovation on productivity of enterprise

In the 1980s, foreign scholars began to use the function simulation method to analyze the impact of technological innovation on productivity of enterprise. The final research data showed that technological innovation can improve productivity of enterprise. The actual impact of federal government's independent research expenditure on the productivity of enterprise is relatively small, but there are significant differences in the productivity of enterprise ($P < 0.05$)^[4]. In 2010, foreign scholars collected basic information of 136 companies in Taiwan, including the status of technological innovation and the productivity of various departments. Finally, the relationship analysis was carried out by means of function estimation. The final conclusion is that the impact of technological innovation on the productivity of enterprise is flexible, and the impact of technological innovation on the productivity of enterprise in high-tech enterprises is greater than that of traditional enterprises.

2.3 Impact of technological innovation on value of enterprise

There is also a correlation between technological innovation and value of enterprise. In 1994, foreign scholars brought out technological innovation data and accounting income data of an enterprise, and used accounting income to estimate the investment value of R & D. The conclusion is that for every \$ 100 million invested by an enterprise in technological innovation, the company's income will increase by five dollars. Subsequent research and analysis found that technological innovation will not only bring about an increase in corporate income, but also indirectly affect the company's market, which is particularly important for companies. Later, foreign scholars took the relationship between technological

innovation and market value of companies in developed countries such as Germany, France, and Italy as the research object. The results show that the value of Italian domestic companies is most affected by technological innovation, and there is a positive correlation between them.

The stock price and volatility of an enterprise are also important indicators to reflect the value of an enterprise. Luo Ting has studied the technological innovation of an enterprise and the stock price and volatility of an enterprise, and found that although technological innovation can increase the profits of an enterprise in a short period of time, the stock will not be directly changed, and there is an offline phenomenon of intertemporal impact. The main reason for this phenomenon is that investors do not realize in the first time that technological innovation of enterprise can promote the value of enterprise.

3. CONCLUSION

To sum up, most of the research data show that there is a positive correlation between collaborative innovation in technology and performance management of enterprise, and it will indirectly affect the value of enterprise, which is conducive to maintaining a high competitiveness of enterprises. From the perspective of demand, government procurement has greatly promoted technology innovation and performance management of enterprise, which is conducive to the stable development of social economy.

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Critically evaluate research case study: Service family support- a small-scale project of educational psychologists working with parents

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Abstract: Hogg, Hart, and Collins conducted an investigation into the efficacy of an original intervention designed to help improve the psychological well-being and academic performance of Service families in the UK^[1]. This paper aims to critically evaluate the study's research purpose, methodology, and findings. It will comment on the practical implications of the study as well as propose future research.

Key words: efficacy, psychological well-being, academic performance

1. INTRODUCTION

Research conducted in the US suggests a link between declining academic performance and parental deployment in Service children^[2-3]. It is suggested that this may be related to parental absence as well as secondary stressors such as relocation, leaving friends behind, and additional household duties^[4]. This change in routine and family roles is referred to as 'the cycle of deployment' by Logan^[5]. The cycle of deployment has been found to be further associated with a decline in the psychological well-being of Service children. Millegan, Engel, Liu and Dinneen, for example, found a 10% increase in child psychiatric hospitalisation risk in the year following the deployment of a parent^[6]. Further, Larson, Adams, Ritter, Perloff, Williams and Tompkins, found a 17% increase in antidepressant prescriptions and a 10% increase in antianxiety prescriptions amongst children in the year following the deployment of a parent^[7].

Deployment of a parent not only affects children: the remaining parent may also experience increased levels of stress, anxiety, and symptoms of depression^[8]. This, in turn, may have an effect on the child's psychological well-being and academic performance, as caregiver function has been found to influence child mental health^[9].

2. CURRENT LITERATURE REVIEW

The current research literature has several limitations. Firstly, the majority of research conducted to date regarding the academic performance of Service children relies on focus

groups and interviews, and there is limited empirical research. Secondly, though the research regarding Service children's psychological well-being is more broadly empirical, it cannot fairly conclude that the observed increase in anxiety and depression is caused solely by separation from a parent. Thirdly, there is limited research on the impact that parental deployment has on the remaining parent^[10]. Despite these limitations, the importance of interventions to mitigate the risks faced by Service families is well-documented, and numerous behavioural health interventions have been designed to address concerns. However, the majority of interventions to date have been criticised as suffering from considerable methodological limitations including poor external and internal validity, and low statistical power^[11].

3. INVESTIGATION OF THE ORIGINAL INTERVENTION

Hogg et al. investigated the efficacy of an original intervention, which was designed to focus on four key themes identified from the research literature: mobility, defined as transfers between schools at times other than typical; separation from the parent; the remaining parent's stress and psychological well-being; and support for the remaining parent. It was based on a model of support developed by Gewirtz et al., which was, in turn, based on the Parent Management Training - Oregon Model (PMTO) developed by Patterson & Reid^[12]. PMTO interventions focus on utilising parents as the primary agents of change, and therefore the majority of contact that the therapist has with the family is through the parents. In the past, PMTO interventions have significantly reduced problematic school behaviour and self-reported depression in children^[13]. Based on the current research literature, Hogg et al.'s research purpose is argued to be theoretically sound. It is also argued to be of great importance to both improving quality of life for Service families and contributing to an area of research that is currently limited.

Hogg et al.'s intervention consisted of individual parent consultations (three sessions of an hour each) and parent group information/discussion sessions (three sessions of two hours each). Attendance was

voluntary. The consultations were attended by five Service families and one family with no members in military service who was referred due to school concerns. The group sessions were attended by eight Service families. No information was given regarding other demographics such as ethnicity. Efficacy of the intervention was determined through the use of self-report questionnaires given to the parents following the consultations and final group session, and a semi-structured interview with the school's head teacher. The efficacy of the group session was also determined through a semi-structured group discussion following the final session. Only three parents completed the consultation questionnaire. Nine parents completed the group session questionnaire.

Hogg et al. found that parents experienced both an increase in confidence and a decrease in concern following the consultation sessions. It was also found that the parents who attended the group sessions reported that they appreciated the support of a group and found the sessions to be practical and informative. The existing research literature, as discussed above, suggests that this may, in turn, improve their children's academic performance and mental health.

Novel conclusions derived from the findings of the study are that clear transition procedures need to be available in order to support Service families as they relocate and to inform new schools of where the children are in the curriculum in order to avoid disrupting their learning as much as possible. The findings of the study also provided novel information regarding the impact of parental deployment on the remaining parent, who was found to feel a sense of isolation, loneliness, and a lack of support.

4.FURTHER IMPLICATIONS

These findings have implications for educational psychologists and schools with high proportions of Service children enrolled as they provide a toolkit for use in assisting Service children and Service families who might be struggling with mental health and/or academic performance. They have further implications for parents who either work for the military or have spouses who do so, as the demonstrated success of the PTMO method encourages the remaining parent to educate themselves and potentially seek intervention or community support for themselves in order to pass the benefit onto their children.

However, the study itself is not without methodological limitations. There are several issues, for example, with the participant sample. The participants were self-selected in as much as the school that participants were recruited through was utilised because it had requested funding for such an intervention, and then the individual families volunteered. This is likely to have introduced self-

selection bias, which was, in fact, noted by the head teacher who was interviewed in the study, who expressed concerns that the timing of the sessions might have made them inaccessible for working parents^[14]. Secondly, no demographic information was given by Hogg et al., making it difficult to generalise the findings as there is no way of knowing the participant sample's ethnicity, socioeconomic status, or level of education. It was also unclear how old the participants' children were, or whether they had more than one. Thirdly, one of the participating families was not a Service family, and this may have muddled the results. Altogether, leading to poor external validity. Finally, the sample size itself is small, and were the study quantitative, this would have resulted in a low statistical power. Limitations of the intervention itself are that it ran for only a short duration and that participants did not reliably attend. The typical PMTO intervention is suggested to run from between six to fourteen weekly sessions^[15]. Participants in Hogg et al.'s study attended a maximum of three group sessions and three individual consultations; less in some cases as attendance was not mandatory. Though the overall trend was that participants felt better informed at the end of the study, there was little mention of any ways in which the participants had seen improvements in their own psychological well-being or that of their children. In a longer intervention, this may have been more apparent. A final limitation of the study is that it is not empirical. As discussed previously, a lack of empirical research is chronic in this research area^[16] and Hogg et al. may have better contributed to the research literature by including quantitative measures such as school grades, felt anxiety, or sense of belonging. These measures could have been taken before and after intervention, allowing for a more precise investigation into the efficacy of the intervention procedure.

5.CONCLUSION

In conclusion, Hogg et al.'s study into the efficacy of an original intervention designed to help improve the psychological well-being and academic performance of Service families in the UK has important implications for education professionals and parents in Service families. It supports both seminal and contemporary research in the area. However, it is not without limitations, including its participant sample and its overall methodology. These limitations leave scope for considerable future research, including investigations utilising larger sample sizes, baseline measures, empirical data, well-documented demographic variables, and longer interventions.

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Application of Artificial Intelligence Technology in the Prevention and Control of Public Health Emergencies: Theoretical Basis, Necessity and Feasibility Study

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Abstract: [Purpose/Significance] In recent years, the development of big data, AI, cloud computing and other technologies has provided technical support for the prevention and control of public security incidents. The research of scientific integration of AI technology and the prevention and control of health emergencies can provide new ideas for the prevention and control of these emergencies. [Method/Process] This paper analyzes the theoretical basis, feasibility and necessity of AI participating in the prevention and control of health emergencies. [Result/Conclusion] It is found that the application of artificial intelligence technology in severe epidemic situation is helpful to improve the efficiency of epidemic prevention and control.

Keywords: Artificial intelligence technology, Prevention and control of public health emergencies, epidemic situation

1. INTRODUCTION

In the recent decades, major public health emergencies have occurred frequently in China. The outbreak is often accompanied by a series of social development phenomena that are detrimental to social development, such as life casualties and economic stagnation. Timely and effective prevention and control of the epidemic is related to the health and safety of the people, as well as the steady development of society, economy and politics. At present, the traditional way of relying on human control is obviously not enough to deal with the grand challenges brought by large-scale epidemic. Therefore, the ideas and methods of preventing and controlling public health emergencies also need to be changed.

2. THEORETICAL BASIS

The discussion and application of artificial intelligence in the field of national security governance can be traced back to the mid-to-late 1980s, American scholars of international relations Stephen Cimbala, Philip Schrod and Paul Lehner analyzed the possible impact of AI technology from the perspective of national security [1-3]. The pioneer in the field of artificial intelligence says that artificial intelligence is an important barrier to protect the country [4]. In terms of crisis prediction, artificial

intelligence can not only expand the applicable scope of crisis prediction, but also improve the accuracy and timeliness of prediction [5].

Chinese scholars believe that new technologies such as Internet of things, Internet plus, cloud computing, big data have the ability to improve and innovate tools for emergency management [6]. Network technology and artificial intelligence has not only changed human life styles, but also provided new technical means and management methods for the realization of emergency management objectives [7]. Que and Zhang says that, the development and application of artificial intelligence technology not only provides a strong driving force for social development, but also has a series of impacts on national security governance [8]. Qu Shenning and Yang Danhui claim that intelligent response to public health emergencies is essentially a public management innovation [9].

It can be seen from the relevant literature that scholars at home and abroad think that artificial intelligence technology plays an active role in national security, crisis prediction, emergency management, etc. The prevention and control of health emergencies belong to the scope of public safety emergency management and intelligent response needs perfect technology as support.

3. NECESSITY STUDY

In terms of Prevention, Public health emergencies are usually sudden outbreaks without warning, and there are filled with uncertainties in the time, place and cause of occurrence. It is difficult for human resources to monitor and warn in time. Delayed and missed reporting of information will make the prevention and control of the epidemic miss the best time and lead the epidemic spread quickly [10]. Using artificial intelligence to build the model of disease prediction and early warning system can detect the occurrence of events in time, take measures in time and prevent the fermentation and spread of public health emergencies as much as possible.

In terms of control, major public health emergencies have a wide range of dissemination, national boundaries often can not prevent the transnational spread of disease crisis, and the spread and impact of a country's public health crisis is often globalized [11].

Therefore, it is particularly important to accurately identify the super communicators and the relevant personnel who have close contact with them in the process of epidemic prevention and control. However, relying on the traditional visit registration and the door-to-door screening method is not only inefficient, but also consumes a lot of time. In fact, artificial intelligence can effectively replace the prevention and control personnel to complete repeated and time-consuming work in order to save time and improve the efficiency of the prevention and control.

In terms of impact, the major public health emergencies not only directly affects people's life and health, but also indirectly affects the construction of ecological environment, the development of social politics and economy, and the normal development of education. The use of artificial intelligence technology can enable people to complete online office, management and teaching in the event of a major epidemic, so as to ensure the normal scheduling of work and minimize the harm and impact of the epidemic on all fields.

In conclusion, Whether from the perspective of epidemic prediction, early response, or from the perspective of prevention and control efficiency and social impact, AI participation in prevention and control is superior to traditional prevention and control methods. Therefore, artificial intelligence technology is urgently needed to participate in the prevention and control of public health emergencies.

4.FASIBILITY STUDY

As a core driving force in the era of intelligence, artificial intelligence technology promotes innovation in China's economy, security, education, medical care and e-commerce retailers^[12], and also provides more reliable technical support for the prevention and control of public health events.

(1) Natural Language Processing (NLRP)

During a major outbreak, the number of hospital visits also increases. It is unrealistic for medical staff to receive every consultant. As a result, many companies have launched remote online consultation systems such as the project of intelligent clinical auxiliary diagnosis platform in DUCG has established a cloud-based consultation platform and a teleconference platform. Alibaba Group's Intelligent Outbreak Robot is able to answer epidemic-related diagnosis and treatment questions through voice recognition, natural semantic understanding and other artificial intelligence technology.

(2)Computer Vision

The application of face recognition, image recognition and video structured technology in the prevention and control of public health emergencies in recent years is increasing, mainly in medical imaging, surgical robot, screening disease and so on. Currently, Baidu's AI multi-person rapid temperature detection solution for the 2019-ncov has been piloted in Beijing Qinghe railway station. It can take the

temperature of 200 people checked in 60 seconds.. The Ming Ji system of Megvii can achieve non-contact distance temperature measurement at a distance of more than 3 meters. In this way, the work efficiency of the prevention and control personnel is improved, and the probability of pedestrians being infected in public places is also reduced.

(3)Intelligent Service Robot

Public health emergencies are mostly infectious diseases. According to the observation, the possible transmission mode of novel coronavirus 2019-ncov is spread by droplets, by contact and by aerosol of different respiratory tract sizes^[13]. Intelligent service robots are immune to virus infections and can not only replace people to perform necessary face-to-face activities, but also reduce the consumption of medical protection supplies. The Small Raccoon of Deep Blue Technology can be routinely disinfected in crowded public places such as airports and railway stations. KEENON technology company has developed an intelligent feeding robot, which can solve the diet problems of medical staff and patients without contact.

In conclusion, natural language processing, computer vision and intelligent service robots have been widely used in public health and public safety. Therefore, it is feasible for AI technology to participate in the prevention and control of public health emergencies.

5.CONCLUSION

This paper summarizes the theoretical basis of AI technology participating in public health emergencies, and discusses the necessity and feasibility of AI technology participating in the prevention and control of public health emergencies. It is found that the scientific combination of artificial intelligence technology and epidemic prevention and control can help carry out epidemic prevention and control work, improve epidemic prevention efficiency, and promote the prevention and control process. We should continue to research and explore the possible role and application scenarios of artificial intelligence technology in the field of public security, so as to provide reference strategies for the prevention and control of public health emergencies.

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ZeroMerkleTree, An Enhanced Merkle Tree with Zero Overhead

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Abstract: In this paper, a new Merkle tree called ZeroMerkleTree was raised to handle Merkle tree layers with an odd number of nodes without adding extra nodes. It saves not only space but also computing power. Besides, a prototype cryptocurrency called ZeroCoin also was created to demonstrate the feasibility and advantages of ZeroMerkleTree. Finally, we compared the performance of ZeroMerkleTree with Bitcoin's and Libra's Merkle Tree, with the results show that it is faster than Bitcoin's Merkle tree and Libra's Merkle tree.

Keywords: Bitcoin, cryptocurrency, Ethereum, Libra, Merkle tree, Ripple

1. INTRODUCTION

With the development of computer technology, new cryptocurrencies are being released at an increasing rate. Cryptocurrencies are flexible, diverse and fast, which has a profound impact on the effect of economy^[1]. Many scholars from different fields have studied cryptocurrencies. Urquhart (2016) thought that Bitcoin is an inefficient market but maybe in the process of becoming more efficient^[2]. Androulaki et al. (2013) evaluated user privacy issues in Bitcoin transactions^[3]. By studying Ethereum's smart contracts, Grishchenko et al. (2018) further defined many important security attributes of smart contracts based on the combination of super and security attributes for the first time^[4]. Bogner (2016) researched decentralized shared applications that run smart contracts on the Ethereum blockchain and proposed that the use of smart contracts has the potential to revolutionize the sharing economy^[5]. Armknecht et al. (2015) analyzed current usage patterns and transaction dynamics in Ripple by extracting information from the Ripple global ledger^[6]. Di Luzio had looked at the history of Ripple for the first three years and found that even the approximate information of one payment can reveal the user's entire financial life with amazing accuracy^[7]. Taskinsoy (2019) sees Libra as a promising

alternative to the U.S. dollar and has been promoted as a stable cryptocurrency^[8].

Both blockchains and cryptocurrencies have a shared bottleneck: performance. They need to store intermediate nodes in memory and disk and heavily rely on hashing, which takes huge storage space and computing power. Thus, in this paper, different Merkle trees from different cryptocurrencies were studied.

2. MERKLE TREES IN EACH RESEARCHED CRYPTOCURRENCIES

Firstly, the structures of Merkle trees in the four cryptocurrencies Bitcoin, Ethereum, Ripple and Libra and the drawbacks of each type of cryptocurrency were analyzed.

2.1 Bitcoin's Merkle Tree

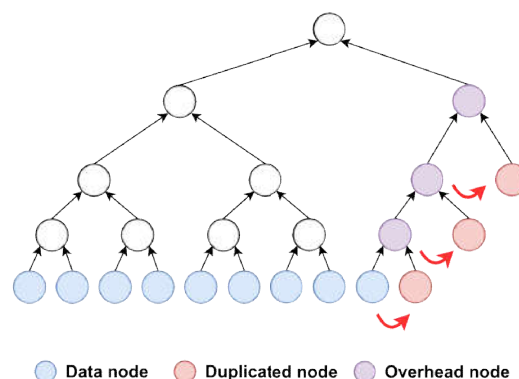


Figure 1: Bitcoin's Merkle Tree

Bitcoin's Merkle trees are used to store transactions (see Figure 1). It is binary. Despite some advantages of it, there are also some disadvantages. For example, the blockchain often needs to face data updates and insertions in practical applications, and the Merkle tree is often inefficient when performing update operations.

2.2 Ethereum's Merkle Patricia Tree

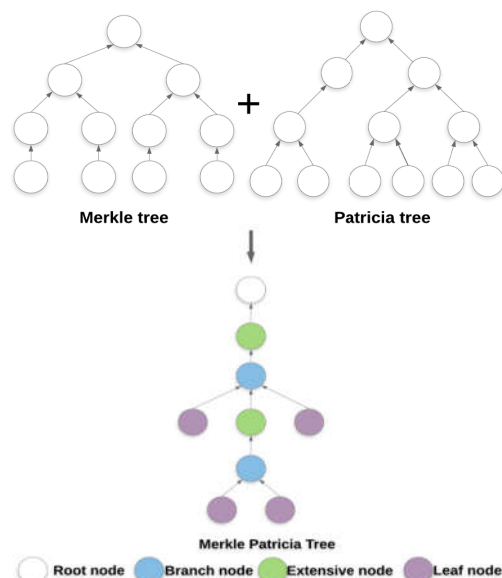


Figure 2: Ethereum's Merkle Patricia Tree

Figure 2: Ethereum's Merkle Patricia Tree

Merkling in Ethereum takes the advantages of both the Merkle tree and Patricia tree. Three different types of roots for each tree: Transaction, State and Receipt are involved. To implement the trees in Ethereum, it uses a typical hex-prefix encoding to encrypt the key. It improves the efficiency of the encryption algorithm. However, the Merkle Patricia tree causes high computing power and costly.

2.3 Ripple's Merkle Patricia Tree (MPT)

MPT was first introduced and implemented in the Ripple protocol. There are two trees in Ripple's ledger: a transaction tree, which contains transaction information in the previous ledger; a state tree.

holding account balance data as well as credit limits. After checking the correctness of transactions, each validating server encapsulates these transactions in a proposal and broadcasts it in the whole network. This process is realized by building a hash tree of all validated transactions and signing the root of the tree.

2.4 Libra's Merkle Tree

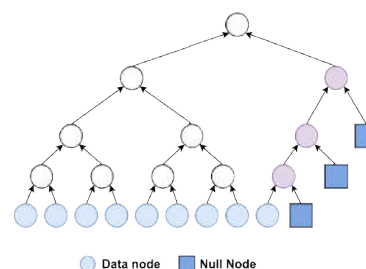


Figure 3: Libra’s Merkle Accumulator

What makes Libra Merkle tree different is that it is a single data structure that saves all the transactions. Compared to Bitcoin's proof-of-work consensus algorithm, it is safer and will not waste enormous energy. Simultaneously, Libra Merkle tree solves the "free rent problems" effectively.

3. ZeroCoin Prototype

ZeroCoin is a prototype cryptocurrency used to test the feasibility and performance of ZeroMerkleTrees. It only contains features that are essential to test Merkle trees such as transfer transactions, a block-creating protocol.

3.1 ZeroCoin Network

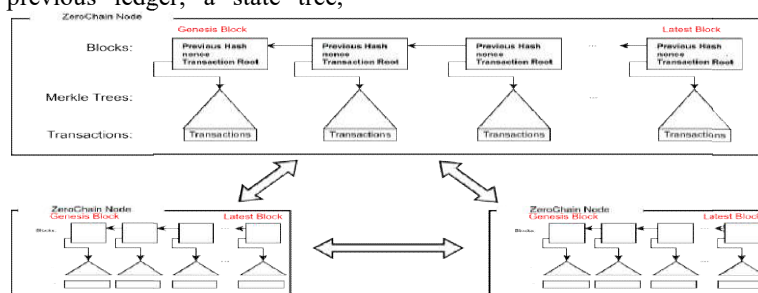


Figure 4: ZeroCoin Network

The ZeroCoin network consists of multiple ZeroChain nodes (see Figure 4). Each node works on its own blockchain and updates the whole network sometimes so that every node on the network has the longest chain.

3.2 ZeroMerkleTrees

Merkle trees are binary trees where each branch node stores the hash of its two children combined. The leaf nodes, which are found at the bottom layer in most Merkle trees, store data, and in the case of cryptocurrencies, the data is transactions. However,

the data stored in these Merkle trees almost never come in 2^n number of chunks, which means that there would be non-root layers that contain an odd number of nodes, and the last nodes of such layers must be added to the Merkle tree in some way or another. Bitcoin and Libra solve this problem by duplicating the last node or adding a null node in such layers, but doing so would create more nodes than necessary. To address this issue, we propose the ZeroMerkleTree. They are constructed from the bottom, which contains sorted items as nodes, and for

each layer except for the root layer, every other Merkle tree node is paired with an adjacent node by a shared parent node. Extra nodes will be pushed to the next layer. Because there is only one way to construct a ZeroMerkleTree from the same list of items because it is sorted, the root node will have the same hash value, so the intermediate discarded (see figure 5).

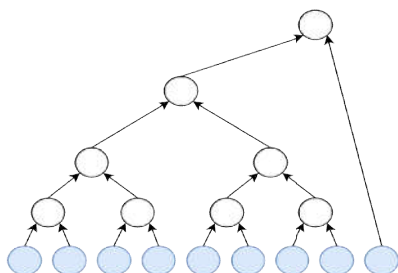


Figure 5: ZeroMerkleTree

Algorithm 1: Construct ZeroMerkleTree⁺

```

Data: a list of transaction  $T$ +
Result: new Merkle Tree with root hash  $r$ +
 $layer \leftarrow EmptyList()$ +
for all  $t$  in  $T$  do+
   $n \leftarrow CreateNode()$ +
   $h \leftarrow CalcHash(t)$ +
   $NodeHash(n) \leftarrow h$ +
   $layer.append(n)$ +
end+
while  $Length(layer) > 1$  do+
   $up\_layer \leftarrow EmptyList()$ +
   $i \leftarrow 0$ +
  while  $i < Length(layer) - 1$  do+
     $n \leftarrow CreateNode(layer[i], layer[i+1])$ +
     $h \leftarrow CalcHash(NodeHash(layer[i]) +$ +
     $NodeHash(layer[i+1]))$ +
     $NodeHash(n) \leftarrow h$ +
     $Append(up\_layer, n)$ +
     $i \leftarrow i + 2$ +
  end+
  if  $i = Length(layer) - 1$  then+
     $Append(up\_layer, layer[layer[i]])$ +
  end+
   $layer \leftarrow up\_layer$ +
end+
return  $layer[0]$ +

```

The process used to build the ZeroMerkleTree can be described in Algorithm 1.

4. EVALUATION

4.1 Theoretical Analysis

If the number of nodes (N) is $2n$, both Bitcoin's and Libra's Merkle trees would be exactly the same since both would have N intermediate nodes. However, if N is not $2n$, Bitcoin would append an extra node on each layer. Since the only difference between Bitcoin's and Libra's Merkle trees is that Libra's Merkle tree adds null nodes instead of duplicating the last node, it should be slightly faster but still requires up to $\log(2N)$ extra nodes and $\log(2N)$ extra rounds of hashing. ZeroMerkleTree does not require these, which making data existence verification more efficient.

4.2 Benchmark Test

To show the effectiveness of ZeroMerkleTree, benchmark tests on CPU and memory usage were conducted among Bitcoin's Merkle tree, Libra's Merkle tree and ZeroMerkleTree. The best-case scenario for a Merkle tree is when there are $2n$ items because there is no need to deal with the last nodes of each layer independently. The worst-case scenario for a Merkle tree is when it has $2n+1$ items since every layer of the tree would be affected, and there would be an extra layer.

4.2.1 Cpu Benchmark Test

For the CPU benchmark test, we measured the individual time it takes for each type of Merkle tree to calculate the root hash from a list of data. Two separate series of tests (each does 500 runs) were implemented. One with 16 (best case) - 17 (worst case) items with 1-17 nodes (chosen randomly for each run) for average case (see figure 6) and another with 2048 (best case) - 2049 (worst case) items with 1-2049 (chosen randomly for each run) nodes for average case (see figure 7).

CPU Benchmark Test (a small number of items)

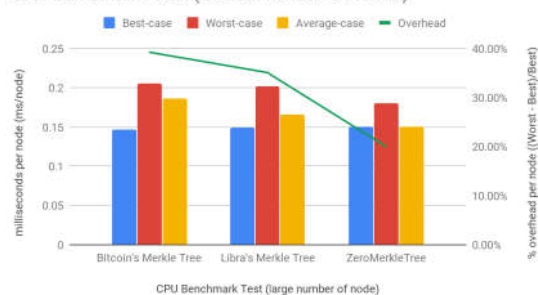


Figure 6: CPU Benchmark Test (a small number of items)

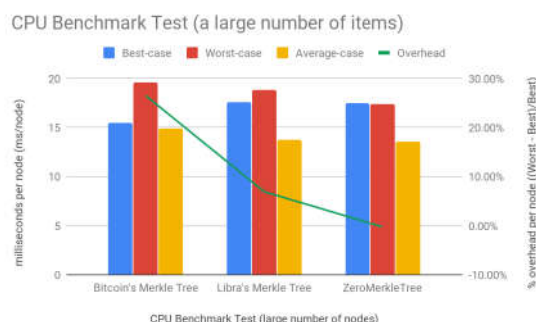


Figure 7: CPU Benchmark Test (a large number of items)

From the tests, we conclude that although ZeroMerkleTree only does slightly better than Bitcoin's and Libra's Merkle tree, ZeroMerkleTree reduces per-node overhead better than the others by almost a half.

4.2.2 Memory Benchmark Test

For the memory benchmark test, we measured the peak memory usage for each type of Merkle tree and one series of tests with 100 runs, 1024 (best case) - 1025 (worst case) items (see figure 8) were used.

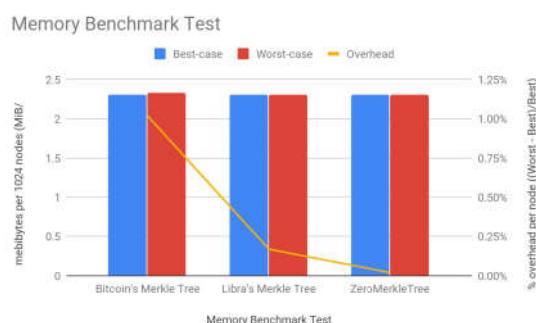


Figure 8: Memory Benchmark Test

Based on the memory test, all three types of Merkle trees used about the same amount of storage, but ZeroMerkleTree reduced overhead to a 0.02 percent while Bitcoin's and Libra's Merkle tree had a 1.02 and 0.07 percent overhead respectively.

5. CONCLUSIONS

In conclusion, based on the benchmark tests, it shows Merkle tree surpassed Bitcoin's and Libra's Merkle tree in time and storage in overheads. This paper opens up a new direction in optimizing Merkle trees without compromising security, which could potentially help optimize cryptocurrencies and blockchains. In the future, ZeroMerkleAccumulator as an accumulator and benchmark tests can be considered.

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Soviet Communism Ideology in The Second World War

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Abstract: This paper will show that, although nationalism did rise during the war, Communism still played a pivotal role in the Soviet ideological system. This will be shown through an analysis of Stalin's political theory, and illustrations of popular culture and art. After reviewing this evidence, this paper will conclude by explaining how these two ideologies are not only rivals, but also collaborated and reinforced one another through "class nation" and universalism.

Keywords: ideology, nationalism, communism, soviet union, political culture, world war II

1. POLITICAL THEORY

Joseph Stalin was the dictator of the Soviet Union during World War II. During the war, his speeches continued to discuss Communism and the class struggle—he did not abandon those older ideals in the service of nationalism.

In the western world, fascism is usually defined as anti-democratic and dictatorial. The Soviet Union defined fascism differently. Stalin providing a Marxist and class-based account of fascism and of its relationship to bourgeois democracy^[1].

These views, equating Fascism with Capitalism, are common in the 1930s. Even when the American-Soviet alliance was solid during the war, Stalin still possessed this sort of view and revealed it at some covert occasions.

After the war, Stalin famously said that this war is different from previous ones: no matter who occupied the field, they will impose their own social regime on it. This belief presumes a class-based understanding of international order again.

From Stalin's perspective, the foremost nature of fascism is capitalism. Fascism is a outcome of "the general crisis" in 1930s. The struggle against fascism is a part of the struggle against capitalism. And the conflict among the capitalist countries will escalate to cause the world revolution. Under this theory, the mainstream of history is class struggle and the struggle between Fascism and Communism is never exceptional. This theory regards the class struggle as the engine of history and the fundamental thread to narrate and explain history. The global revolution will be fulfilled by these series of wars. In this way, Stalin successfully absorbed the turmoil of his age, which is regarded as the conflict of nations now, into a Marxist

philosophy of history.

2. ART AND PROPAGANDA

Culture and art are great propaganda tools used by regimes to spread their ideals. Art and propaganda are often cited to prove the boost of nationalism during the war. In "The Use of Nationalism Discourses in the Soviet," Caner Caki and Mehmet Ali Gazianalyse the boost of nationalist content in war time propaganda posters. The traditional Russia hero's images are set as comrades of red army soldiers to inspire Patriotic enthusiasm and sense of holy missions^[2].

In 1944, the Soviet Union adopted a new national anthem. This is usually regarded as a proof of nationalism. The song references "Russia", which had been discarded for a long time since the October revolution in place of the more properly revolutionary "Soviet Union." However, when we consider the lyrics as a whole, the persistence of Communist themes is apparent. In the refrain the lyrics refer not to Russia but to the USSR^[3].

The conventional Communist images like people and red banner appears repeatedly at the end of each paragraph. These are the most common symbols in the traditional Communist songs, just like the lamb and stable in Christianity. From a holistic perspective, this national anthem contributed more emphasis to Communism than nationalism.

Another example is the "Song of Soviet army", composed in 1943, contrasted with another famous military song, "We are the army of people" from 1975. The army in this case is viewed as a successor to the Russian army of the Napoleonic Wars. If we take the two representative songs of the Second World War period and the Cold War period to compare, it's obvious that the former one is far less nationalist. The Second World War time military songs still insisted that the Red Army was rooted in the civil war and preached some common Communist notions, like the workers and peasants' nature of Red Army.

Military medals are also an incarnation of ideology. Its pattern is closely related to political ideology. However, if we look into the entire medal design, we may have different conclusions. Two medals, the patriotic war medal and the Victory Medal were newly designed during the war. The traditional Soviet medal like red star medal, red flag medal and Lenin medal were also widely issued during the

war. Even the restoration of "guard" title for the outstandingly performing troops is also marked with Communism. Although this title is inherited from empire tradition, the emblem is newly designed with a red banner stuck upon a red star. The Communist pattern emblems and medals obviously played a dominant role.

3.THE RELATIONSHIP BETWEEN COMMUNISM AND NATIONALISM

In this section, the paper will attempt to explain the relationship of mutual support between Communism and nationalism.

Firstly, we shall distinguish the basic difference stemmed from these two thoughts. Every ideology serves as an adhesive to integrate the individual into a community by construct collective recognition and identity. Nationalism rallies citizens with the same language, field and tradition while Communism calls comrades with the same economic status. That is where the contradiction laid. They demand the exclusive loyalty to different entity, class and nation. According to Nationalism, we shall regard a country as a cohesive monolith. But from the perspective of Communism, the split struggling classes are the essence of a country. It is tough for the individual to choose a side.

However, when this problem spreads to the international dimension, it will be quite different. The conflict between nation and class can be perfectly solved by a newly coined notion: the "class nation." This refers to an ideal nation composed by only one class, the proletariat. If we imagine a nation made up of just one class, the apparent contradiction between nationalism and Communism can be resolved. This explains why the cultural material above is able to marry together nationalist with Communist themes.

The idea of the "class nation" is not strictly Marxist, but it emerged historically in Communist nations. Soviet propaganda endeavored to promote the recognition of class nation during the war time. By recognizing other hostile countries as Capitalist, the Soviet union successfully enacted a self-image of a Communism country. So that the international classes struggle between two different countries substitutes the domestic class struggle. When a country can theoretically represent both class and nation, the conflict no longer exists. This new sort of nationalism calls for the unity of all citizens and also presume that citizens share the same economic status.

Another reinforcement is through universalism. Both Nationalism and Communism possess a universalism trait. For Communism, the goal is to liberate all labor in the world. For nationalism, nationalists were often just as universalist as their socialist competitors in practice, even if thought in terms of global empire rather than global proletariat.

The introduction of Communist Universalism is necessary to justify Soviet occupation. It is a revival of 1920s propaganda to insist the friendship and alliance between Soviet labor and Eastern Europe labor. Especially during the people's democracy period, when the Communism party still struggled with the farmer party and social democracy party, it was always emphasized that Soviet Union is to help local peasants reclaim fields from Junker landlords. Red army is the liberator of these nations against Nazi tyranny and the liberators of the peasants and workers against the exploiting classes. The consequent nationalization of industry and land reformation also prove that Communism Universalism is still appealing at that time.

The universalism of Communism and nationalism could also be found in revolutionary. Soviet Union was the liberator against Capitalism and only Soviet Union(Russian) nation could assume this responsibility. In this way, Communism and Nationalism were fused together by the Universalism Crusade Belief.

4.CONCLUSION

While we often see Communism and nationalism as enemies, they are often compatible in practice and theory. When Communism and Nationalism co-exist, we can see some subtle fusion and coherent ideological innovations. To avoid contradiction between different periods propaganda, theorists meticulously arrange the present ideology, trying to use mild and obscure words and obtain the widest recognition. How do these ideologies gradually revolve in harmony rather than create ruptures and turmoil? Understanding this transition can help us get further of these countries' legitimacy construction and political philosophy feature, thereby clarifying their practice regular patterns and foreseeing their behavior in the future.

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13.
[3]“The flag of the Soviet Union, the flag of the people, From victory to victory!”

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Analysis of Network Security Issues in the Era of Big Data

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Abstract: In the era of big data, the network has provided convenience and also brought potential threats. Viruses, Trojan horses, and hackers' attacks have caused irretrievable losses for people, and they have become a major obstacle for the expansion of internet. This paper first analyzes the related concepts of big data and the current situation of network security in the era of big data, then uses the five indicators of network security to establish a network security evaluation model, and finally puts forward the countermeasures for ensuring information security of computer networks in the era of big data.

Keywords: Big data, Network security, Evaluation model, Coping strategies

1. INTRODUCTION

Big data is an abstract concept. As most of the emerging concepts in the field of informatics, big data has not yet been defined exactly^[1-2]. With the coming of the big data era, the issue of network security has gradually attracted people's attention. Although various countries have made different efforts to the issue of big data network security, still, more and more websites have been attacked and it is difficult to fundamentally guarantee the security of the network in the era of big data, so that the current network security problem in the era of big data is not optimistic^[3]. With the application of internet becomes wider, various sensors increased their data collection abilities dramatically, more and more people, companies and organizations are using the internet, and the data collection and sharing become more convenient, data dimensions have become higher, the data amount for describing the same object is growing^[4-6]. Complexity is an important feature of big data. The biggest difference between big data and traditional data processing is that it focuses on unstructured information. Big data focuses on unstructured data that contains a large amount of detailed information, it emphasizes on minority and experience, and these features make traditional data processing methods face enormous challenges^[7]. The real-time processing requirement for the ever-increasing massive data is one of the key differences between big data and traditional massive data processing technologies. The data is exploding and growing rapidly, new data emerges continuously, the fast-increasing data amount requires the data processing speed up correspondingly, big data requires fast, continuous real-time processing^[8].

Finally, low data value density is an important attribute of unstructured data that big data is concerned about. The low data density of big data means that, for a specific application, in order to ensure that there is enough effective information for newly generated applications, it is usually necessary to save all data, on the one hand, this results in an absolute increase in the number of data, on the other hand, the proportion of effective information is continuously decreasing, and the data value density is low.

The core of network security is the security of information^[9]. In order to prevent illegal users from stealing, falsifying, and destroying data using the security flaws of the network system, a security service system of the network information system must be established. The main content of network security is shown in Figure 1:

Although efforts have been made to the issue of big data network security to a certain extent, more and more countries and websites are still being attacked, and it is difficult to fundamentally guarantee the security of the network under the era of big data, so in the current era of big data, the issue of network security is not optimistic. Therefore, in the current era of big data, there are many problems in network security, which seriously affect the current rapid economic and social development, and it is also difficult to ensure the protection of people's privacy, and it is not conducive to the construction of a harmonious society.

2.NETWORK SECURITY EVALUATION MODEL IN THE ERA OF BIG DATA

The network security evaluation index comes from the study of dependability. At present, there are five basic attributes of security that people generally concern, including reliability, availability, safety, integrity, and confidentiality. We use the following Figure 2 to summarize the relationship between various security attribute definitions.

2.1 Reliability

Reliability is the probability that a network system can perform a specific function continuously for a certain period of time. It focuses on analyzing the continuity of the normal operation of the network system, we present the mathematical description of reliability below. Assuming that S_R is a set of specific functions that the network can perform, $X(t)$ represents the state of the network system at time t . The reliability $R(t)$ represents the probability that the

system continues to perform the function S_R within time $[0, t]$. The following mathematical definition can be given:

Assume:

$$X(0) \in S_R, \tau = \inf\{t : X(t) \notin S_R\} \quad (1)$$

$$\text{Then: } R(t) = P\{\tau > t\} \quad (2)$$

In some studies, people also use the Mean Time To Failure (MTTF) indicator to characterize the system reliability, it can express mathematical expectations:

$$MTTF = E[\tau] \quad (3)$$

2.2 Availability

Availability is the quantification of the alternating process of secure and insecure network systems, it focuses on describing the possibility of normal operation of the network system. Availability is defined as the ratio of time that a network system can operate safely at a given time. Assuming that S_A is the set of system security states, the instantaneous availability can be defined as the probability that the system is in a safe state instantaneously, which is usually expressed as follows:

$$A(t) = P\{X(t) \in S_A\} \quad (4)$$

Under normal circumstances, people are more concerned about the steady-state availability of the network system, that is, the probability that the system is in a safe state under the steady state. The mathematical expression of it is given as follows:

$$As = \lim_{t \rightarrow \infty} A(t) = \lim_{t \rightarrow \infty} \frac{\int_0^t A(u) du}{t} \quad (5)$$

2.3 Safety

Safety is the probability that the network system will not cause catastrophic consequences to the environment and users within a period of time. Below we give the definition of network system safety. Set S_W and S_F as the sets of states for normal system operation and security incidents occurrence, respectively. $\pi_i (i \in S)$ is the steady-state probability that the system is under the i state. Then the safety S is the probability that the system has no serious security impact under the steady state, we can directly obtain:

$$S = \sum_{i \in S_W} \pi_i \quad (6)$$

2.4 Confidentiality and integrity

Confidentiality and integrity are two other important attributes of network system security. Confidentiality refers to ensuring that the protected data in the system is not leaked to unauthorized persons, and integrity refers to preventing the protected data in the

system from being tampered by unauthorized persons. When the network system is affected by a certain type of attack, we can quantify the confidentiality or integrity indicators of the network system if we can clearly distinguish which system states satisfy confidentiality or integrity.

Assuming that S_c and S_i are two different sets of states that satisfy confidentiality and integrity respectively, then network system confidentiality C can be expressed by a probability as follows:

$$C = \sum_{i \in S_c} \pi_i \quad (7)$$

Similarly, integrity can also be expressed as a probability:

$$I = \sum_{i \in S_i} \pi_i \quad (8)$$

3. CONCLUSIONS

The discussion of computer network security technology under the background of big data era has very important practical significance. To improve the protection capabilities of computer network security technology at the present stage and reduce the threat of network attacks against information data, this paper comprehensively analyzes the problems existing in computer network security at the current stage, conducts a comprehensive study of computer network security technologies, and formulates computer network security protection strategies on this basis to ensure the safe use of information data to meet the needs of socioeconomic development for the use of information data in the era of big data. In conclusion, the issue of network security in the era of big data must be given more attention. With the development of the Internet of Things and the internet, we must do a good job in the big data methods analyzing and processing works, refine effective information, conduct a comprehensive defense against network security, strengthen users' awareness of security protection, so as to effectively avoid network security problems in the era of big data.

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The perfect combination of rural community adult education and modern network course resources construction

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Abstract: nowadays, information changes rapidly, and it is more and more important for everyone to acquire more useful knowledge. All kinds of teaching resources in rural communities should be fully played and effectively developed to build an adult education system for villagers in new rural communities and promote the spiritual civilization construction of rural community residents. Rural adult education network curriculum resources construction, from the improvement of teaching curriculum, adult teachers, suitable textbooks, practical teaching content, to solve practical problems and other aspects to build a modern network system.

key words : community adult education; Modern interconnection; Rural community education.

1. BASIC INFORMATION OF RURAL ADULT EDUCATION CURRICULUM RESOURCES

Before with the rapid growth of the country's social economy, the rural people's living standards continue to improve, the modern era of knowledge information update quickly, rural adult education needs more urgent daily, now put more emphasis on lifelong learning and lifelong education, have to admit that school education in school period has been unable to meet the needs of the residents' pursuit of a better life. A large number of residents adult education have a lot of network teaching resources, China's current adult education is lack of characteristics to adapt to adult education, which is also the rural adult education results are not high. The adult education school does not according to the student's own characteristic and each person's interest hobby formulates each student to study independently the education pattern and the method, must change this kind of situation now, the school must according to the student's respective occupation characteristic and the specialized characteristic formulates the suitable practical teaching material^[1].

Now rural adults in the actual learning feel that a lot of knowledge independent learning may feel more boring, and the lack of real-time interaction with students and broadcast courses, for everyone's appeal, teaching time long students will be distracted, affecting the learning effect of rural adults. With the wide spread of the teaching method of network resources in adult education, it has become a practical problem that people pay close attention to to ensure

the practical effect of network teaching resources. Good online course resources provide assurance for adult students who want to improve their education and learn a skill. In order to make every adult master more practical knowledge and technology, the school adopts a new personalized teaching model. Every adult can choose the course resources he or she likes according to their own interests and directions, and can also choose textbooks according to their actual work needs^[2].

2.THE COMMUNITY ADULT EDUCATION NETWORK RESOURCE CONSTRUCTION PRACTICE THEORY

In real adult schools, it is difficult to carry out face-to-face teaching on a large scale, the teaching cost is high, and the learning time of community rural residents is not the same, the residents are basically scattered time. Compared with face-to-face teaching, online platform for residents has lower cost and higher efficiency, which is suitable for rural adults to study independently and freely. The arrival of the global Internet era makes ordinary people more convenient and efficient in their daily life and work. It has become a very important communication tool in the lives of ordinary people.

Now, these personalized curriculum groups can better break the barrier of face-to-face teaching of traditional school teachers, and provide targeted education to students in a more flexible and faster way, so as to realize the excellent education concept of individualized teaching. In the whole learning process, each student can decide to study the teaching material by himself or herself, and can also choose the free time for his or her own study, which is the real self-learning spontaneous learning. Rural community education should seize the era of Internet big data and make use of the advantages of network media to enable all residents to realize the continuing education and lifelong education for all. Better use of the network so that ordinary residents in rural communities can not only communicate and learn on the Internet, but also in a safe and effective situation in the offline experience combined with the virtual line and real life.

To provide students with targeted textbook selection, teachers of various majors record online course videos and place them on the online learning platform so that students can choose their own content to study

independently. The contents of modern ideological and political theory courses are constantly changing with the changes of current events and need to be updated at any time. However, re-recording courses requires a lot of energy and financial resources, which increases the investment of school resources. Therefore, in the original video files to be modified according to current events, can reduce the school's resource input cost, but also can maintain the network teaching course video constantly can also improve the rural students to learn the strong interest in free.

Nowadays, many rural residents, especially rural adults, have a wide demand for new knowledge and skills. Relying on the overall goal of new community construction in the new era, the Chinese government is organizing the research and innovation of high-quality education resources in new communities that adapt to the new era, and actively exploring the construction of a lifelong learning and learning system for rural residents in the new era by taking rural communities in the new era as the entry point, so as to improve the overall quality of rural residents. The national government has incorporated continuing education and lifelong education in rural communities into the national economic construction and the development of new rural communities.

Rural new community teachers are mainly divided into online teachers and face-to-face teaching in schools, community students can according to their own time and needs to focus on the selection of suitable courses and content. Adult education of ideological and political education specialized invited to colleges and universities education experts, the administrative department of the government's successful leaders and social entrepreneurs to analyzing the hot problems in today's society, in the form of elective courses for great efforts to promote popularization, let each change of students want to learn can through their own efforts to struggle to realize life value.

Adult education school according to the ideological and political education professional students network questionnaire survey, will have different needs of the students are divided into the need for face-to-face class and online teaching class. Achieve full coverage of education in two ways. Then use instant messaging software to give face-to-face and online teaching time, place, teaching teachers, teaching content to everyone, so that rural students have targeted to choose their own courses and skills.

According to the needs of different majors and different students, select now excellent textbook content, let the adult school units, correspondence and online students free choice of courses. Students of different levels are divided into ordinary family women and skilled men who work outside; Working life skills and family nursing expertise in the first and second tier cities; For rural students with different needs, the Internet online platform can provide them

with appropriate practical skills. For example, technical talents who work in cities can choose more advanced courses to study, so that students can choose their own needs and favorite families can use skills to work in cities in the future and have stable income. The school advocates that adult education school teachers sum up what kind of talents the country needs for its future development and tailor the curriculum to the skilled workers the country needs. This will be more targeted and more in line with the country's development direction, so that rural workers also contribute to the country's construction of an important force.

In the actual teaching process of adult schools, the problem teaching method can make the interaction between teachers and students better, so as to help teachers understand the situation of each student, students according to their aptitude to improve the learning interest and motivation of adults in rural communities.

3.PRACTICE METHODS OF BUILDING ADULT EDUCATION RESOURCES IN RURAL COMMUNITIES

In order to be able to meet the demand, rural adult learning school personalized study plan with online education platform solution to the practical teaching, the school is divided into two parts: one is provided to want to learn practical skills of students can systematically study of rural adult students, students show their real needs and their daily time allocation is reasonable, it can provide for personalized tracking of different students to learn further promotion plan. Second, for some popular knowledge and skills courses, adult schools can regularly launch a monthly learning program. In this way, students can comprehensively improve their life and survival skills, so that everyone can get a lot of educational learning opportunities.

Adult schools should do a good job on the communication platform between teachers and students, and maintain constant communication between the school and students. Only in this way can we always understand the needs of students. Rural adult schools can also create online virtual classes for rural students, so that each student has a wide space to learn, so that rural students are not limited by time, region and space, can independently carry out learning anytime and anywhere.

Today's adult education schools should maintain the advanced nature of the Internet curriculum resources, and the world's advanced thought and technology. The construction and application of the Internet curriculum resources also need the new era of new ideas of professional talents, adult education schools can only build an excellent teachers team to advance with The Times for the new era of Internet curriculum resources and the construction of the country to provide high-quality talents. Internet big data technology is fully utilized in various fields and

plays a better role in adult school teaching. There are mainly three aspects: first, the Internet big data can be used to continuously update new knowledge and skills for rural adults, rural community residents' learning needs are advancing with The Times. 2 it is can use the Internet to big data technology to analyze the rural community adult students' learning habits, combination of online and offline, according to the different region and different age paragraph the different levels of knowledge classification research interest in the characteristics of the students, requirement types, to better and more efficient to

provide personalized learning program custom service and technology and the needs of the country.

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The Change In Role Of Science And Technology From 1870s To 1920s

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Abstract: In the twenty-first century, science and technology play an extremely crucial role in Americans' lives. the development of science and technology became more tainted with the desire of maintaining existing social institutions over time, as different groups tried to justify themselves using the new findings.

Key words: Technology, Science, Role

In the twenty-first century, science and technology play an extremely crucial role in Americans' lives. Their rapid development can date back to the Gilded Age when people started realizing the merits science and technology could bring. Numerous innovations and branches of science emerged as they changed the citizens' lives drastically. For the most part, the advancement of science brought benefits to the society: it improved the average living standards, facilitated communication, and lengthened the life expectancy of most people; however, it also resulted in disharmonious voices in American society, mostly revolving around the issues of religion, race, and gender. These conflicts occurred majorly at the beginning of the twentieth century, signifying a change of tone in the society regarding science. Therefore, science and technology from the Gilded Age to the eve of the Great Depression has changed from a rather pure tool for improving the society to an instrument for both development and the perpetuation of certain social institutions.

1. BETTER LIVING STANDARDS

From the latter half of the nineteenth century to the early twentieth century, science and technology had become increasingly sophisticated and beneficial as a tool for improving living standards. After the Civil War, big businesses seized the opportunity to gain power in the disordered era by developing new technologies and innovative management techniques to reduce the price of basic commodities to increase competitiveness.^[1] For example, Andrew Carnegie adopted the Bessemer process that removes the impurities in the iron to increase the material's hardness in steel production, which led his way to great wealth, and eventually, a monopoly in the market.^[2] As a result, more people started seeking opportunities with technology; this surge of science soon created a snowball effect and became a trend of development in all fields. As time proceeded, numerous inventions mushroomed

and benefited the country greatly. Since the invention of the light bulb, the use of electricity had been explosively popularized. The electrical industry became one of the most dynamic sectors of the American economy between 1875 and 1900,^[3] creating countless jobs in every industry and greatly enhanced productivity, thus making more goods available to the general public. From 1909 to 1929, total personal consumption expenditures elevated approximately 180%,^[4] reflecting an impressive growth in individual purchasing power as well as the amount of diverse goods, both likely to be correlated with technological advancement. In the next century, more revolutionary innovations emerged such as the automobile. A contemporary commentator wrote that "the most comprehensive change [automobile] has wrought for [people] has been the general widening of the circle of [their lives]." ^[5] Indeed, automobiles enabled people to establish connections with the world and to migrate to more places, especially from city centers towards the suburbs. ^[6] These inventions improved the living standards in the United States substantially because people could access more types of resources within a shorter time. Therefore, technology had largely maintained its function in pushing the society forward during the fifty years.

2. CONFLICTS WITH RELIGION

Conflicts appeared amid this wave of transformation as the development of science clashed with the long-standing system of religion since they proposed different ways to explain natural phenomena and human existence. Since Charles Darwin published his theory about evolution and natural selection, a new philosophy called social Darwinism emerged. The followers believed in the "survival of the fittest" proposed by the scientist and applied it to the society, arguing that only capable ones could become affluent. Some even justified imperialism with the philosophy that imperial countries colonize other inferior countries to preserve their high quality for human evolution. ^[7] However, Darwin's theories contradict the explanation in the Bible that humans and other species were created by God and therefore were inherently distinct. For the first time in history, the system of religion was challenged by another competing system from the root. Believers started arguing back with shock, and the war between the two systems formally began in 1869 when the

president of Cornell University Andrew Dickson White lectured that both sides were harmed due to this intense rivalry.^[8] After Tennessee, a state sitting on the Bible belt, outlawed the teaching of evolution at school, one of the most famous court cases, the Scopes Trial, took place in 1925 when a high school teacher John T. Scopes was indicted for teaching evolution in the state. The clash between "[preventing] bigots and ignoramuses from controlling the educational system" and "protection the Word of God from the greatest atheist and agnostic" ended with a fine on the high school teacher,^[9] but it successfully kindled wide disputes between the scientists and the faithful. The trial ignited the flame of collision between the two sides, yet the discussions "always leave the reader precisely where he started,"^[10] all by virtue of science. Thus, science in the twentieth century added the role of an agitator among people with contrasting beliefs, acting as a centrifugal force and stirring up ineffective debates.

3. REINFORCEMENT OF SOCIAL HIERARCHIES

The mindset of scientific explanation soon expanded to help the reinforcement of social hierarchies such as race and gender relations. In an era when scientific and technological development had become the trend, individuals borrowed the mindset and applied it to justify their personal beliefs, if not religion. For instance, a novel branch of science called eugenics was established in the early twentieth century and argued that humans should regulate their reproduction to pass on the favorable traits and remove the undesirable ones, borrowing Mendelian genetics for legitimacy.^[11] Consequently, state governments started passing laws to promote eugenics, namely the Asexualization Act of 1909 in California that pushed for sterilization of African Americans as well as people of Mexican origin.^[12] The federal government also funded programs to sterilize the vaguely defined "undesirable populations."^[13] Such legislation backed by science gave tremendous opportunities for discrimination against people of color because the terms were so subjective and open to any interpretation, perpetuating the already unbalanced racial dynamics. Gender relations were also influenced by the tide of technology, some of which were beneficial to women's rights. For example, the invention of typewriters gave women more opportunities for employment; In 1880, only 5 percent of clerical office workers were female. By 1900, this figure had climbed to 75 percent.^[14] However, such figures can also reflect the circumstance that for most times, female office workers only received jobs with less power, while most high-level officeholders remained in men's hands. Another example of potentially harmful creation to women's position in the society is

electricity, as it diminished the role of domestic servants who were gradually replaced by women saddled with more responsibilities.^[15] Since these hierarchies long existed, it was extremely difficult for the few social movements to eradicate such opinions. The blossoming of science and technology provided the majority who supported the institutions more grounds to defend themselves. Overall, the development of science and technology became more tainted with the desire of maintaining existing social institutions over time, as different groups tried to justify themselves using the new findings. Nevertheless, the advancement was happening globally as countries raced to fill their arsenals, and it is inevitable for the United States to sustain its global position if not gaining; in the following World War II, this advancement eventually provided America with the capacity of responding with strong military actions and seizing a dominating position in the world.

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Research on Industry-University-Research Collaborative Training Mode for Applied Undergraduate Colleges and Universities

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Abstract: Applied undergraduate colleges and universities are the main source of strategic human capital introduced by enterprises, which determines that they should accurately position their professional training objectives in the process of talent cultivation and organically integrate academic education with practical application skills. From the perspective of collaborative cooperation, this article proposes a collaborative talent training mode for industry-university-research collaboration on the real problems of talent training in China's applied undergraduate colleges and universities to promote better development of applied undergraduate education.

Keywords: Applied Undergraduate, Industry-University-Research Collaboration, Talent Training Mode

1. INTRODUCTION

Since the 1980s, the international education community has begun to attach importance to practical teaching and the cultivation of applied talents. Many local undergraduate colleges and universities in our country have gradually transformed into applied undergraduate colleges and universities according to the needs of social and economic development.

According to the current training mode of China's applied undergraduate colleges and universities, there are a series of problems such as a high proportion of theoretical course hours in the total number of hours, and a low degree of professional fit between graduates and the jobs they are engaged in ^[1]. In order to effectively solve these problems, it is necessary to coordinate the cooperation of resources from multiple parties such as the government, universities, and related enterprises. On the basis of giving play to the educational advantages of all parties, a synergy of $1 + 1 > 2$ can be achieved to meet the needs of the economic society for applied talents and contribute to the construction of an innovative country.

2. PROBLEMS IN THE CURRENT TALENT TRAINING MODE OF APPLIED UNDERGRADUATE COLLEGES AND UNIVERSITY

The talent training mode is the whole process of talent training under a stable curriculum system under

the guidance of certain education theories and ideas for specific training objectives of different majors. In recent years, the rapid development of applied undergraduate education has cultivated many high-quality applied undergraduate graduates. While achieving tremendous educational achievements, there are also a series of problems in training mode.

2.1 The Goal of Talent Training Is not Clear

In the process of formulating talent training programs, most colleges and universities lack the pertinence to the positioning of training targets ^[2]. The majors did not combine the actual development of domestic and international economic development and industrial structure changes to conduct detailed analysis and research on market trends and market orientation, and pay attention to the special needs of related industries (enterprises) for future talents in real time.

2.2 The Design of the Curriculum System Is Unreasonable

Most of the applied undergraduate colleges and universities do not highlight the practicality and practicality of the curriculum in the design of the curriculum system. In terms of the proportional allocation of class hours, the classroom theory teaching hours greatly exceed the practical teaching hours. In addition, the course assessment method is too simple. Generally, the final closed-end exam or the submission of course papers are used, combined with the usual attendance and classroom performance to give a comprehensive score, which does not fully reflect the student's participation in the daily teaching process and practical application ability.

2.3 Teachers' Professional Practice Ability Is not Strong

At present, among the teaching faculty of applied undergraduate colleges and universities, there is a relatively high proportion of teachers with high academic qualifications and professional titles, and there is a relative shortage of dual-qualified teachers. In addition, there are not many opportunities for these teachers to contact with enterprises or obtain relevant professional qualification certificates in their daily work. They also do not pay attention to skill training while imparting professional knowledge to students, so students' hands-on ability and practical application ability are relatively weak.

2.4 Imperfect Training Conditions Inside and Outside Colleges and Universities

Applied undergraduate colleges and universities have higher requirements on training conditions and environment than traditional academic undergraduate colleges and universities. At present, due to the limitation of funds and other objective factors, the practical training conditions in applied undergraduate colleges and universities are relatively lacking. Furthermore, the construction and update process of off-campus training bases is relatively slow, which is not conducive to the formation of benign and stable off-campus training bases.

II. Positive Role of Industry-University-Research Collaborative Training Mode

The "innovation theory" was first proposed by the economist Schumpeter. In the 1970s, German physicist Haken founded the theory of synergy. The synergy innovation theory is embodied in the cultivation of talents in applied colleges and universities, and it is manifested in the collaborative education of industry-university-research.

The cooperative education of industry-university-research is aimed at cultivating applied talents with comprehensive quality. In the teaching process, through the collaborative cooperation of industry (enterprise), colleges and universities, relevant research institutions and government policies, to ensure that students obtain a solid theoretical foundation, comprehensively improve their professional skills and practical application ability.

Driven by the collaborative training mode of industry-university-research, applied undergraduate colleges and universities integrate teachers to teach theoretical courses, laying a solid foundation for students to learn theoretical knowledge. At the same time, colleges and universities introduce high-quality resources from off-campus cooperative enterprises. Through the teaching of practical cases such as real cases and software operations, teachers help students complete the deep integration of theory and industry education.

The collaborative training mode of industry-university-research helps to form an interactive mechanism of internal and external linkage. The collaborative training mode of industry-university-research is to use high-quality resources of enterprises and universities for education and teaching. Colleges and universities establish long-term cooperation mechanisms with relevant enterprises according to the characteristics of their majors. Through real-time interaction, the enterprise gives back their specific needs to colleges and universities to help them to have a more clear training goal.

3. IMPLEMENTATION STRATEGIES OF COLLABORATIVE TRAINING MODE OF INDUSTRY-UNIVERSITY-RESEARCH

3.1 Clear Talent Training Goals

Taking the specific needs of enterprises as the goal of

talent training, applied undergraduate colleges and universities are based on their own school-running advantages and professional characteristics under the guidance of relevant government industrial policies. In the light of the actual educational resources of our university, the core issue of cultivating students' application skills is implemented through a series of measures such as adjusting admission resources, in line with the implementation of clear human resources training goals oriented to the market demand.

3.2 Optimize Course Structure

Applied undergraduate colleges and universities establish a cooperative relationship with enterprises through collaborative education, and organically combine theoretical learning and practical operation according to the specific needs of cooperative enterprises. In the design of the curriculum system, we should devote ourselves to the cultivation of students' ability to apply theory to practice. In terms of class hours allocation, class hours should be reasonably allocated with practice class hours, so as to provide students with more opportunities for skill training and innovation ability training. In the setting of theoretical courses, to break the problem of the previous form of assessment is too single, increase the proportion of process assessment results, while at the same time the form of assessment is flexible.

3.3 Strengthen Teacher Development

The teaching faculty of applied undergraduate colleges and universities not only need to have high theoretical literacy, but also have strong practical ability. This requires colleges and universities to introduce part-time instructors from cooperative enterprises on the basis of strengthening the core competitiveness of their own teaching staff to provide strong support for the cultivation of comprehensive and applied talents. With high titles and high academic qualifications as the core teaching backbone, colleges and universities should lead the teaching team to continuously carry out curriculum construction. At the same time, teachers are encouraged to enhance their own practical skills through a variety of means, such as encouraging them to go to partner enterprises for on-the-job training from time to time to gain practical experience^[3].

3.4 Rationalization of Practical Training Resources Inside and Outside Colleges and Universities

For the on-campus training resources, on the one hand, on the basis of understanding the actual business operation needs, the original laboratory is upgraded to provide students with the most practical training scenarios. On the other hand, establish student entrepreneurship centers that are project oriented. to create a large number of practical opportunities for students.

For off-campus practical training resources, applied undergraduate colleges and universities should always be oriented to the goal of training. Combining

professional characteristics and enterprise needs, we will work together with the government, universities and related enterprises to build a quality off-campus base.

4.CONCLUSION

As the main source of sending strategic application talents to enterprises, applied undergraduate colleges and universities can solve the problems of unclear target positioning, unreasonable curriculum structure design, weak professional practice ability of teachers and imperfect conditions of practical training inside and outside the university through the cooperative cultivation mode of industry-university-research. It is believed that with the joint efforts and interaction of multiple resources, the theoretical and practical abilities of students will steadily improve.

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Characteristics of Non-GAAP Earnings Measure

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Abstract: To form a comprehensive understanding about the goals of non-GAAP earnings, we reviewed and discussed many literatures covered from 2003 to 2008. The focus of our research shifted from the reasons of reporting this disclosures, various goal reporting needs to comparisons among alternative disclosures that based on hand-collected pro forma press. Specifically, we chose several papers to structurally illustrate the purpose of companies' reports on non-GAAP performance measures, including expectation, informativeness and manipulation.

Keywords: Non-GAAP earnings, disclosures, manipulation

1. CHARACTERISTICS OF NON-GAAP EARNINGS MEASURE

Non-GAAP earnings, also known as pro forma earnings, are an accounting method that derives from GAAP earnings. Different from GAAP earnings, pro forma earnings exclude one-time transaction that are required for GAAP earnings measures.^[1] Recently, scholars try to find out advantages and harms of non-GAAP earnings in order to better evaluate this new accounting method. Figuring out the purpose of using this method is important because it helps the investors fathom the situation they are facing to. According to present research, non-GAAP earnings can be manipulative and misleading,^[2] meanwhile it is informative.^[3] Some recent changes are also noticeable.^[4] Necessarily, this focus of non-GAAP keeps the investors from being deceived and helps them concentrate on practical information. Through those researches, we found out that companies tend to use non-GAAP earnings to present their performance in a way that can positively bias the opinions of costumers.^[5] Managers use non-GAAP earnings to either meet or beat analyst forecasts to benefit themselves. We are also informed that non-GAAP earnings do not include non-recurring or transitory items. Thus, it is more informative about future earnings, however, some argue that it is to change investors' perception of firm performance. There is a critical examination over non-GAAP reporting and intervention from the US Securities and Exchange Commission (SEC) since the SEC recognized the potential for negative manipulation.^[6] In an effort to reduce the manipulation, the SEC implemented Regulation G with policies on disclosure of

non-GAAP measures as regulations to modify this set of standard.^[7] Following Regulation G, managers generally disclose transitory gains and report non-GAAP earnings that improve performance which is an unintended consequence of Regulation G.^[8]

2. OPPORTUNISTIC DISCLOSURE

As one of voluntary disclosures, non-GAAP earning measures, which in turn could be called opportunistic. There are ethical reasons of reporting those. Some intend to affect share price in order to reach the goal of maximizing shareholders' values. Reporters know investors would notice forecasts. Non-GAAP can help them exclude few items but simply show positive earnings. With that, investors at least hold more positive attitude towards the company, especially non-professional investors. They would largely be influenced by non-GAAP measures in press release because knowledge is not strong enough to clearly recognize every adjustment manager made, or even they know, probably would be misleading. There are managers who would intentionally emphasize on non-GAAP to make firms appear to meet strategic targets and such reports flourish in the market, shown by statistic data.^[9]

3. MANIPULATION

Some companies voluntarily disclose information that can favorably manipulate judgements of investors. This voluntary disclosure would mislead investors. They combine recurring items with high impression management, which shows their attempt to positively bias the investors by changing their perception about the persistence of non-GAAP earnings. Usually, managers use the metric that portrays the better performance, and comparatively speaking, non-GAAP earnings are favored over GAAP and non-professional investors' reliance on it. Also, they purposely emphasize financial measures in press releases. Managers prefer to meet expectations based on neutral report of solid operating performance.^[10]

4. INFORMATIVENESS

Gathered paper examined comparisons between pro forma, GAAP earning and I/B/E/S about their value-relevant and predict ability. Managers choose non-GAAP must due to some specific reasons. Samples collected by market show that an increasing number of reporters decide to disclose non-GAAP earnings, which implies that it is gradually occupying the market. Generally speaking, non-GAAP earnings

are more value relevant than GAAP, shown by theoretical model.^[11] Since investors, especially unsophisticated one, pay a lot of attention to a company's core income and profit, non-GAAP that usually reach benchmark functions well here. So, they are considered as value related. The benefits of using non-GAAP include enhancing reporting transparency through income branches, disclosing earning less costly and update information timely. Although there are critics view pro forma as misleading term, managers argue for themselves that it is a kind of straight forward and predictive disclosures to show core earnings, which is quite friendly for unsophisticated investors. Also, it is found that high-technology and service industries tend to report those more.^[12]

Some evidence suggests that informativeness of earnings to predict long-term profit is declining. Non-GAAP metrics can be informative to investors because it is disclosed and demanded by users for both purposes of valuation and contracting. For non-GAAP metrics to be useful, they must be credible and accurate, or people would just disregard non-GAAP disclosure.

5. INTERVENTION OF SEC.

SEC stands for the U.S. Securities and Exchange Commission, and it takes the responsibility for regulating disclosure of non-GAAP financial measures. Those rules imposed additional disclosure and filing requirements on disclosing non-GAAP earnings. This regulation is called Regulation G, and it was to announce some new criteria including demands for present of most comparably GAAP financial measures and a reconciliation of non-GAAP measures and GAAP measures. This action increased consistency and transparency, showing that SEC's wishes to inspire the investors with more intelligible information.^[13] Overall, the regulations have reduced the opportunistic use of non-GAAP earnings disclosures, and firms that stopped applying non-GAAP earnings after the intervention usually had lower quality exclusion. Those regulations interrupted the ascending trend in the way of reporting non-GAAP earnings such as using it to meet or beat earnings forecasts.

However, there might be unintended consequences arising from the regulations. Kolev et al. (2008) found evidence that the quality of special items declined, which indicated that managers shifted recurring expenses into other items so that they could adapt to the new disclosure environment.

6. CONCLUSION

This paper summarized what we know from a wide range of academic literatures regarding non-GAAP disclosure. Three aspects that lead to the purpose of using non-GAAP were presented. These insights should be helpful for investors, especially unsophisticated ones, attempting to understand why managers disclosure pro forma so frequently these

days. We summarize them into three important points. Firstly, non-GAAP earnings can easily reach benchmark, giving unprofessional investors great confidence. Secondly, non-GAAP earnings are value-relevant compared to other disclosures and the last point is the SEC regulation and regulation G impact on pro forma by constraining items being disclosed but the market is still positive. Additionally, the adoption of pro forma depends on setting for most cases, whether it is institutionally and economically developed or not. For strictly ruled market, like the U.S., such disclosures have to show vital items, which make them more reliable. SEC and G regulation did reshape environment, but tendency of disclosing pro forma is still fair.

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The Research-Tendency Analysis of Chinese Music Therapy and Korean Music Therapy in 2009-2019

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Abstract: With the development of science and technology, music therapy from the original simple listening to now combined with a variety of technology, science, medicine, art in the clinical process of music therapy, using more and more ways and methods. At present, music therapy in China and South Korea is in the development stage. Music therapy is not only art, but also science. From the perspective of music, it is a combination of music psychology, music sociology, music anthropology, etc. From the perspective of treatment, it is a combination of psychology, psychotherapy, psychiatry, etc. Because there are too many research methods, methods and results, it is necessary to sort them out. This paper mainly analyzes the research status of music therapy in China and South Korea in 2009-2019, and the research development. First, the paper is analyzed by objective retrieval data; second, the paper is analyzed by the existing research field statistics; third, the paper is analyzed by the research results. Through comparative analysis, the two countries can learn from each other and develop each other, and further improve the international requirements of the whole music therapy.

Keywords: China Korea Music therapy technique education

1. THE ORIGIN AND DEVELOPMENT OF MUSIC THERAPY IN CHINA

Music therapy was first introduced into China in the period of reform and opening up, during which China's economy, culture, science and technology level were in the rising period. People's understanding of this new psychotherapy method is full of misconceptions. Do they think that simple music can really be used for therapy? At this time, the so-called "music prescription" appeared in China. The biggest mistake in this period is that music is a medicine^[1]. It is obviously wrong to use music as a medicine to compel listening. Since China's reform and opening up, there have been some welfare institutions for music therapy. At the beginning, everyone cast a curious eye, but in the subsequent development process, they have been closed. At this time, China has the economic ability to receive music therapy, only a small number of people, plus music as a "drug" to be forced to listen, which is obviously

unscientific. In order to develop music therapy in China, the first thing we must face is to establish a correct concept of music therapy. Now, China's science, technology, culture and politics are strong, and music therapy, art therapy and movement therapy have developed in succession. In some professional music colleges in China, there are courses of music therapy, mostly learning western music therapy professional knowledge, such as music psychology Trauma intervention, GIM music guided imagination and so on, some professional music teachers began to engage in music therapy, and really participate in the clinical practice of the hospital. To create new music therapy methods in practice^[2].

The event that played a catalytic role in the birth of music therapy in China was Liu bangrui, a Chinese American professor of music therapy at Arizona State University, who made a systematic scientific introduction to the Central Conservatory of music in 1980. His lecture aroused great interest of musicians and doctors in music therapy. This is the first systematic and scientific introduction to music therapy. In 1984, Zhang Boyuan and others of Peking University published the experimental report "Research on physical and mental reactions of music", which reported the different physiological reactions of the subjects when they listened to happy music and quiet lyrical music. This is the first scientific research report on music therapy published in China. Music therapy in China is first implemented according to the experience of American development. The original music therapy is usually first explored by medical staff. However, due to the lack of music knowledge and skills of medical staff, they can't get rid of the simple listening mode, so they can't really make music therapy develop and mature. Due to the intervention of music professionals, the methods of music therapy have developed from simple listening to later complex listening techniques and various complex methods and techniques such as active participation and improvisation. Professionals engaged in music therapy believe that music is a powerful form of sensory stimulation and multiple sensory experiences. Music includes audible music (auditory stimulation) and perceptible acoustic vibration (tactile stimulation). When experiencing on-site treatment, it

can produce the experience of visual stimulation. In the background of music, dance or movement can produce the experience of muscle kinesthetic stimulation. In addition, the experience of music therapy can attract and maintain people's attention for a long time, and improve people's ability of concentration. Under the promotion of such theoretical background, Chinese music therapy will eventually develop and mature.

2. THE ORIGIN AND DEVELOPMENT OF MUSIC THERAPY IN KOREA

The time when music therapy was introduced into South Korea was about the same as that of China in the 1970s and 1980s. The first schools offering music therapy courses are Sookmyung Womans University and Ewha Womans University. In addition, the two universities each have a music therapy association supported by themselves to promote the development of discipline construction and form a win-win situation for the development of colleges and societies. After that, other schools continued to offer music therapy courses, and music therapy began to be understood and accepted by Korean people. This major is not set up separately in Korean university undergraduate. Music therapy is only a course in university undergraduate, unlike vocal music, orchestral music, dance and so on. Music therapy starts to have an independent specialty from the graduate stage. Therefore, students who study music therapy at the graduate stage have different majors at the undergraduate stage. Most of them come from psychology department, pedagogy department, special education department, sociology department, art department and other related departments. Music therapeutics includes the related knowledge of psychology, medicine and musicology, which not only embodies the artistic beauty of music therapy itself, but also embodies the role of music expression content, the role of music in clinical practice, and the related knowledge of psychology, medicine and Musicology in the learning process of music therapy in South Korea. To promote the further development of Korean music therapy, 1345 music therapists from 45 countries in the world participated in the conference. These therapists exchanged and shared the advanced music therapy techniques from all over the world. The development of music therapy in South Korea is inseparable from the experts and scholars who have returned from abroad. They learn the advanced western music therapy, and then return to their own countries, learn from each other, develop, create and reuse music therapy techniques. Korean music therapy, like Chinese music therapy, is influenced by American music therapy. At the beginning of its development, it imitates the construction of American music therapeutics. Although music therapy started in a short time, it has developed into a mature discipline and more and more universities have started to open music

therapeutics in the continuous efforts of Korean music therapists Department, music therapy has also been accepted by more hospitals and patients, and has been recognized by the society.

3. RESEARCH METHOD

3.1 Selection criteria

This paper studies the comparative analysis and research of Chinese music therapy and Korean music therapy. First, in order to grasp the previous academic achievements, from 2009 to 2019, all relevant academic articles in ten years are selected as the benchmark to better grasp the current development achievements. The article is divided into two countries for investigation: China National Knowledge Infrastructure (hereinafter referred to as CNKI). CNKI is the largest and most authoritative paper database in China. The key words searched in this study are "Chinese music therapy", "Korean music therapy", "Chinese and Korean music therapy". In South Korea, RISS database is used to retrieve theses and academic papers for analysis and research based on specific data. In the text analysis of this paper, only CNKI and RISS are used. The inclusion and exclusion benchmarks in the paper, as shown in Table 1, are more directional in the investigation.

Table 1. Inclusion criteria

1. Research results of Chinese music therapy and Korean music therapy from 2009 to 2019
2. Focus on music therapy
3. Human subjects
4. Chinese data of the original text and Korean data of the original text can be viewed
5. Research on music as the main treatment technique in the treatment process
Exclusion criteria
1. Research on music therapy beyond 2009-2019
2. Taking animals as experimental objects
3. Exclude Chinese data that cannot be viewed in the original and Korean data that cannot be viewed in the original
4. Treatment research that is not based on music therapy.

3.2 Screening process

In the context of Korean data, the first screening is to exclude research papers that cannot be viewed in the original text; the second screening is to exclude non related music therapy other than China and South Korea, such as music therapy in the United States, etc. in combination with topics; the third screening is to exclude non music therapy centered paper research. The results are as follows,

South Korea RISS 2009-2019, Through RISS, 247 papers related to the theme were retrieved. For the second time, the 247 papers were sorted out, including 239 Korean music therapy papers and 8 Chinese music therapy papers. For the third time, the

results of the second classification were sorted out, including 8 doctoral papers, 143 master's papers and 96 other papers.

In the context of Chinese data, the first screening is to exclude research papers that cannot be viewed in the original text; the second screening is to exclude non related music therapy other than China and South Korea, such as music therapy in the United States and so on; the third screening is to exclude non music therapy centered paper research. The results are as follows: China CNKI 2009-2019, Through CNKI, a total of 192 papers related to the theme were retrieved. For the second time, the 192 papers were sorted out, including 0 music therapy papers in South Korea and 192 music therapy papers in China. For the third time, the second classification results were sorted out, including 6 doctoral papers, 42 master's papers and 144 other papers.

3.3 Research object analysis

The content of the selected paper data is analyzed and sorted out. The research objects are roughly divided into three stages. The first stage is the stage of children and teenagers, which is school education. Therefore, the research objects are kindergarten, primary school, junior high school and senior high school students, all of whom are under 16 years old. The second stage is adults, and the adult stage mainly includes school learning Birth and preparation for employment, unmarried, pregnant, postpartum and under-60s are included in the adult stage. The third stage is the elderly stage. The elderly stage is the most studied stage in music therapy in China and South Korea, including the elderly and the elderly over 60 years old.

3.4 Target area analysis

This study refers to the field of human development and the functional field of music response, In all aspects of research, classification and arrangement are carried out in Table 2. The target areas of music therapy are consistent with the treatment expected results, which is a very important point in the design of music therapy. In order to achieve certain music therapy goals, scientific methods must be used, and the basis for experiments in the scientific target areas is the effectiveness of music therapy activities Guarantee. In the target domain, it includes cognitive domain, physical domain, social domain, language domain and so on. Compound field refers to the use of more than two kinds of treatment methods in the treatment activities, which is the most common in the current music therapy activities.

Table 2. Classification standard

target area	Classification standard
Cognition	Taking memory, attention, problem-solving ability, discrimination ability, task, execution ability, perception ability and intelligence as variables;

body	The changes of physical functions such as sensory motor technology, sense of coordination, function of muscle regulators, walking training and pain relief are variables.
language	Variables used to express language and accept the language functions related to pronunciation, pronunciation, breath, tone problems, improve language functions, lexicology and other communication needs.
Sociology	Taking social adaptability, problems related to social technology or social calling function, formation of relationship with others as variables;
emotion	Personal psychological objects (including quality of life, subjective well-being, etc.) take positive and moderate books, negative emotions, emotion identification, self-concept, relaxation pressure and other fields related to inner emotions as variables;
Reunite with	More than two areas

3.5 Analysis on the classification standard of music therapy

The original techniques of music therapy are just simple listening. In the continuous development, music therapists have created more and more treatment methods, including singing, music creation, musical instrument performance, music appreciation, music action, etc. For example, instead of language, singing is used to form musical dialogue, which is a form of expression of music. Musical instrument performance is mainly the imitation and recreation following the rhythm of the therapist. On the basis of imitation, add your own ideas to express the inner feelings of the speaker, which is the strength of musical instrument performance. In music appreciation, first of all, we should determine the music theme, and use the lyrics of the selected theme music to guide the interlocutors to associate and intervene. Music movement is the combination of music and sports. When the language cannot be expressed, the inner feelings of the inner talker can be expressed by body language. The therapist leads the patient to do some natural body movements under the guidance of music, gradually evokes the memory of body functions and enhances the ability of action expression through the guidance of music therapist. As shown in Table 3.

Table 3. Classification standard

Therapeutic method	Classification standard
Sing	Use voice to express the voice, melody and lyrics of a song
Song dialogue	Conversations related to

	individual or group songs
Singing discussion	Analyze the content or feeling of the lyrics, and discuss the musical elements or songs of the songs
Composing music	The object independently or together with the therapist, according to the treatment purpose, makes new lyrics or melody, or creates instrumental music, writing music and other music creation activities.
Improvisation	Improvisation of musical instruments without prescribed rules or structures
Musical instrument performance	Along with the rhythm of instrument performance, instrument performance, imitation rhythm, structured instrument performance, recreation of performance activities etc.
Music appreciation	Accept and actively enjoy music with the purpose of physical and emotional relaxation, including music and appreciation techniques (MI, GIM) etc.
Music action	Including activities aimed at guiding physical activities according to music.
Music therapy base	Based on music therapy in China and South Korea, activities provided by the developed music therapy instrument
Reunite with	Including two or more music therapy activities used in parallel.

4. RESEARCH FINDINGS

According to the trend analysis of music therapy in China and South Korea in 2009-2019, it can better provide direction for the future research of music therapy, and the effect of music therapy on people's mood is very favorable. As long as it can truly make

music and treatment objects synchronize, the vast majority of treatment of image emotions will soon start dialogue with music therapists, resulting in spiritual communication and music therapy Therapeutics is constantly developing under the promotion of these articles, and music therapy is also contacted by more and more people. Through the text analysis of music therapy, what kind of treatment methods should music therapists choose and what kind of music therapy means should be used in the process of treatment, this paper provides certain paper materials, which is also the value of this paper. Through the analysis of the current trend, we can grasp the mature music therapy technology that has been used now, and eliminate some technology that has been too long. In the group of music therapy, the old people are the main ones, and now more and more young people are constantly using a healthy way to solve the pressure and psychological problems, which is closely related to the continuous update of the current social music therapy technology and content Contact. According to different treatment objects, the development of music therapy potential is huge. Only with the continuous progress of the new era can music therapy be accepted by more groups. Through the text analysis of Chinese music therapy and Korean music therapy papers, this study finds that the two countries learn from each other's strengths and weaknesses Absorption and application can play a better role in the actual clinical trials, so that Korean music therapy can better enter China, so that Chinese music therapy can also be applied and developed in Korea. This study also provides certain literature value for the music therapy research work of China and South Korea in the future.

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Obedience under the 2019-nCoV Epidemic: Personality and Authorities' Impact

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Abstract: Obedience to different kinds of authority and the individual differences among undergraduate students are examined in this paper. Participants' willingness to share an article about the 2019-nCoV Epidemic from the authority on their social media accounts is assessed as the willingness of obedience. Their personality is measured on Five Factors Model under two types of authority, an official one and an experimental one. The results developed an insight in understanding the relationship between personality and obedience. It also provided inspirations for authorities while calling for public obedience, especially when emergency events happen.

Keywords: obedience, personality, authority;

1. INTRODUCTION

Obedience and disobedience are everywhere and exert great impacts on the society, which is well demonstrated from the recent epidemic in China. Though Chinese government asked people to wear masks while in crowded places, not hosting or joining parties to prevent infection, there were still series of party-caused collective infection of 2019-nCoV. Not only in China, people even gather together to protest against regional lockdown, resulted in further 2019-nCoV outbreaks. This research aims to understand people's obedience under the global health emergency event.

Obedience to authority has long been a core topic in social psychology. It is defined as negative behavior which people commit, lacking awareness, care or sense of responsibility. However, it also has positive sides for the construction of the society norms and order. In empirical researches, obedience is highly correlated with situation stimuli. In Milgram's paradigm, behavior is studied in a strong situation of deep consequence to the participants^[1]. According to the six type of social power^[2], authority can be based on reward, coercive, legitimate, referent, and expert power. Expert and legitimate power of the authority has been proved to explain most for people's obedience behavior^[3].

In addition to situation factors, individual difference, such as social intelligence^[4], correlates with obedience behavior as well. Though there were experiments suggesting that there is no significant differences found in six personality factors^[5], some proposed that conscientiousness and agreeableness were related to people's obedience to administrative

shocks to victims among people aged 26-54^[6].

In this research, we hypothesize that people show greater obedience towards the government authority than the expert authority. Because people may consider that the government has more power to spread news, which means the order of the government has law basis which is more convinced than the knowledge of the experts. The Five Factor Model is a comprehensive model of general personality traits^[6]. On the basis of previous research, people with higher scores on agreeableness and conscientiousness have greater tendency to administer electric shock on a victim and show higher obedience^[7-9].

In the 2019-nCoV epidemic, people share articles and information from various sources, in their WeChat moments. Rumors and various news show great power in influencing people's attitudes and emotional conditions. Thus, this behavior was considered as the paradigm to find out whether people obey the authority's order without any doubts.

2. METHODS

300 Chinese undergraduate students, who are also frequent Wechat users are recruited. They are informed that this is an experiment about the relation between people's personality and behavior under the current epidemic in China.

Firstly, they were asked to fill the NEO-PI-3, a revised NEO Personality Inventory intended for individuals age 12 and older, which measures the Five-Factor Model. The NEO inventories has been classified as Level B or S^[8]. It will scale participants on the five factors: Neuroticism (N), Extraversion (E), Openness to Experience (O), Agreeableness (A), and Conscientiousness (C). Then, an interview was conducted to record the participants' emotional conditions, behaviors and living experience during the epidemic for 10 to 15 minutes. After this, another staff will ask the participant to share an article in their WeChat moments. Half of the participants will meet a staff claiming to be an official, while the others will meet an experimenter. They were told that the article is the emergent news that needs to be spread to inform more people. When participants refuse to obey the request, the staff will respond with a sequence of feedbacks to make the participants agree. The two kinds of authority will reply with different set of feedback.

The experimenter:

Feedback 1: The article is based on our scientific research. Please share it in your WeChat moments.

Feedback 2: The information is provided by professors of our university to inform people more about the epidemic. Please share the article.

Feedback 3: The information is mainly provided by Doctor XXX, who is an expert in Virus and have written many articles about it. For the sake of the public health, please share it.

The official:

Feedback 1: We must widespread the information to inform the public about the latest progress in the study of 2019-nCoV. Please share the article in your WeChat moments.

Feedback 2: We are licensed by the government to study about 2019-nCoV. It's our responsibility to spread the latest discovery widely. Please spread the information.

Feedback 3: We represent the government. We are authorized to spread the latest discovery. As a citizen of the country, please share the article in your WeChat moments.

The feedbacks are used one by one following the sequence. If the participant asks if the content has been proved to be true, the staff will say: it is just a prediction. If someone says that he wants to read the article first, the staff will reply: of course, but other participant of the experiment has arrived. So please browse it quickly.

Participants' obedience will be pointed from 0-4, according to the feedback they agree after. If they share the article as soon as they are ordered by the staff, they will get 4 points; if all the feedbacks are refused, participants will get 0 point.

3. PREDICTED RESULTS

More than 60% of the participants may finally obey the order, which is shown in most experiments about obedience to the authority [9]. Regarding the scores of agreeableness and conscientiousness with the obedience score, it is predicted to show positive correlation ($r > 0$, $p < 0.05$) with Pearson Correlation. The result provides that individual dispositions can influence people's tendency of obedience.

Testing the obedience scores from two groups with different authorities, we predict that the official will receive higher obedience ($F_{\max} < 2$, $t > t_{0.05/2}$, $p < 0.05$) with Hartley's F_{\max} test and t test. On the opposite, the public perform obedience more to the expert. It means that the government in this region may have to some extent lost the public trust. If there is no significant difference between the two authorities, the basis power of the authority can be considered irrelevant.

Regarding the interaction of different authorities and personality factors, we may test the personality scores of those agree to share the article to different authorities, regardless of their obedience score. We predict that there is no significant difference between two groups on the scores of personality factors

($F < F_{0.05}$, $p > 0.05$) with ANOVA.

4. DISCUSSION

The command in this research causes different influence and results from aggressive behavior in empirical researches, providing another dimension of observing the motive and dilemma of obedience. The results are conducive for the government while providing information for the public during the epidemic. The government should consider about the methods of warning the public and how to get people obey the command. Effective releasing of information can bring the public away from rumors, anxiety and panic. It may also provide some enlightenment for the authority on how to instruct the public while making other political decisions and hoping to get the public obedience.

Despite its enlightenment, there are also some limitations in the research. For example, participants are undergraduate students, which unable to represent all the groups. The authority may be the combined production of the legitimate and social power. In future research, further analysis can be considered. Like difference between different authorities in other experiment paradigm, other factors of individual difference that influence people's preference of the authority, such as political stands, social intelligence and education background, and further implications of obedience to spread information.

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An analysis of the design management from aspects of process, organization, culture and management--a case study of IDEO

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Abstract : This case analysis is based on the history and the background of IDEO to link the idea to the contemporary design management. IDEO currently has about 550 employees, their business involve different areas, they always put user to the top priority and deeply understand user's feelings, then to explore their potential demand. The company also attaches great importance of design thinking, advocating human-centered approach to innovate, and encourage everyone to think and practice like a designer. The aim of this analysis report is to characterize IDEO's process, organization, culture and management through some research and various literature reviews. How the IDEO's innovation and thinking affect the market and people will also be discussed. This report concludes that the appropriate approach and management that can improve company's performance.

Key word : IDEO, management, innovation, culture, characterize

1. INTRODUCTION

Changes in the economic climate, namely in the form of development of science and technology and the rapid growth of GDP, commodities now not only play the role of satisfying survival but also that of enhancing quality of life.. From the customer's perspective, more money allows for more choice in consumption (Issa, Byers and Dakshanamurthy, 2014)^[1]. Greater wealth and buying power in the consumer presents challenge and opportunity for enterprises. In 1980, with the boom of Silicon Valley, each enterprise sought the development of new products. This allowed for the business cooperation of David Kelley Design, whose founder graduated from Stanford University's product design, the ID TWO Company of Bill Moggridge, who graduated from the Royal College of Art (RCA) and Matrix, started by Mike Nuttall. In the spring of 1991, these three design companies formally merged under the name 'IDEO', Bill Moggridge links to the word "ideology", with a company logo designed by Paul Rand (who once designed for IBM)(Ideo.com, 2015)^[2]. Today, IFrom a small company with only 20 designers, it has now become an enterprise with more than five hundred employees. In this case study, prior to characterizing IDEO's process, organization,

culture and management through various literature reviews, the reason why this question was chosen also will be explained.

IDEO's Process

"Design thinking is a human-centered approach to innovation that draws from the designer's toolkit to integrate the needs of people, the possibilities of technology, and the requirements for business success."

--Tim Brown, president and CEO

In IDEO, before starting work on a design, leading cognitive psychologists, anthropologists and sociologist experts etc. are often consulted in order best to understand the required consumer experience and in order best to ensure good co-operation with clients. Methods commonly be used include tracing users, building and maintaining video diaries and collecting anecdotal ideas and concepts etc. The group of experts then 'brainstorm' and analyze data that was gathered through analysis of customers, all the while promoting and encouraging inspiration and creativity. IDEO always asks its clients to participate in the whole process of "user experience design". Diagram1: Design process of IDEO (Moen, 2011, P2)^[3]

Step1: Understand and observe. It is necessary to understand not only the product to be designed, but also the problems and obstacles to be encountered, like market, customers, technology, regulatory restrictions etc. Observing real people in real life helps in finding out what their motivations are in making choices: what confuses them, what they like and dislike and what demand unsatisfied by current products and services there is. Design inspiration comes from in-depth understanding and observation (Moen, 2011)^[4].

Step2: Synthesize. The information gathered in step 1 is gathered together in one room, denoted the 'project room'. It is an important tool in successfully turning analyzed and observed information into design and strategic opportunities. It is also a method for classifying and recording creative ideas. People in the room discuss the photos, diagrams and pictures on the wall and everyone is welcome to give their opinions.

Step3 : Visualize. Being visual is key in IDEO's brainstorming process. When a problem is proposed, an innovative idea must be sought in order to solve the problem. The IDEO team employs brainstorming in the group discussion. When conducting a collective discussion, the participants can be a group of 3-10 people, meeting in a timeframe of around an hour. The discussion place is the project room. The situation must be not be too serious, rather relaxed and casual. Wallspace is filled with sketches, mind maps and diagrams etc. The best ideas are finally voted on.

Step4: Prototype. IDEO often opts to shoot a simulated melodrama or video construction depicting typical product usage scenarios, demonstrating the proposed usage of the product or service. A rough model is then used to communicate with customers or users with the aim of feedback improving the product. One of IDEO innovation principles explains that one picture is worth one thousand words, and the same applies to IDEO: a good model is better than a picture (Thomke and Nimgade, 2007)^[5]. The model and product are inseparable, the quantity and quality of a model direct impact the quality of the final product. The model not only determines the appearance of the final product but also the innovation ability index of the design firm (Openideo.com, 2011)^[6].

Step5: Implement. It is the last but longest step in the whole design process. In this step, the team must have finished product design and this phase culminates in a product guaranteed to work and be manufactured and distributed smoothly (Moen, 2011)^[7].

2.IDEO'S CULTURE

2.1.Innovative Culture Background

As is known to all, IDEO is based in America, a culturally diverse country that encourages open-mindedness and offers unlimited opportunities for innovation. Educational departments, non-governmental organizations, enterprises, universities, etc. are strongly supported and actively create conditions, atmosphere and a country-wide environment conducive to encouraging innovation.

Under such circumstances, Americans are convinced that imagination is more important than knowledge, because knowledge is limited. Imagination on the other hand, can summarize everything in the world and promote development. What's more, innovation is the source of the evolution of knowledge. Imagination forms a vital part of scientific research (Thomke and Nimgade, 2007).

2.2.Economic globalization as a cultural impetus

Economic globalisation provides a wider market for IDEO's innovations. A wider market enriches resources available to involve in strategy

development. The economic globalization leaves IDEO on a bigger stage, able to recruit more talent, and leaving them with greater access to a broader capital source, aiding IDEO in achieving an optimal allocation of resources. That is to say ensuring a minimum cost while creating the biggest benefit.

2.3.Full of strength and passion

IDEO created a studio system mode that quickly forms a team around the project and subject requirements. The company is always committed to achieving the ultimate goal, never fearing the deadline. Without hierarchy, they are always work in an atmosphere of openness and advocating freedom (Businessballs.com, 2015).

It is vital not to fear pressure- a fear that can distort thinking and practice, instead seeking truth from facts is needed.

Breaking the routine and seeking opportunities to change the existing conditions is important.

Observing things in innovation activities, beyond the time span of the thinking to seize the same thing in a different period.

The methods and procedures of innovation have no fixed frame. When considering problems it's important to be able to switch quickly from one idea to another, from one prospect to another. Solution should be sought from a variety of perspectives and aspects.

Promote the further development of thinking ability in practice, testing the correctness of results.

1.4The company's concerns

The IDEO team must be good at communication in order to understand the emotions of employee- their heart must be listened to. Mutual understanding, mutual trust and mutual respect are vital. IDEO advocate venting, the company even set up an entertainment part for staff to vent and to rest. There are concerns regarding closeness of employees. The company works hard to promote a team environment with no barriers, no discrimination and instead a staff culture of warmth, care and support (Thomke and Nimgade, 2007).

2.5.Group discussion

Group discussion is conceptual engine of the IDEO's culture. Every Monday, all members from IDEO studios to take part in a "display - talk" meeting, the meeting is different to those with usual companies. It is a noisy meeting. At the meeting, the latest model and concept are shown, ideas and information flow between colleagues as in a normal active studio design atmosphere, strengthening the unity between colleagues (Jaffe, 2003).

3.IDEO'S ORGANIZATION

There is a clear hierarchy in many organizations, a leader and a group of members, this system will make the team lack of unity and cooperation. IDEO's innovative features are based on individual employees and teams, so the company cannot have

management and operation like a massive company. The small operation can arouse people's ability to create.

Diverse role of employees ensure that the IDEO can constantly realize design innovation. This kind of staff role only can operate in IDEO, a less hierarchy and flexible small scale team. Large-scale and unified management cannot ensure the flow of talent, develop the superiority of the organizers and efficient executive ability of employees. So, IDEO's current organizational structure is the most effective and reasonable (Kelley and Littman, 2005).

4.IDEO'S MANAGEMENT

Large company, small operation

The organization structure of IDEO is characterized by "large company, small operation", divide the team into smaller groups. To realize the design process by this small, independent team. It is a flatter, less hierarchical and clear organization.

From the analysis of the process section, IDEO's innovation process needs professional team and interdisciplinary knowledge structure. Small scale team can help achieve fully communication and generate ideas, to ensure that the team has sufficient flexibility to adapt to market requirements. At the same time, we can see a short life cycle time of small independent organization make IDEO's team always in a state of flow, this is the first secret of IDEO to keeps innovation ability(Vague, 2015).

5.CONCLUSION

IDEO think should encourage developing new fields to practice interesting experiments without the existing market and technology. Concerned about some future design project can makes IDEO become an intellectual company, which can constantly create new ideas, communicate new ideas between the company and customer. This

view reflects that the IDEO is encouraging curiosity. Many customers including BBC media or global manufacturers such as EPSON, Matsushita, all are very concerned about the future development trend, but very few have the appropriate resources for future research. IDEO can keep the balance between illusion and reality (Kelley and Littman, 2011).

In this context, for most design company, especially some one whose organization structure is perfect and have certain scale should consider how to improve innovation ability and the design management level, rather than in the competition of price.

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Research on the Incentive Countermeasures of Teachers in Higher Vocational Colleges--Based on the perspective of target management

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Abstract: Higher vocational colleges must seize the opportunity of "double high" construction and strengthen the connotation construction, which is inseparable from the active participation and support of the teacher group. This paper first discusses the Overused word: important significant role of goal management in teacher motivation in higher vocational colleges from both theoretical and practical aspects, and then builds a high-level faculty, improves the teacher management model, builds a multi-development platform, and builds an open-sharing professional based on the goal management perspective. The group and the "humanized" salary management explored how to realize the full incentive of the teachers' group under the guidance of the "double high" construction goal.

Keywords: "Incentive Countermeasures"; "higher vocational education"; "target management"

1.INTRODUCTION

In order to strengthen the connotation construction of higher vocational colleges and make vocational education an important force supporting national strategy and local economic and social development, the Ministry of Education and the Ministry of Finance officially promulgated in April 2019 the implementation of "high-level vocational schools with Chinese characteristics and Opinions on the Professional Construction Plan (referred to as the "Double High Plan"). In recent years, with the expansion of higher vocational colleges, higher

vocational teachers have increased work pressure due to various reasons, increased job burnout, and the phenomenon of brain drain in higher vocational colleges has become more and more serious, which has greatly affected higher vocational colleges. Sustainable development. Therefore, applying Unusual word pair and effective incentives to the management of higher vocational teachers, attracting and retaining outstanding talents has become an urgent issue for research. According to the motivation theory in management science, human motivation Passive voice by some unsatisfied need or unfulfilled goal he experiences. Therefore, this paper chooses the target management theory as the research perspective to explore in the context of "double high" construction. The incentive path of teachers in higher vocational colleges is feasible[1].

2.THE RELEVANT LITERATURE REVIEW

2.1. The connotation and implementation significance of target management

Goal management is a goal-oriented management system that requires employees to decompose into individual goals as their primary responsibility, with self-control and participatory management as the way to achieve their goals, and then dynamically adjust targets through information feedback to achieve Incentives for employee achievement. All in all, "goal management is the management goal, that is, management based on the goal". The goal is the core, and management is just a practice around the main target(as in Figure 1).

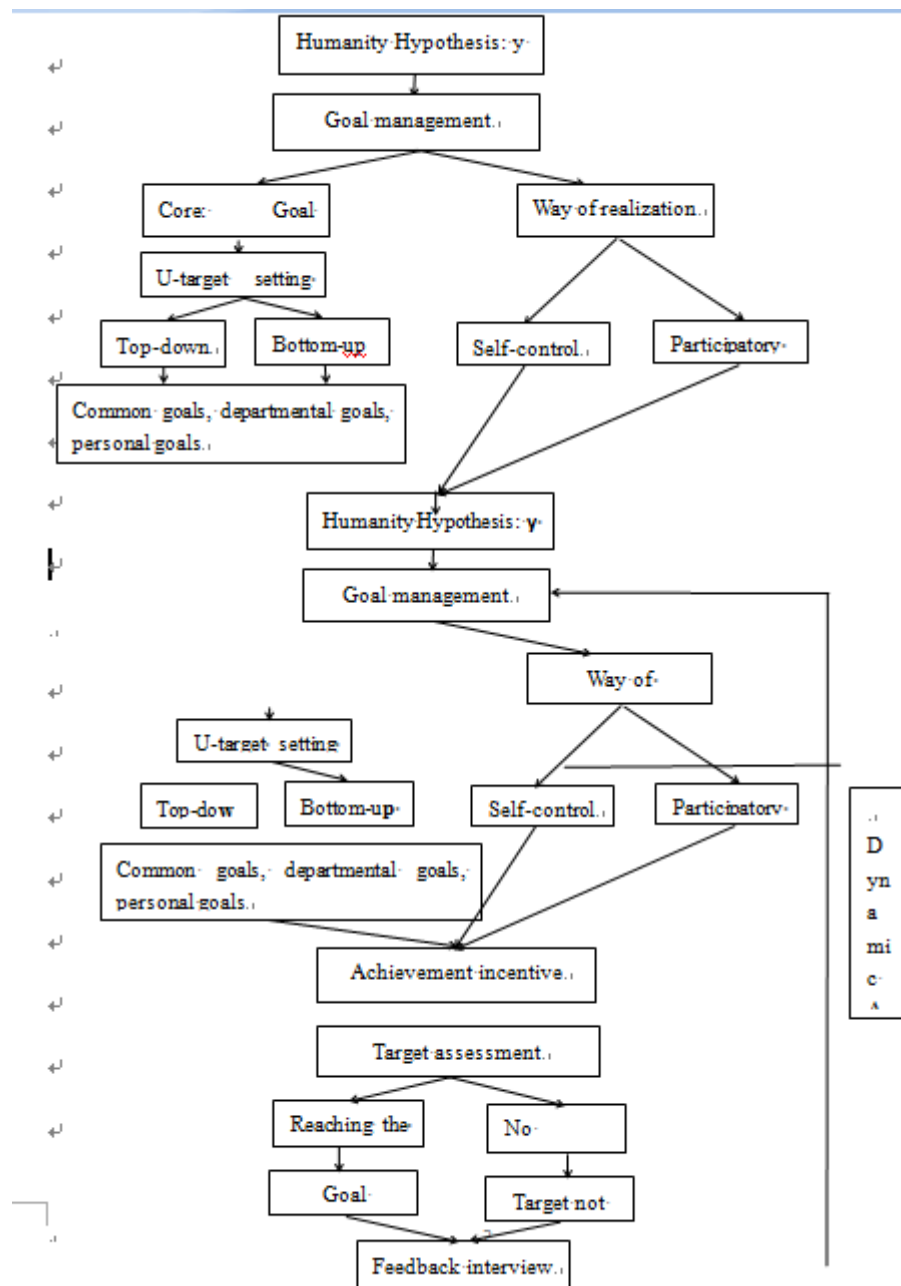


Figure 1: Target Management Process Diagram

(Source: Qiu Guodong. Re-examine Drucker's goal management [j]. Academic Monthly, 2013.)

In management practice, the essence of the goal management law is that both the organization manager and the general staff must participate in the formulation, implementation, assessment and summary of the objectives. Goal management theory provides an effective way to transform the organization's overall goals into departmental and member goals. It combines "work-centred" and "people-centred" to solve the relationship between "people and things". Problem. At the same time, goal management also replaces the management method from others with self-control and participatory management, not only paying attention to the results of results management but also focusing on process innovation in

self-management [2]. Through the organic connection between individual needs and work, the personal interests of employees are integrated into the completion of work goals, self-control to discover personal values, and to meet the self-realization needs while promoting the achievement of the organization's common goals.

2.2. Research on teacher incentives in higher vocational colleges

Incentive is to explore "how to make people want to do something" based on understanding "who is willing to do something", and take measures to stimulate the motivation based on understanding the motives of human behaviour[3]. There are many types of research on the motivation of teachers in

higher vocational colleges. Scholars analyze the incentive factors affecting teachers in higher vocational colleges based on different teachers and different discipline systems, such as administration, logistics, scientific research, and full-time teachers, and based on different perspectives. In summary, the influencing factors mainly include salary, management system, school culture environment, huge workload, and untargeted incentives [4-6]. According to the existing problems, it gives its suggestions such as material incentives, guaranteeing the fairness of incentives, perfecting the welfare guarantee system and the emotional incentive mechanism.

It can be seen that Wordiness the incentives of teachers in higher vocational colleges, such as management systems, but these are only external incentives for highervocational teachers, and there is no incentive to internally motivate . Fromthe very beginning, the goal management emphasizes the freedom of employees. The former external control is an internal incentive. It can greatly stimulate the internal driving force of employees through self-control and participatory management. This article attempts to find the goal management. The intrinsic factors affecting the incentives of teachers in higher vocational colleges help higher vocational colleges to achieve better development under the background of “double high”[7-9].

2.3. The relationship between goal management theory and teacher incentives in higher vocational colleges

Many scholars at home and abroad directly or indirectly discuss the relationship between goal management theory and motivation. The results of educational psychology research show that the right goal is to cause the mostimportant and direct incentives for behaviour, which can give people enough motivation and confidence to work hard to achieve their goals. Gong Yi (2018) proposed that the construction of applied talent training model depends on the process management and multi-participation of decentralized incentives in target management[10].ZhangZhiwen (2016) pointed out that due to the goal management, the needs of work and people have been unified. Through self-control, employees have discovered the interest and value of work, and the self-goal and organizational goals have been met together [11-12]. The predecessors' research has laid a solid theoretical foundation for the research of this paper. Target management is likea magnet attracting the interaction between organization and employees. It makes the incentive work routine, quantification

and standardization, and makes this attraction process more solid.

Third, higher vocational and technical colleges target management and teacher incentives practice exploration

With the continuous expansion of the scale of higher vocational colleges, it has presented new challenges to its management model. In recent years, the top 100 universities in the country have adopted the target management model for internal management, and have accumulated a lot of valuables. Experience[13].n Vocational and Technical College areone of the first demonstration high vocational colleges in China. Its target management practice is as follows:

At the school level, thenvocational and technical colleges, based on the annual work requirements of the Ministry of Education, the Provincial Department of Education and the competent departments, the school's school orientation, and the personnel training objectives, draw the school's annual keytasks and use this to formulate the school's annual overall development goals. The overall development goals are the key indicators for the annual goals of each department. At the level of secondary colleges and functional departments, the personal goal of the faculty and staff, that is, the “individual annual work assignment book” is mainly formulated by the leaders of each department and the leaders of the secondary school responsible for the target management. The annual task book mainly includes “Dayang Construction, The eight modules of planning work, departmental work, temporary work, other work, personal development, decomposition tasks, and education management are the basis for the work and assessment of the faculty and staff, and the results of the assessment and the annual staff. Substantial interests such as job appointments, job promotion, training and recognition awards are linked. According to the completion degree of these eight goals and tasks, the backbone teachers of the college no longer rely solely on the professional title and length of service, but the completion of the annual target task volume. According to the assessment results, a large number of young teachers are promoted as the backbone teachers, which inspires the vitality of the teachers. .Through the goal management,its graded managementreform pilot secondary college j college has been greatly improved in many aspects from project establishment to student and teacher competition in the three years from 2016 to 2018. The specific results are shown in Table 1 below:

Table 1: j college 2016-2018 results statistics

year Result	2016	2017	2018	total
Project establishment (item)	5	6	12	23

Project completion (item)	1	5	9	15
Publishing textbook (this)	0	1	15	16
Publication of papers	20	58	49	127
Patent (item)	1	6	8	15
Teaching achievement award (item)	0	3	0	3
Student Competition Awards (items) (School-level provincial and district level national level)	----	19	35	54
The teacher himself won the prize (item) (school-level provincial level)	----	4	19	23
total	27	102	147	

It can be seen that the goal management has great influence on the motivation of teachers in higher vocational colleges both in theory and in practice. Therefore, it is of great significance to explore the incentive measures of higher vocational teachers from the perspective of target management.

IV. Analysis of the Train of Thought and Path of Teachers' Incentives in Higher Vocational Colleges from the Perspective of Target Management

4. THOUGHTS

The key to goal management is to develop a general goal of science, and then divide the overall goal into a number of small goals, and implement them layer by layer. To play a leading role in the reform and development of vocational education and the cultivation of thousands of high-quality technical and technical personnel, so that vocational

education becomes an important force supporting national strategy and local economic and social development. To achieve the overall goal of "Double high" construction, it is inevitable that the active participation of higher vocational teachers will be required. Through the development of teachers' enthusiasm and initiative, the development of higher vocational colleges in various fields will be promoted.

This paper believes that higher vocational colleges should build a high-level faculty, improve the teacher management model, build a multi-development platform, build an open and shared professional group, and adopt "humanized" salary management. These five sub-goals are under construction. (as in Figure 2)

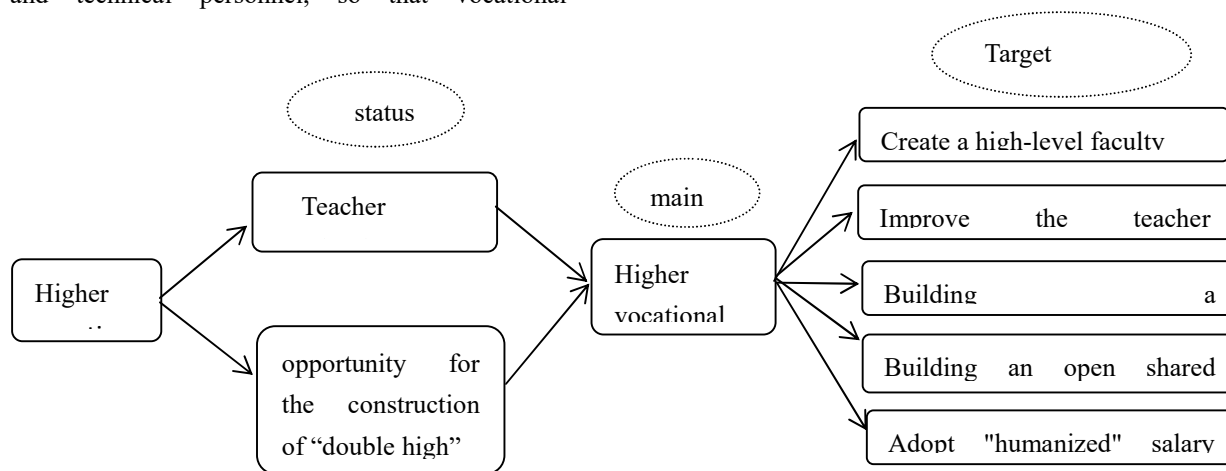


Figure 2 Incentive path for teachers in higher vocational colleges from the perspective of target management

5. PATH ANALYSIS

5.1. Create a high-level faculty

According to the goal of "double high" construction, higher vocational colleges must first actively introduce excellent professional talents in the construction of teaching staff, and plan to send teachers to enterprises to receive training, work and practice, and improve the teaching group. The second is to encourage higher vocational teachers to obtain professional-related vocational skill level certificates, and give policy support in research, such as reimbursement of examination fees,

promotion of job title, training in research, and construction of platform supply and demand certificates. Teachers exchange and share information, and build a team of "learning" dual-skilled teams; thirdly, encourage higher vocational teachers to actively go out, closely contact enterprises, apply technology to solve practical problems in production and life and strengthen new product development. And the promotion and transformation of technological achievements. And organize relevant skills training to serve the rural areas and the vast rural

areas; Actively introduce overseas talents, realize step-by-step promotion, strengthen exchanges and cooperation with developed countries, enhance the depth and breadth of exchange visits, serve the national "The Belt and Road Initiative" strategy, encourage teachers to actively undertake overseas training programs, and enhance the internationalization level of teachers.

5.2. Improve the teacher management model

At present, most vocational colleges adopt the three-level management mode of "schools and departments". This rigid management mode can improve management efficiency, but there are also problems of rigid organizational structure and excessive administrative colour. The flexible management method can better adapt to the current development of the teaching staff. To adapt to the development of the teacher group, higher vocational colleges should establish a "people-oriented" management philosophy, refocus management on teaching, and pay more attention to the teaching community. The development of the teacher team with higher vocational teachers as the main body. Secondly, the scientific post-analysis of the work of teachers in the higher vocational colleges is carried out. Based on the post-analysis, combined with the characteristics of the teachers in the new era and the characteristics of work, the tasks are assigned scientifically and rationally. In the post-analysis, it is necessary to fully obtain all aspects of the relevant post information, adopt a reasonable post-evaluation method, deeply analyze the responsibilities of each post, formulate scientific work instructions, put the right people in the right positions, and do their best to achieve Optimal staffing. Finally, the school level should properly decentralize, fully mobilize the initiative of each secondary school, and effectively put teaching and students in the most important position.

5.3. Build a multi-development platform

Research confirms that organizational support is an important factor in achieving college teachers' incentives [14-15], and it is therefore essential for teachers to build a diversified development platform. The first is to build a school-enterprise cooperation think tank platform. In-depth cooperation with industry enterprises in personnel training, employment and entrepreneurship, and build a technical skills think tank platform that combines product development, process development, technology promotion, and master training functions to achieve resource sharing and promote innovation and core technology transformation. The second is to build a social service platform. Strengthen the transformation of teachers' research results, and the school will provide supporting funds and policies for teachers participating in horizontal projects. The third is to build an international

exchange and cooperation platform. Higher vocational colleges should actively go out of their way of thinking, strengthen exchanges and cooperation with developed countries in vocational education, cooperate in vocational education and training, and conduct academic exchanges.

5.4 Building an open shared professional group

Innovate professional groups with new technologies and new models such as big data, cloud computing, and Internet+. The first is to change the traditional teaching and research section organization method, break the professional restrictions, build a community of government, industry, research and research, training centers, and create space, and create scientific research, teaching, and physical platforms. Through these three platforms, the benign interaction between teaching and research is realized, the quality of personnel training is improved, and the local economic development. Second, the establishment of school-enterprise cooperation companies, mobile workstations, and research and development bases. And other resource sharing modes, for teachers, students, employees and technicians to build a platform for scientific research cooperation, technical exchanges, new product development and student internships, and strengthen the sharing of case teaching resources and commercial actual combat projects, and promote the school. The benign interaction between professional teachers and corporate teachers also enables modular teaching.

5.5. Adopt "humanized" salary management

Different from the traditional reward and punishment salary management, humanized salary management is to take humanity as the starting point. It is not to require managers to pay more wages than employees in the past, but to make employees pay for the salary on the premise of the existing salary level. Payment has a more enjoyable psychological feeling. To build a "humanized" salary system, the focus can be started from the following aspects: First, the humanized treatment of monthly salary. Adjust the proportion of basic salary and reward based on the existing salary level of higher vocational teachers, and focus on strengthening outstanding rewards. The third is the humanized treatment of the profit-sharing plan. Adjust the proportion of general salary and profit-sharing based on the existing salary level of higher vocational teachers, and focus on strengthening the outstanding profit sharing. While meeting the monetary compensation of faculty and staff, it also satisfies its spiritual needs and mobilizes the enthusiasm of the teacher community.

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Feedback uptake rate and uptake difference in English writing revision during three-level-feedback stages for Chinese EFL learners in an online English writing context

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Abstract: English writing is one of the important language skills that Chinese EFL learners must master in the process of English learning. Scholars both domestic and abroad have conducted a large amount of research on effects of peer feedback on English writing, but there are few studies about three-level-feedback(automated feedback, peer feedback, teacher feedback) uptake for Chinese EFL learners in the field of English writing revision especially under the circumstance of three-level-feedback stages in an online English writing context. Data were collected by analyzing drafts of eight students taking an online English writing course at Renmin university of China, and conducting interviews with them. Research results showed that automated feedback uptake occupied the smallest proportion and teacher feedback accounted for the largest percentage.

Key words: Feedback uptake; Online English writing; Automated feedback; Peer feedback; Teacher feedback

1.INTRODUCTION

Peer feedback activities are widely used in writing classes not only because they have been shown to provide a range of benefits to the learner(Liu & Hansen, 2002), but also because they can be used with students who vary in their language proficiency(e.g. Mendona & Johnson, 1994; Nelson & Murphy, 1992; Suzuki, 2008). However, no studies to date have compared peer feedback with automated feedback and teacher feedback in

English writing revision especially on the background of online English writing course^[1].

2.LITERATURE REVIEW

Research into the effectiveness of peer feedback has been overwhelmingly consistent in detailing the validity of the activity in terms of assisting writers in developing their writing(e.g. Hyland and Hyland, 2006; Liu and Hansen, 2002)^[2]. The main findings from this research are that with appropriate training, peer feedback is likely to lead to the development of social skills, cognitive skills, and meta-cognitive strategies(De Guerrero & Villamil, 2000; Mendona & Johnson, 1994; Min, 2005; Suzuki, 2008; Villamil & De Guerrero, 1996), improved text quality(Berg, 1999; Suzuki, 2008) and writing ability(Lundstrom & Baker, 2009). This study mainly focused on feedback uptake rate and it was in different stages from automated feedback, peer feedback to teacher feedback during online English writing course.

3.RESEARCH QUESTIONS

What percentage of feedback is incorporated by Chinese EFL learners during three feedback-revision stages in an online English writing context?

In what ways did learners incorporate feedback in different feedback-revision stages?

4.METHOD

4.1Participants

The information of the participants is demonstrated in the table 1 below:

Table.1.Demographic information of learner participants

	Gender	major	Grade	English Grading Level for Admission	English Grading Test for Admission Score	Written Task Score Given by Pipinwang	Written Task Score Based on IELTS Writing Scoring Criteria	Self-rated English Proficiency Level	Self-rated English Writing Level
Learner1	Female	Philosophy	Junior	Level 4	70	88	6	Average	Average
Learner2	Female	French	Sophomore	Level 3	63.5	89.5	6	Average	Average
Learner3	Female	International Politics	Junior	Level 4	70	89.4	6	Good	Good
Learner4	Male	Industrial and Commercial Management	Junior	Level 3	57	86.1	5	Average	Average
Learner5	Female	Finance	Junior	Level 4	76	87.1	6.5	Bad	Bad
Learner6	Female	Journalism and Communication	Junior	Level 3	69	89.4	6	Average	Average
Learner7	Female	Marxist Theory	Junior	Level 3	59	90.6	5.5	Good	Average
Learner8	Female	Industrial and Commercial Management	Junior	Level 3	68	92.2	6	Average	Average

4.2Measures

Online academic English writing course

Since the course is an online course, it is distinct from normal face-to-face class. Most of the course

content is put on the internet and displayed in the way of videos so that the students could watch and learn them in any time at any place before writing an essay, during which physical class would be

implemented about once a month by a foreign language teacher to summarize questions and lecture structure of the composition^[3]. Apart from that, the course is a three-level feedback model. After the teacher gave a writing task, students' compositions would be submitted on the Pigaiwang and automatically scores would be generated and then a large number of writing suggestions, automated feedback, were provided regarding the essay. Next, peer feedback and teacher feedback came along. As an optional course of Renmin University of China, all participants took the course and underwent three-round revision, during which the researcher studied feedback uptake rate and analyzed reasons by interviewing. In this study, all participants were invited to write a given-topic essay based on a prompt for completing the writing task on the given topic. The topic selected for this study was deliberately general, culturally inoffensive, and familiar to participants^[4] perception. This guaranteed fairness to every participant. Each respondent was required to write more than 200 words to submit it to Pigaiwang before deadline^[5].

4.3 Coding scheme

Suggested revisions were coded using Faigley and Witte's (1981) coding scheme. This coding scheme, which has been used in previous studies on the feedback process in L2 writing (Connor & Asenavage, 1994; Paulus, 1999; Phinney & Khouri, 1993), is useful because it distinguishes between two levels: surface changes and text-based changes. The former includes suggested revisions that do not change the meaning of the text and the latter includes those that do. In turn, these two levels are divided into four categories: formal changes (e.g. spelling, tense), meaning-preserving changes (e.g. word choice, active to passive sentence changes) and meaning-related changes (e.g. content and rhetoric-related revisions) at a microstructure level and meaning-related changes at a macrostructure level^[6]. We preserved the general distinction between surface and text-related changes, and the distinction between formal and meaning-preserving changes within surface revisions, but we did not distinguish between micro- and macro-structure levels as this level of detail was unnecessary for the present analysis^[7]. The distinction between formal and meaning-preserving changes was maintained because formal changes refer solely to grammatical issues, whereas meaning-preserving changes cover a wider variety of suggested revisions that include register-related changes. The researcher (the present author) compared initial and revised drafts, identified revisions, and coded them according to the above classifications^[8].

5. RESULTS

In Pigai feedback-revision stage, for learner1 participant, the total number of suggestions from

correction network was 46 and the percentage of suggestions were as follow: 10.87% formal including 2.17% mechanics and 8.70% word form, 86.96% meaning-preserving, and 2.17% meaning related. The percentage of suggestions that were actually incorporated into the revised drafts was approximately 6.52% comprising 4.35% for formal revisions (0% for mechanics and 4.35% for word form), 2.17% for meaning-preserving revisions and 0% for meaning-related revisions revealing that learner1 acted upon few of the actual suggestions, which indicates that she appeared to evaluate suggestions and did not simply incorporate all of automated feedback. In addition, from interview data she actually revised the draft on the level of meaning-related, more specifically, lexical level but this actual revision behavior was not based on automated feedback. In Peer feedback-revision stage, for learner1 participant, the total number of suggestions from the peer was 0 as from think-aloud data, she said her peer only gave her one good comment on her essay. Hence, the percentage of peer feedback incorporated was 0%.

^[9] In Teacher feedback-revision stage, as for learner1 participant, the total number of suggestions from the teacher was 6 and the percentage of suggestions were shown below: 0% formal including 0% mechanics and 0% word form, 0% meaning-preserving, and 100% meaning related. The percentage of teacher feedback that was actually incorporated into the revised drafts was exactly 100% comprising 0% for formal revisions (0% for mechanics and 0% for word form), 0% for meaning-preserving revisions and 100% for meaning-related revisions^[10]. The results of other seven learners were almost in the same way. Obviously, overall, automated feedback made up the least percentage and teacher feedback uptake rate was the largest; in automated feedback uptake, learners concentrated mainly on grammar and mechanics and meaning-preserving and meaning-related sectors were few incorporated. From interview data, learners said that they did not trust automated feedback to some extent and found some feedback was not consistent with the essay^[11]. In peer feedback uptake, learners hardly paid attention to grammar or mechanics. Instead, they principally thought about suggestions associated with meanings but from interview data, some learners hoped that peers could give more suggestions concerning argument^[12]. In teacher feedback uptake, learners totally incorporated teacher feedback; in interviews, they said that the advice from the teacher was quite useful and directly^[13] determined their final scores. Correspondingly, they put much emphasis on teacher feedback^[14].

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Research on Teaching Methods of College Film and TV Art Appreciation Course

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Abstract: With the continuous deepening of the reform of quality education in colleges and universities, film and television art courses have become an important part of college public art courses. At present, film and television art appreciation as a basic course in public art courses has been opened in most colleges and universities. However, from the perspective of actual teaching methods, there are still problems with teaching methods that focus on theory; the curriculum is relatively simple, and students have recreational entertainment psychology. The teaching quality of university film and television art appreciation courses is difficult to improve. In this regard, colleges and universities need to improve teaching methods in terms of improving curriculum settings, integrating film and television education, and enriching film and television content, so as to enhance students' appreciation of film and television arts.

Keywords: film and television art appreciation courses; teaching methods

1. INTRODUCTION

Appreciation of film and television art is a kind of comprehensive art. It takes specific film and television works as an object to guide students to comprehensively analyze the connotation of works through audio-visual integration and theoretical knowledge, so as to enhance cultural cultivation and art appreciation ability of students. At the same time, the course requires students not only to master the theoretical knowledge of film and television art, but also to be able to integrate the knowledge and accurately grasp the connotation of the works in the actual film and television works. Therefore, there is a certain difficulty in the study of college film and television appreciation art course, which requires teachers to use appropriate teaching methods to gradually improve students' film and television appreciation level.

2. TEACHING STATUS OF UNIVERSITY FILM AND TELEVISION ART APPRECIATION COURSES

Film and television art appreciation courses seem to be simple, but the actual learning is more difficult. In recent years, the Ministry of Education has paid more and more attention to art education in colleges and universities. Especially in the field of film and television art education, colleges and universities are

required to set up film and television art-related courses, including film and television art appreciation courses, to cultivate comprehensive quality of students. However, although film and television art appreciation courses are currently favored by students in some colleges and universities, the performance of students has been steadily declining. This can neither improve the quality of teaching nor increase the level of student film and television appreciation.

2.1 The course is more random

In the teaching of university film and television art appreciation courses, teachers need to use Internet technology to show students film and television fragments. Although they will stimulate students' enthusiasm to a certain extent, they are more likely to mislead students, making students think that film and television art appreciation courses are entertainment courses. No attention is paid to this course, so it deviates from the purpose of film and television teaching. The reason is mainly that colleges and universities film and television art appreciation courses are more arbitrarily set. Film and television appreciation courses are generally based on theory. Students are required to appreciate the connotation according to several works, grasp the main purpose of film and television works, and increase the comprehensive appreciation difficulty of students to a certain extent. At the same time, the film and television appreciation courses are relatively isolated. Usually, the film and television introductory courses coexist with the film and television research-based special courses. The lack of a teaching model that combines with other film and television art majors has led to the lack of a comprehensive curriculum system and syllabus.^[1]

2.2 Student appreciation mentality is difficult to change

Due to the greater arbitrariness of film and television art appreciation courses, students are also more arbitrarily in film and television appreciation. Most students regard watching movies as a pastime and entertainment in the study of film and television courses. They do not realize the importance of film and television art appreciation in film and television art works and in film and television art major. This low-level film and television appreciation has greatly affected the improvement of students' appreciation level. At the same time, the film and television art courses in colleges and universities mainly feel the connotation of the works through audio-visual

methods, and the emotion is strongly subjective, which greatly limits the perspective and scope of students' film and television appreciation. It can be seen that students need to go through a certain process for the transformation from ordinary audience to learner.

2.3 To focus on teaching art appreciation theory

In the teaching of university film and television art appreciation courses, teachers themselves focus on theoretical teaching, such as the Film and Television Appreciation course, which mainly includes the introduction of film and television knowledge, the basics of film and television appreciation, interpretation of film and television texts, and film and television commentary writing. These contents themselves meet the teaching requirements of college film and television art appreciation course. However, because the teacher's explanation is too theoretical in the actual teaching, it does not fully reflect the spiritual connotation of film and television art, which makes the students' analysis of film and television works rigid and single, and it is difficult to improve the level of students' film and television appreciation. At the same time, some university teachers focus on the teaching of film history and television history in film and television teaching materials, and one-sided think that students should consolidate the theoretical basis of film and television, which shows that teachers have inadequate understanding of the teaching content and teaching objectives of film and television art appreciation course, which makes students have a psychological resistance to the course learning and low participation in the classroom.^[2]

3. THE TEACHING METHODS OF UNIVERSITY FILM AND TELEVISION ART APPRECIATION COURSES

Based on the analysis of the current situation of the course of film and television art appreciation, the teaching content of film and television art major in most colleges and universities in China still needs to be improved and perfected, because the teaching of film and television art is a course with both art and emotion. In the teaching, teachers need to pay attention to the improvement of students' art emotion and aesthetic ability, stimulate students' interest in art appreciation, so as to have a deeper appreciation of the course Meeting. Therefore, in the course of teaching, teachers can improve the film and television art curriculum, lead students to integrate into the film and television classroom, ensure the integrity and efficiency of the curriculum, and improve students' appreciation level.

3.1 To construct a perfect curriculum system

In the teaching of university film and television art appreciation courses, teachers need to build a perfect curriculum system to effectively achieve the goals of film and television education and talent training. First of all, teachers need to make full use of the traditional five-character teaching methods of listening,

memorizing, reading, writing, and discussing to help students make classroom notes, watch film and television works, regularly organize and discuss film and television works, and complete film review assignments on time, so that they can understand the connotation of film and television works. At the same time, it can also ensure that the course system is complete and not boring, and has the meaning of learning. Secondly, in the specific teaching, teachers can control the selected film and television teaching materials and playing time within a short period of time, requiring students to think about the film with questions. At the same time, the teacher can also use the two-pass playback method. The first playback can appropriately meet the students' visual experience. Only the students need to grasp the summary of the film story. The second playback requires the students to think deeply about the content of the film.^[3]

3.2 Integration into film and television emotional education

In the context of quality education, college teachers need to adjust teaching ideas, accurately grasp the goals and nature of the film and television art appreciation courses, and integrate personality education content in the film and television art appreciation courses. For example, when explaining the film and television works of Ruan Lingyu, teachers need to deeply analyze the triple structure of the film and the realm of life reflected, analyze the reason why Ruan Lingyu lacks an independent personality and the difficult situation of resisting the oppression of the environment, and guide students to develop a positive life mentality. At the same time, teachers should also incorporate life education content in the film and television art appreciation courses, such as guiding students to feel the value of life and thinking about the dignity of life in the film appreciation of the films *Deep Sleep in the Sea*, *21 Grams* and *My Land and My People*, thereby enhancing the artistic aesthetic ability and appreciation level in the study of film and television art appreciation courses.

3.3 To enrich the content of film and television appreciation

At present, the phenomenon that theory is more important than practice is obvious in the teaching of film and television appreciation in colleges and universities. Therefore, colleges and universities need to provide perfect teaching equipment for teachers of film and television art, such as audio equipment, recording equipment, and regularly replace other multimedia equipment to create a good teaching environment for teachers. At the same time, in the specific teaching, teachers need to reduce the entertainment effect when students watch the film, make a clear goal of film and television appreciation course, and gradually improve students' art appreciation ability and aesthetic level (as in table 1).^[4]

Table 1.: To enrich the content of film and television appreciation

Goal Category	Professional Course Goal	Teaching Resources
Learning Objectives	To learn relevant theoretical knowledge of film and television art appreciation and enhance students' appreciation of works	Textbooks, video clips and Appreciation of film and television
Appreciation Ability Objective	Learn to use the knowledge learned to identify and analyze different film and television works	
Objective of Aesthetic Quality	To comprehensively analyze the connotation and theme of film and television works from different angles, and improve cultural accomplishment	

4.CONCLUSION

Since the beginning of the 21st century, movies, TV, advertisements, networks and other media derived from new media technologies have become an important content in visual culture, and have become a film and television art professional education curriculum in colleges and universities. Therefore, in the university film and television art appreciation courses, teachers are required to change their educational ideas, innovate teaching methods, and use a variety of teaching methods to stimulate students' interest in art learning and help them achieve comprehensive development in film and television art appreciation, in the face of traditional theoretical teaching methods.

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Analysis of the influence factors of china's thermal coal price based on VAR model

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Abstract:Based on the average price data of Qinhuangdao thermal coal from January 2014 to December 2019, this paper studies the impact of coal supply, coal demand, macro-economic climate index, commodity price index and international coal price on the price fluctuation of thermal coal by using VAR model and a series of tests. The results show that there is a cointegration relationship between the six variables, and the change of the price of thermal coal is mainly influenced by its own factors, followed by the demand of coal and the price of international coal, while the other factors are less.

Keywords:Thermal coal price; VAR model; international coal price

1. INTRODUCTION

In China's energy structure, coal consumption accounts for more than 60%, is an important basic energy and chemical raw materials in China. Thermal coal is used as a raw material for thermal power, and its price changes affect the development of downstream basic industries such as metallurgy and building materials, thus having a significant impact on the economic situation. Influenced by the energy structure and macroeconomic situation, the price fluctuation of thermal coal in China has been large in recent years. Therefore, the influence factors of thermal coal price are analyzed to support the steady and orderly development of the coal industry and the relevant departments to formulate policies.

Domestic scholars have carried out sufficient research on coal prices. Some scholars pay attention to the trend of coal price changes and analyze coal price changes through time series analysis. Wang Ke and others established a VEC model based on China's coal prices and coal imports and exports from 2000 to 2009. They believe that there is a long-term equilibrium relationship between the three. The export value responds to price shocks slowly and lastingly, but the price responds quickly to the export value shock. But it lasted for a short period^[1]; Zhang Huan et al. Established the ARIMA (1, 1, 1) model based on coal price data from 1997 to 2005 and predicted the price in the next 5 years^[2]; Ding Zhihua et al. Used the VEC model to show that coal Cost has the most significant impact on coal prices, and the other main reasons are economic operations, etc.^[3] Sun Dayan believes that the thermal power and building materials industries have a greater impact on coal by establishing a VAR model^[4]. Some scholars

studied coal price fluctuations by analyzing industry endogenous factors such as coal supply and demand. Wang Lei focused on analyzing the impact of supply and demand factors on coal price changes, and believed that the relationship between coal price changes and the gap between supply and demand is strong^[5]; Li Peng started from the relationship between supply and demand and believed that insufficient supply in the coal market was the main factor that caused the coal price to rise significantly^[6]; Xu Yuhang and others adopted the VAR model and believed that coal supply and demand were Granger reasons for coal prices^[7]. Some scholars have conducted research on the impact of macroeconomic factors and fluctuations in the international energy market on domestic coal prices. Zhu Jianmei and others studied the relationship between coal prices and CPI and PPI, and believed that coal prices have a greater short-term impact on PPI^[8]; by studying the relationship between coal and the national economy, XieHeping believed that GDP and coal consumption There is a positive correlation^[9].

Based on previous research results, this paper takes into account the macro-economic operation, coal supply and demand and international coal price, and analyzes the influence factors of china's thermal coal price fluctuation from multiple angles on the basis of the monthly data from January 2014 to December 2019 based on the monthly data from January 2014 to December 2019.

2. RESEARCH METHODS AND VARIABLE SELECTION

2.1 RESEARCH METHODS

There are many factors that affect the price of thermal coal, the VAR model treats each variable as an endogenous variable, and the explanatory variable of each equation is the regression of the lag value of the interpreted variable, which is set as follows in general form:

$$Z_t = \sum_{i=1}^k A_i Z_{t-1} + U_t \quad (1)$$

In the formula, the Z_t is the n is the column vector consisting of the value of the t -period variable, the A_i represents the $n \times n$ coefficient matrix, k is the lag order, and the U_t is the $n \times 1$ matrix of the random error term.

2.2 VARIABLE SELECTION

In this paper, Qinhuangdao Q5500 thermal coal price (CP), coal supply (CS), coal demand (CD), macro-economic climate index (HG), commodity

price index (DZ) and international coal prices(FOB) a total of 6 indicators, the sample of the study for January 2014 - December 2019 a total of 72 months data.

According to the economic thought, the price level change is influenced by the supply and demand quantity relationship, at the same time, the price level change can also guide the market to adjust the supply and demand, so choose the supply and demand of coal as the important factor affecting the price of thermal coal.

The country's economic development and energy structure have also greatly affected the demand for coal, in recent years, China's active development of new energy and continuous optimization of energy structure, but the consumption of coal and China's macroeconomic operation is still greatly related, therefore, this paper introduced the macro-economic climate index and commodity price index. The macro-economic climate index is basically in line

with the current economic situation and can objectively reflect the macroeconomic performance, while the commodity price index reflects the trend of commodity spot prices.

In addition, international coal prices will also have an impact on the price of thermal coal, this paper represents the Australian FOB Coal Price.

3 EMPIRICAL RESULTS

3.1 SEQUENCE STATIONARITY TEST AND MODEL BUILDING

Only when the time series is stationary can the VAR model be established. This paper uses the ADF test to perform stationarity test on the original sequence, the principle is as follows:

$$\Delta y_t = \alpha + \delta t + \eta y_{t-1} + \sum_{i=1}^p \beta_i \Delta y_{t-1} + \mu_i(2)$$

In the formula, α is a constant, and δt is a linear trend function, and η slug is used to determine the stability of y_t . When $-1 < \eta < 1$, the delegate y_t is stationary. The ADF test results are shown in Table 1:

Table1 ADF Test Results

sequence	ADF statistic	1% level	5% level	10% level	Prob.	Conclusion
CP	-0.160	-2.599	-1.956	-1.614	0.625	non-stationary
D(CP)	-7.019	-3.528	-2.904	-2.589	0.000	stationary
FOB	-1.617	-3.529	-2.904	-2.589	0.468	non-stationary
D(FOB)	-6.130	-3.527	-2.903	-2.589	0.000	stationary
CS	0.927	-2.604	-1.946	-1.613	0.904	non-stationary
D(CS)	-2.605	-2.605	-1.946	-1.613	0.010	stationary
DZ	-2.614	-4.095	-3.475	-3.165	0.276	non-stationary
D(DZ)	-5.486	-3.527	-2.904	-2.589	0.000	stationary
CD	-0.504	-2.598	-1.945	-1.614	0.496	non-stationary
D(CD)	-8.099	-3.528	-2.903	-2.589	0.000	stationary
HG	-0.107	-2.597	-1.945	-1.614	0.644	non-stationary
D(HG)	-6.785	-3.527	-2.903	-2.589	0.000	stationary

At the 1% significance level, the six sequences CP, FOB, CS, DZ, CD, and HG all have unit roots, which are non-stationary series, and the first-order difference of the series is all stationary series.

According to the LR, FPE, AIC, SC, HQ information criteria to determine the lag order of the VAR model, the results are shown in table 2.

Table2 Model lag order determination

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-1381.572	NA	2.32e+12	42.66377	42.83103*	42.72976*
1	-1354.523	49.10477	2.19e+12	42.60071	43.60428	42.99668
2	-1328.464	43.29784*	2.15e+12*	42.56813*	44.40800	43.29408
3	-1315.467	19.59637	3.22e+12	42.93744	45.61361	43.99336
4	-1303.276	16.50492	5.11e+12	43.33156	46.84403	44.71745
5	-1288.688	17.50563	7.91e+12	43.65193	48.00070	45.36780
6	-1271.962	17.49806	1.23e+13	43.90651	49.09159	45.95235

It can be seen from Table 2 that the LR, FPE and AIC criteria all support the establishment of a second-order VAR model. In this paper, the VAR (2) model is established. For the VAR model, all the characteristic roots in the model are in a circle, indicating that the model is stationary. As can be seen from the figure below, the points are all inside the

unit circle, and the VAR model with a second-order lag is stationary.

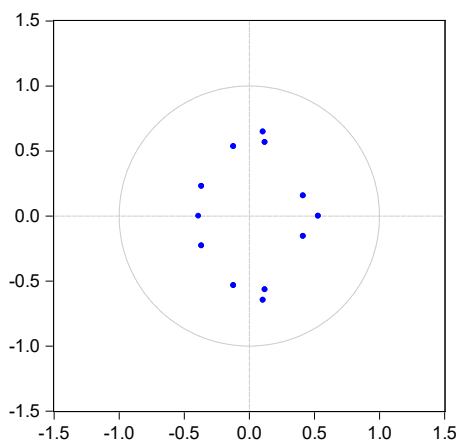


Figure1 Stability test

3.2 JOHANSEN TEST

Because the model analysis designs 6 variables, this article uses the Johansen cointegration test to determine whether there is a cointegration relationship between the variables. The test results are shown in Table 3:

Table3 Johansen test results

Hypothesized No. of CE(s)	Eigenvalue	TraceStatistic	0.05Critical Value	Prob
None *	0.607369	233.7783	95.75366	0.0000
At most 1 *	0.587841	169.2713	69.81889	0.0000
At most 2 *	0.477213	108.1134	47.85613	0.0000
At most 3 *	0.357367	63.36129	29.79707	0.0000
At most 4 *	0.233458	32.85080	15.49471	0.0001
At most 5 *	0.189605	14.50609	3.841466	0.0001

The results show that there is a long-term equilibrium relationship between the variables. The establishment of the VAR model should be based on the co-integration relationship between the variables. This paper believes that the VAR model can be established.

3.3 GRANGER TEST

If the price of thermal coal is affected by the lag of other variables, it is said that they have Granger causality, so we can verify the transmission direction of each influencing factor and the price of thermal coal. Granger causality test was performed on the thermal coal price and its influencing factors with a lag of 1 order. The results are shown in Table 4.

Table4Granger test results

Null Hypothesis:	F-Statistic	Prob.	conclusion
DCP does not Granger Cause DCD	1.05868	0.3072	accept
DCD does not Granger Cause DCP	0.00769	0.9304	accept
DCS does not Granger Cause DCP	0.37844	0.5405	accept
DCP does not Granger Cause DCS	0.00880	0.9256	accept
DDZ does not Granger Cause DCP	1.53559	0.2196	accept
DCP does not Granger Cause DDZ	0.09199	0.7626	accept
DFOB does not Granger Cause DCP	6.09667	0.0161	refuse
DCP does not Granger Cause DFOB	0.17709	0.6752	accept
DHG does not Granger Cause DCP	0.07012	0.7920	accept
DCP does not Granger Cause DHG	0.58662	0.4464	accept

As can be seen from the table above, there is a Granger relationship between international coal prices and thermal coal prices, while other assumptions show Prob. > 0.05, accept the original hypothesis, these variables and thermal coal prices can not show a double causality. The Granger test can only indicate the cause and effect relationship in the statistical sense. Whether these factors are the real causes of thermal coal price fluctuations still needs to be combined with other tests to judge.

3.4 IMPULSE RESPONSE ANALYSIS

Next, the impulse response function is used to study the effect of a single variable change on the price of thermal coal in the short term. The impulse response function is to analyze the effect of the standard error of the residual error in the VAR model on the change of the dependent variable. A p-order vector autoregressive model is set as follows:

$$Y_t = C + \sum_{s=0}^{\infty} (\Psi_s P) w_{t-s} (3)$$

In the formula, Ψ is the coefficient matrix; C is the constant vector; P is the non-singular singular matrix, satisfying $PP' = \Omega$; w_{t-s} is the vector white noise.

In Figure 2, the solid line is the impulse response function, the dashed line is plus or minus 2 times the standard deviation, the horizontal axis is the lag order, and the vertical axis is the impact response of thermal coal price to various influencing factors.

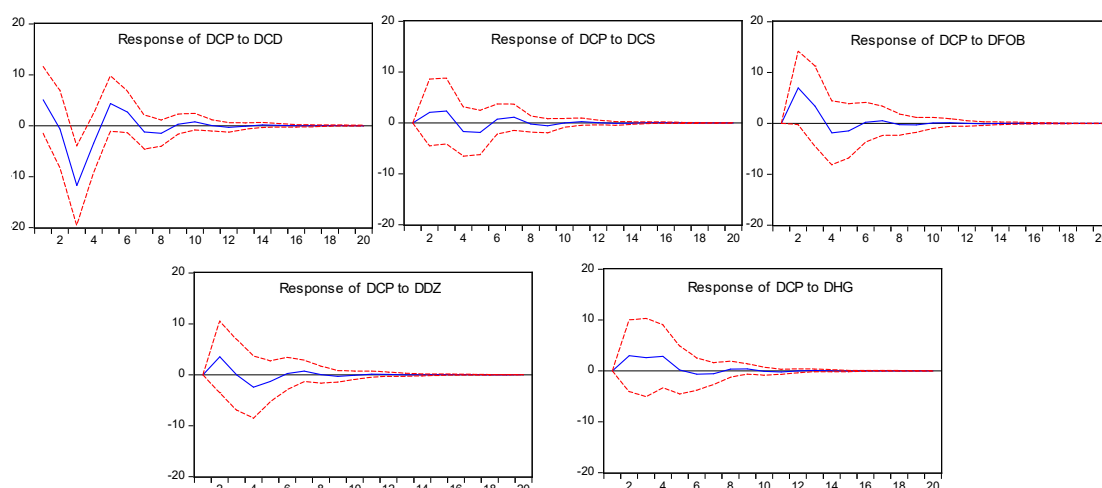


Figure 2 Impulse response result

It can be seen from the above figure that the impulse response functions all show significant convergence effects and are effective. Judging from the mid-level response of thermal coal prices to coal demand factors, the positive impact of 1 unit standard deviation of coal demand has the largest impact on thermal coal prices in the first period, and then the impact decreases, reaching the second peak in the fifth period. In the ninth period, the impact of coal demand gradually went to zero. Judging from the response of the thermal coal price to the coal supply shock, the current supply of coal has an impact, and the thermal coal price will continue to grow within three months of lag, then decline in the 3-6 period, and gradually stabilize in the 8th period, Converging to 0.

The positive impact of the Commodity Price Index on thermal coal prices to 1 unit reached its peak in the second period, the impact turned negative in the third period, and gradually went to zero in the sixth period. After the commodity price index gives a unit of coal price a positive shock, the thermal coal price will rise in the lag 5 period, and then gradually decrease until it approaches zero. This shows that the better the macroeconomic performance, the power consumption of industries, chemical industries and other industries will increase, so that the price of thermal coal will also increase.

The response of thermal coal prices to the impact of international coal prices is more obvious. After a positive impact on international coal prices in the current period, domestic coal prices have increased in the lagging 4 periods, and reached the highest point in the second period, tending to the 7th period. 0. After the external coal price is affected by external shocks, it will affect the domestic coal market through the import and export of coal and form a co-directional shock to the price of thermal coal. At the same time, the impact of this shock is more obvious.

3.5 VARIANCE DECOMPOSITION

The variance decomposition method can decompose the predicted mean variance of a variable in the VAR model into the impact contribution value of each variable, that is, the contribution of the impact of each variable to the total contribution, and can derive the relative importance of these variable impacts. According to the VAR (2) model, the variance decomposition analysis of the thermal coal price is performed. The horizontal axis is the lag order and the vertical axis is the variance contribution rate. The results are as follows.

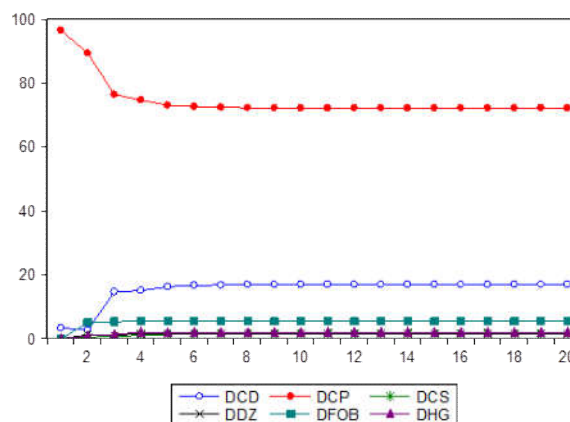


Figure 3 Variance decomposition results

As can be seen from the above chart, a standard deviation of thermal coal prices can be decomposed into the effects of itself and the other five factors, all showing a clear time trend. Among them, the impact of own factors and coal demand is the most obvious. The price of thermal coal was only affected by its own fluctuations in the first phase, and the operation of other factors gradually appeared after the second phase. When the lag period is 1, 96% of the variance in thermal coal price fluctuations comes from itself. As the lag period increases, the effect from itself gradually decreases, and it stabilizes at about 72% in the sixth period. The contribution from coal demand increased gradually, from 3.4% lagging in the first phase to 17% in the 10th phase, after which the

contribution rate stabilized at 17%. The contribution rate of international coal prices gradually increased from the first period, reached the maximum in the fifth period and stabilized at 5.5%. The contribution rate of coal supply, commodity price index and macro-economic climate index is relatively small, stable at 1.5%, 1.7% and 2.0% respectively.

In summary, the influencing factors of thermal coal price fluctuations mainly come from itself, coal demand and international coal prices. The economic system has an internal adjustment mechanism for coal price changes. Coal supply and demand and international coal price changes have a significant impact on thermal coal prices. , Indicating that coal demand and international coal prices have a certain price discovery and guidance role for thermal coal prices.

4 CONCLUSION AND SUGGESTION

4.1 Conclusion

This article takes the price of Qinhuangdao thermal coal as the research object, and through the establishment of VAR model and series of tests, the following conclusions are obtained:

The six variables of thermal coal price, coal supply, coal demand, macro-economic climate index, commodity price index and international coal price have a co-integration relationship. From the significance level of Granger test, international coal price is the Granger reason for thermal coal price, indicating that thermal coal price will be affected by international coal price.

Impulse response function analysis shows that the impact of coal demand, commodity price index and international coal prices on thermal coal prices all reach a maximum in the short term, the impact of coal demand on thermal coal prices is negative, and the impact of international coal prices on thermal coal prices is positive and significant, and the impact of the macro-economic climate index on the price of thermal coal is positive.

From the decomposition of variance, it can be concluded that the price of thermal coal is mainly affected by its own factors, followed by coal demand and international coal prices, while other factors have less influence.

4.2 Suggest

Combined with the above analysis, we can see that many factors may have an impact on the fluctuation of coal prices. During the period of rapid economic development, the country has advocated the use of clean energy, but coal is still one of the important energy sources in social development. Therefore, in order to ensure the stable development of China's future coal market, the following suggestions are proposed:

Relax the control of coal prices, reduce the level of government intervention in the coal market, and further promote the reform process of coal marketization.

Under the current management system, we should recognize the complexity of changes in the coal market, accelerate the study of coal price policies, reduce the lagging effect of regulatory policies on coal prices, and use market forces to achieve dynamic, timely, and appropriate regulation^[10].

The international coal price index is one of the main factors for the price change of thermal coal. It should pay attention to the international coal price index so that the domestic coal price does not deviate excessively from the international market price.

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Preview Effect in Reading and Enlightenment to Education

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Abstract: In the process of reading, the reader can not only obtain the processing information of the current fixation words from the central concave area, but also process the sub central concave words on the right side of the current fixation words and obtain some information, which is called preview effect. The study of preview effect in reading has gradually deepened. Reading and education are closely related. How to better combine the study of reading and preview effect into education can give some enlightenment and suggestions to education. This problem needs to be considered and solved.

Key words: preview effect; reading; education

1 INTRODUCTION

The eye movement in reading is mainly divided into fixation and saccade. Fixation is to make people get most of the key information in reading. The purpose of saccade is to make the new information fall in the central fovea of the retina, that is, the 2° field of vision of the central vision. The central fovea has the highest visual sensitivity. The area around the fovea, which is about 2° to 5° of the visual center, is the vice fovea. The visual acuity of this area is obviously decreased. With the increasing distance from the fovea, the visual acuity is gradually decreased, and the ability of extracting information is also gradually reduced. Whether readers can get information from the vice central concave and what kind of information they can get will directly affect their reading efficiency.

Therefore, in the process of reading, the reader can not only obtain the processing information of the current fixation words from the central concave area, but also process the sub central concave words on the right side of the current fixation words and obtain some information, which is called preview effect. Rayner's boundary paradigm, which was designed in 1975 to study the effect of information cues in the visual area of the parafovea on reading, is usually used in the study of presight effect^[1]. It can reveal what kind of presight information readers can get from the parafovea and how much presight information they can get.

2 A SPECIFIC STUDY OF PREVIEW EFFECT

2.1 The discovery in the study of Pinyin reading

The research on Pinyin characters shows that readers can get the following preview information, such as the initial information, font information and voice information. However, there is no clear conclusion

about whether we can get high-level language information, such as semantic information and syntactic information.

In recent years, the study of semantic processing in the process of English reading has found that to a certain extent, readers can process semantic information from the vice central concave. When the preview words can attract more attention (such as initial capitalization) or the semantic relevance of the preview words and the target words is very high (synonyms), the readers can extract semantic information from the sub central concave, and the size of semantic preview benefits will be affected by the context (rationality) and predictability.

In the process of reading, in addition to semantic information, there is also a high level of language information called syntactic information. Compared with the semantic sub central concave processing, there are few researches on syntactic sub central concave processing. Braze et al. through changing the part of speech of the target word in natural reading, found that the reader can detect the abnormality on the target word under the condition of syntactic violation, which indicated that the extraction and processing of syntactic information is very timely.^[2] Experiments show that if a word appears next to a word with the same syntactic type, the fixation time will increase, indicating that syntactic errors will affect reading behavior.

Veldre and Andrew found that in the case of semantic irrationality, the gaze time and look back time under syntactic rationality were significantly shorter than those under syntactic irrationality, but the preview benefit on the jump rate disappeared. In the case of semantic rationality, there is a very significant syntactic preview effect: in the case of syntactic rationality, the jump rate is significantly higher and the fixation time (except the total fixation time) is significantly shorter. Also found in Dutch can extract syntactic information of the experimental results^[3].

2.2 Findings in Chinese Reading Research

In Chinese reading, we also find the preview effect of font, but there are still differences in the semantic and syntactic preview effect.

Yan et al. showed that there are font and semantic preview effects in Chinese reading, but no phonological preview effect was found^[4]. As for the semantic preview effect, recent experimental research shows that readers can obtain semantic information from the vice central concave, and can also obtain

some preview information from the second word on the right side of the current gaze word. The difficulty level of word processing in the central fovea will affect the reader's preview of the sub central fovea and the amount of preview information obtained from the next word of the current staring word.

There are few studies on the early processing of syntactic information in Chinese. Zang et al. explored whether the special high-frequency auxiliary "de" would have a preview effect in Chinese^[5]. The results show that when the special preview word "de" appears in the parafovea, the syntactic effect is so weak that it is ignored, which is consistent with the conclusion of the English study.

3 THE ENLIGHTENMENT OF PREVIEW EFFECT ON EDUCATION

Preview effect has reached a relatively consistent conclusion in the study of reading. Reading is directly related to educational problems and daily life. Preview effect is of great significance to education

3.1 The Enlightenment of preview effect on primary school education

In general vocabulary recognition (foveal vocabulary recognition), font processing is helpful for reading. Children readers can not only get information from the fovea, but also from the sub fovea.

Schroeder found that in German reading, adults showed significant font preview effect, while children (age range: 7.9-9.1 years) showed this effect on a single fixation time index^[6]. Believe that because frequency of single fixation time is relatively small in the reading process, it is not sure whether children can foresee font information.

In the sub central concave processing, the second year students activated the font representation of Related words in the mental lexicon through the font units (such as components) of preview words, so that the font representation of the target words was activated faster by the shape like preview words than by the unrelated preview words, showing the font preview effect. And the development of font preview effect shows that the second year students need longer preview time to process vocabulary than the adult readers; font preview effect shows a certain development mode.

Therefore, in the education, we should improve the recognition of Chinese word recognition for the children of lower grade, explain the role of font in the development of reading, and provide some practical guidance for children literacy learning. Specifically speaking, teachers and parents should pay attention to the identification and judgment ability of the junior students in primary school, so as to improve the reading speed and efficiency, and lay the foundation for future learning and education.

3.2 The Enlightenment of preview effect on the education of children with developmental dyslexia

It was found that children in dyslexia group and reading level matching group can also get a certain degree of font preview in the parafovea preview, but not as stable as other children of the same age. It shows that we should teach students in accordance with their aptitude in the process of education. We should find children with dyslexia in time and as early as possible in teaching. We should pay as much attention to them as possible in education. Through the training of font and voice ability, we can improve their reading ability and reading efficiency.

3.3 The Enlightenment of preview effect on foreign students and TCFL

Due to the strong emphasis on cultural exchange and cultural integration, in recent years, there has been an upsurge in the study of foreign students and Chinese as a foreign language. In the education of foreign students and Chinese as a foreign language, we should give full play to the advantages of preview effect, starting with low-level language information, including information such as pronunciation and font. Gradually transition to the processing of semantics and syntax, step by step in the process of education, which not only conforms to the characteristics of reading development, but also can be better combined with practice, and has a certain contribution to the education of foreign students and TCFL.

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The transformation of College Students' physique test function from the perspective of network

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Abstract: With the coming of the information age in China, the network is also developing day by day. In order to cultivate students' fitness consciousness and popularize how to exercise scientifically, colleges and universities all over the country have focused on building a reasonable network system mode, hoping to improve the level of College Students' physical quality. However, according to the survey, many college students' physical test is result oriented, ignoring the analysis and summary of the test results, which makes the physical test function unable to play its maximum effect.

Keywords: Network, college students' physical test, theory

1.THE THEORETICAL BASIS OF COLLEGE STUDENTS' PHYSIQUE TEST FUNCTION FROM THE PERSPECTIVE OF NETWORK

1.1.Quality education

With the continuous reform of China's education system, the requirements for students are more diversified. In the context of quality education, schools should pay more attention to the differences and independence of each student. However, in the traditional physical test, teachers often summarize the students according to their previous experience, ignoring their own characteristics and personality. From the perspective of network, we can analyze and feed back the information of each person according to the difference between each person's physique and congenital, so that each student can have his own health plan, and do a strong guidance for the comprehensive development of students.

1.2.Network scientization

With the advent of science and technology in the new era, the network has entered thousands of households. The network brings more new changes to people, and people's life is more intelligent and convenient. Under the influence of these technologies, students' physical fitness test is not floating on the surface, but with the help of the network, they can clearly understand what they lack in sports and what they need to exercise. This not only makes up for the shortcomings that traditional tests can only understand students' physical condition based on test scores, but also greatly helps to improve students' physical quality.

1.3.Health scientization

With the improvement of people's awareness of exercise, all aspects of society realize that in addition to the pursuit of broad knowledge, we should pay attention to physical and mental health. However, due to the difference of physical fitness of each person, sports events and exercise intensity must be scientifically and reasonably formulated according to each person's physical tolerance. From the perspective of network, according to the information feedback and summary, we can make a series of sports plans and exercise programs for students, so that students can exercise happily and keep their physical quality in a state of continuous improvement.

2.THE SIGNIFICANCE OF COLLEGE STUDENTS' PHYSIQUE TEST FUNCTION FROM THE PERSPECTIVE OF NETWORK

With the Ministry of education of the people's Republic of China paying more and more attention to the health of students, the Ministry of education requires colleges and universities to test and report the physical fitness of students, but also issued a series of standards. A mature and sound physique test system needs to form a system of learning, exercising, relearning and re exercising. If there is a flaw in one of the links, it will lead to a great discount in the effect of physical test. Through the traditional physical test, students can only know their own achievements, not their health level, and teachers can not make special guidance according each student's physical condition. The physical fitness test from the perspective of the network can let students directly understand their own physical state according to the dynamic changes of their own performance, and the teacher can also give each student more suitable guidance to their own physical quality and improve their physical quality.

3.THE BASIS OF COLLEGE STUDENTS' PHYSIQUE TEST FROM THE PERSPECTIVE OF NETWORK

3.1Popularization of database application

Today's society has been an information society, and every field of society has established a perfect database. Colleges and universities also input students' information, examination results, sports test results and a variety of assessments into the school's database, and make dynamic analysis based on these data, so that students can make their own sports

programs according to the query results, and enhance their physical quality.

3.2.Smart devices

With the development of this society, a series of modern technology products, such as mobile phones, computers, electronic navigation, etc., have penetrated into thousands of households, providing better services for students' life and other aspects, so that contemporary college students can understand their own health level and have their own health guidance on electronic equipment^[1].

4.THE FUNCTION OF COLLEGE STUDENTS' PHYSIQUE TEST FROM THE PERSPECTIVE OF NETWORK

4.1Management and query of test results

Most of the traditional evaluation methods presented to students are comprehensive evaluation results, students can not find their own test results. The information management system of many colleges and universities is not perfect, and students have no way to query their achievements in previous years, which leads to students' insufficient mastery of their own physical quality and various sports events and can not get meticulous management. In the perspective of network, students can query the evaluation results of previous years, summarize and make their own sports plan according to the data, so that students can actively exercise, improve their quality scientifically and effectively^[2].

4.2Summary and suggestion of physical test results

The feedback information that the traditional evaluation method brings to students is often not comprehensive and scientific. Students often can not improve their physical quality effectively by making fitness plan with feedback information, which makes students get half the result with twice the effort. From

the perspective of network, while showing the results of physical fitness test in detail for students, it will also give detailed health reference opinions for each test result of students. Students can constantly revise and improve their exercise programs according to their previous test results, and there are special managers on the Internet to track and guide students' uploaded promotion data from time to time.

4.3.Comprehensive evaluation results

The results of traditional evaluation are mostly to show the comprehensive scores for students. Students can't understand the health instructions behind the scores, and often don't care much. While from the perspective of network, students can understand their comprehensive assessment results more intuitively, and have a more intuitive assessment of their physical condition.

Final words:

Most of the traditional test evaluation methods are only used as an indicator of achievement, and students are more likely to use it as a sign of whether they are qualified. From the perspective of network, the physical test of college students can make students understand themselves, reflect on themselves and change themselves through more systematic information, so as to improve their physical quality.

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Research on the Reform of the Talents Training Mode of Engineering Majors in Higher Vocational Colleges

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Abstract: This time's reform research on the vocational undergraduate engineering professional training model, Based on the learning characteristics of contemporary higher vocational students, Social needs, The orientation of higher vocational education is oriented, Combining multiple optimized talent development programs, Experience of teachers and students serving enterprises, Competition guidance, Various types of teaching reform topics, Graduates' employment feedback information and many other aspects, Put forward the talent training program, Course teaching content, After class training system and other reform research content.

The whole process of cultivation focuses on teaching according to merit, Personality guidance, So that students with different specialties and employment directions, can try to find their own professional background hot spots.

Keywords: Higher Vocational Undergraduate; Talent training model; Personality guidance

1. INTRODUCTION

"Application undergraduate" is the exploration of the new type of undergraduate education and the new level of higher vocational education combined with the educational model. By some provincial undergraduate colleges and state-level model vocational colleges, the national large-scale backbone enterprises jointly pilot training to meet the needs of socio-economic development of applied undergraduate professionals^[1].

However, in the early exploration process of the vocational undergraduate training model, they imitated ordinary undergraduate universities, and the subject system was obvious. Through the school-enterprise cooperation in the past few years, Construction of the teaching staff, Optimize talent training programs and curriculum system reform, Gradually established a clear context suitable for the personality development of engineering majors, Strong support for local economic development of talent training model.

2. PROFESSIONAL POSITIONING AND SERVICE REGIONAL ECONOMY MATCH

Today's enterprise competition, in fact, is the competition between talent, The performance that

talent brings to the company is difficult to measure. Different regions have different economic development characteristics, and different talents are required. After the professional positioning matches the regional economic services, Talent training goals and training models can be targeted. Strengthen the construction of teaching staff according to the mode of talent training, Offering courses based on training objectives, while meeting the regional economic needs of the main body, must also have the knowledge reserves needed for the development of the regional economy in the next few years.

3. THE CURRICULUM SYSTEM OF TALENT TRAINING FOCUSES ON COMPOUND PROGRESSIVE IMPROVEMENT

The professional basic courses in the talent training curriculum system focus on the mastery of basic knowledge, and use practice to verify theoretical knowledge^[2]. Part of the in-depth theoretical knowledge is taught in the comprehensive course.

There are two main types of comprehensive courses, the first one, 1-3 special techniques combined to complete the project course; The second is based on a project or business, According to the whole process of market demand and project development, Integrate the knowledge needs of different enterprise jobs in different links, Job responsibilities, Professional literacy and other comprehensive knowledge information. According to the process of completing the entire project or business from the project investigation, plan quotation, business negotiation, plan design, technical management, development adjustment, document filing, etc^[3].

The comprehensive curriculum is no longer a single technical knowledge point of the subject system, but the interdisciplinary and comprehensive knowledge of various professional fields used in the work is interwoven. The post knowledge of enterprises involved should be based on the principle of sufficiency of the project and pay attention to the application of knowledge^[4-5].

4. NEW CONNOTATION GIVEN TO CURRICULUM TEACHING

Set the course content according to the process and knowledge of the job position of the enterprise, around a main line, innovative design of

personalized tasks, With the purpose of "teaching according to aptitude", increase students' recognition of the course.

The student's enthusiasm for learning has greatly increased, not because of the depth of the professor's content and the amount of time to explain the class, but because of the following two points:

(1) Lies in the rich curriculum learning content, According to different employment directions and career plans, Guiding students to focus on learning different knowledge points, negotiating and arranging different tasks, satisfying students' different pursuits, so that students feel that their personal personality is respected^[6-7].

(2) The method of teaching and learning is changed, and the teacher's teaching focuses on explaining the problems encountered in the actual work and the processing methods. For example, how to calculate the efficiency and economy of equipment investment from the customer's perspective; How does the technology department carry out research and development, access to unfamiliar knowledge, etc. The use of network resources, demonstrations, case explanations, etc. in teaching does not just impart knowledge to students, What's more important is how to enable students to master knowledge, self-learning awareness, independent problem-solving methods and creative thinking skills. As students grow their knowledge.

(3) Learning some teaching modes in German vocational education, we will modularize the course content around the main line, and teachers from different professional directions will teach according to the course schedule, this mode can be copied and promoted.

5.CREATE A HAPPY CLASSROOM ENVIRONMENT

Teachers should create a happy classroom environment, increase classroom participation and motivation for extracurricular self-study. The teaching method of classroom knowledge is to chat, discuss, take some cases close to students' cognition, let students teach some content, and relieve students' boring feeling of just listening to class. This process has also subtly cultivated the student's personality qualities, such as confidence, diligence, creativity. That is to say, the cultivation and education of quality and ability that we emphasize include the professional quality as a professional and the social quality as a social person.

6.THE ESTABLISHMENT OF TUTOR SYSTEM

By letting all the teachers of the major open the "Introduction to Professionals" lectures and other methods for the incoming freshmen, students can get a preliminary understanding of the professional expertise of the professional teachers, the professional fields of study, and the ways of

cooperation with enterprises. In addition, a professional tutor assistance system should be established, follow different tutors to form cross-professional learning groups, and realize the tradition of benign transfer. Accelerate students' learning stages from entry, start to teamwork, independently undertake several levels of the project.

7.INTRODUCE ENTERPRISE RESOURCES AND LAUNCH PROJECT RECRUITMENT ORDER

After the comprehensive course, Students have a preliminary understanding of the concept of the project, Also know that looking for different special expertise of people to complete some small projects, The enterprise publicizes the project tasks through the school department or teachers, Starting the project recruitment order, the company and the student R&D team choose in both directions. In case of failure, the enterprise will not pursue the responsibility. If the key points of the verification scheme are feasible, the enterprise will sign a formal horizontal project contract with the R & D team. The students get real exercise, know more about the way of work and market development prospect of the enterprise. After graduation, they will be recognized by the enterprise and get high paid employment.

8.CONCLUSION

The reform of the training mode of engineering talents in higher vocational colleges, It has greatly improved students' understanding of the major, It has expanded the self-study atmosphere of interdisciplinary comprehensive learning and strengthened the confidence of students and enterprises in direct connection and negotiation.

All in all, learning equipment is cold, The theoretical knowledge is boring, But once the desire to learn ignites, everything will be hot.

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Education Reform Exploration of Integrating Traditional Handicrafts into Visual Communication Design

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Abstract: Traditional handicraft has unique artistic value and rich forms of expression. These characteristics are closely related to visual communication design. To explore the possibility of the two sections is of far-reaching significance for curriculum reform. This paper taking the graduation design course of Shandong Women's University as an example, this paper explores the practical path of curriculum reform from the present situation and existing problems of graduation design course and from the four aspects of topic selection, research, design performance and work feedback.

Key words: Traditional Handicrafts; Visual Communication Design; Graduation Design; Education Reform

1. INTRODUCTIONS

The academic circles have done extensive research on the inheritance and development of Chinese excellent traditional culture. The research field mainly includes these three aspects: the concept overview of traditional handicraft, the inheritance of traditional handicraft and the future development. Scholars generally believe that the future development of traditional handicraft should be combined with modern life. So how to integrate traditional handicrafts be integrated into modern life? What role do local colleges and universities play in the inheritance and development of traditional handicrafts? The author thinks that the major of visual communication design is both aesthetic and practical, which is closely related to traditional handicraft. The combination of the two is not only feasible, but also necessary.

In recent years, China has issued Guidance on Promoting the Development of Industrial Culture, Chinese Traditional Technology Revitalization Plan, Regulations on Protection and Inheritance of Handicrafts. These policies encourage the revival and development of traditional handicrafts and make clear the main tasks and specific measures for the development of traditional handicrafts. The development of traditional handicraft enters a new stage. While as the way of life production has undergone earth-shaking changes, the development has also been unprecedented impact and its heritage and living space have been greatly tested. The situation is very embarrassing. On the one hand,

under the impact of large-scale machine production and the development of high technologies, mass production has shortened the production cycle and improved production efficiency, but it also leads to a clear trend of product homogenization. On the other hand, the decoration is greater than the function. The traditional handicraft no longer adapts to the modern life. Its shape, color, craft and so on cannot satisfy the modern aesthetic view. It can be seen that the traditional handicraft should come down from the "altar of gods" to create more objects accepted by the broad masses and in line with the aesthetic and use characteristics of modern people^[1].

Visual communication design is a major to cultivate students with innovative creative ability, which requires students to have a certain artistic aesthetic ability and hands-on practical ability and coincides with the ability required by traditional handicraft. Therefore, the higher art colleges have an unshirkable responsibility to carry forward the traditional culture and should become the "vanguard" of inheriting and innovating the traditional handicraft.

2. THE PRESENT SITUATION OF VISUAL COMMUNICATION MAJOR AND THE PROBLEMS OF GRADUATION DESIGN COURSE IN SHANDONG WOMEN'S UNIVERSITY

The school orientation is to focus on the idea of running an applied undergraduate education. The Academy of Art and Design determines the mode of training talents based on design subject, The college offers the direction of arts and crafts design in elective courses, such as folk art, pottery design and other practical courses. There are also several teachers who regard traditional culture as the research direction. In addition, the design art week of college also invites many domestic non-legacy inheritors into school to carry out lectures and intangible cultural heritage teaching. In general, the college has a relatively systematic curriculum system, certain theoretical resources support, as well as rich teaching resources and practical activities^[2].

The graduation design course is an important practical course to investigate students' four-year comprehensive study, which requires students to have strong ability of problem solving, design and innovation, and is the most able to reflect the quality of applied talents training. In recent years, the author

found that there are several outstanding problems in the practice of graduation design. Firstly, The main topics of graduation design are self-proposition, design competition and a small number of design projects. The self-proposition theme design is based on the students' field research and network data collection around the university town, and the research scope is small and not deep. The number of students who choose the last two topics is small because the time and content of the event is not controllable. Secondly, under the influence of western culture and international design style, students can not help but westernize their aesthetics, which leads to the serious homogeneity of design style and expression form of works, and the lack of creative expression ability of innovation and creativity.

3.IMPLEMENTATION PATH OF INTEGRATING TRADITIONAL HANDICRAFTS INTO GRADUATION DESIGN COURSE

3.1 Traditional and cultural creation topics

In today's society, both at the national and local levels, the development of innovative creative industries is being encouraged. Combining professional advantages and taking "traditional" and "cultural creation" as the design direction, it can not only avoid the homogenization of topics, but also provide a certain reference for local creative industries, which can be described as a win-win situation. When selecting specific topics, we can make specific choices with existing resources and students' abilities. The graduation design work - "Rabbit King" Jinan Clay Sculpture Product Design" under my guidance is taken as an example. The student has a strong interest in traditional culture, and I have research the local traditional folk handicraft for several years. Both the teacher and student expressed a strong interest in this, and then determined this topic with Jinan local traditional handicraft as a starting point. In the design process, because of the interest, we finally completed the higher quality design work.

3.2.In-depth field research

Design research is very important for establishing design concept and style. With the traditional handicraft as the topic of graduation design research, we can start from these aspects. Firstly, go to the field and interview directly with the inheritors. The author has carried out research with students in-depth inheritor studio. In the interview, I have been familiar with the historical background, artistic characteristics and artistic value of traditional handicrafts and also further understood the sale and dissemination of traditional handicrafts confusion, as well as the intentions of inheritors to make the work product. Secondly, access to information and learn the story behind traditional handicrafts. After determining the content of the selected topic, we should also inquire the background story of traditional handicraft through books or network resources. Because of the variety of traditional handicrafts, the same traditional handicraft

will have different interpretations in different regions. Only when we know ourselves and know our enemy, can we refine the design content accurately and determine the design elements. Third, enter the market and know well the modern design products and design technology. The final landing is cultural creation product with the design mode of "traditional" + "cultural creation". We should be aware of the carrier types of the best-selling cultural creation products in the market and the printing and post-production processes of cultural creation products. Only in this way can the traditional handicraft really be integrated into modern life.

3.3.Design performance path

Traditional handicraft has both usability and aesthetics, and contains rich cultural contents and creative thoughts. It is not easy for students to accomplish modern innovation in traditional culture. In the process of guidance, I also found that there was a lack of systematic thinking and design logic at the beginning of the study of design problems and the arrangements of design works were often in a confused state. They often conceived a design based on their own assumptions when research was inadequate or they did while thinking and reworked back and forth. In fact, in order to avoid rework back and forth, students should make detailed design plans at the beginning of the design, and determine the design form according to the students' design strengths. If some students have a strong foundation of illustration, they can combine illustration with cultural creation, translate the contents of traditional handicraft in rich image form, and make graphic expression directly. Some students have strong hands-on ability. They can make full use of the resources of the school's woodworking studio or pottery studio and translate the planar design contents in the manual three-dimensional form. Such products will be full of feel and emotional temperature. Design forms serve the design content. For the expression of design content, we should further refine the design elements from the perspective of internationalization and nationality on the basis of previous research, and pay attention to the transformation of design semantics and the expression of design implication.

3.4.Integration and feedback of design works

The integration and feedback of design works is an important way to promote students' deep understanding and deep reflection. It is mainly the writing and representation of design instructions. The whole process of writing design instructions is also a process of deep integration and deep thinking, which is of great significance for students to form systematic design thinking and construct self-design style. Design presentation can be divided into online and offline modes. Online design inspection can be realized through WeChat public number, online app and professional design website, so that students can understand the advantages and disadvantages of

design works in the public's comments. Offline mode can be carried out through the college and school graduation design report exhibition and the mutual evaluation between students and teachers. Teachers should make a reasonable evaluation of the results of students' works and the whole design process in the course evaluation rules.

4. CONCLUSIONS

Colleges and universities have rich talent resources and educational resources, and their design major plays an irreplaceable role in the development of local cultural innovation and creative industries. Understanding the artistic connotation of traditional handicraft and expressing traditional semantics with modern design language is not only conducive to

design innovation and forming a unique design style, but also has far-reaching significance in that it provides a "living" way for the development of traditional handicraft in the contemporary era.

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On the Innovate Path of Education for Ideology and Politics in Colleges and Universities under the Background of New Media

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Abstract: The position of education for ideology and politics in colleges and universities has developed in the era of the rise of new media, which has made colleges and universities continue to deepen their education for ideology and politics. As a result, new carriers have been formed. In the entire education, it is practical and significant to give full play to the new media, evade the negative news in the environment of new media, and enhance the effectiveness of students' ideological and political education. In this study, the author first analyzes the characteristics of new media, then explores the difficulties of colleges and universities in the education for ideology and politics under the environment of new media, and finally analyzes the innovate path of education for ideology and politics in universities.

Keywords: New media; Education for ideology and politics in colleges; Working ideas; Innovative path

1. INTRODUCTION

Big data thinking is the biggest feature under the environment of new media. It has been widely used in many fields. New media is everywhere in the Internet era, and college students have a great influence under the environment of new media. With the opening and dynamic effects of new media, students will be exposed to bad public opinion without even noticing, and the authority of education for ideology and politics will be affected. The study of the innovative path of education for ideology and politics in colleges and universities under the environment of new media, is helpful to improve the effectiveness of education for ideology and politics^[1].

2. FEATURES OF NEW MEDIA

Compared with the traditional media such as newspapers and magazines, new media has its own unique features. In the environment of virtualization and personalization, new media has shown the massiveness and timeliness of the already obvious cross-linking. The current environment of new media is a simulation of the real world environment based on the Internet and combined with modern digital technology. All kinds of animation effects are virtual, but such a virtual environment can well show the personality of students, so it is loved by students. In the new media environment, every netizen can

form their own network data, which will form a large number of network data. These information will not be limited by the location, but can be published in a few seconds in the virtual network. The Internet users can communicate with each other, which is irreplaceable by traditional media. It is a unique feature of new media^[2].

3. OPPORTUNITY OF EDUCATION FOR IDEOLOGY AND POLITICS IN COLLEGES AND UNIVERSITIES

The characteristics of new media are obvious, so it is worth affirming to carry out education for ideology and politics in colleges and universities. But things are both sides. Under the environment of new media, colleges and universities will also show their own opportunities when they choose positions to carry out education. The environment of new media provides a two-way education channel for ideological and political education. Traditional education is mostly one-way education. Educators guide and educate, and students are forced to accept indoctrination education. However, in the era of new media, education for ideology and politics can be changed from one-way to two-way, and the education mode is more convenient. The thought of college students tends to be mature gradually. They have their own understanding of all things. They have strong independence, obvious variability and significant difference in personality. The education assisted by new media is in line with the development of students. In the era of new media, students have been proficient in using mobile phones, computers and other communication tools, and online communication can break through the location limitations, so that students can access diverse ideas and knowledge. Therefore, teachers should stimulate students' interest in learning, enhance students' enthusiasm for ideological and political related knowledge, and encourage students to take the initiative to learn at a suitable time when carrying out education for ideology and politics. Under the environment of new media, education for ideology and politics shows more possibilities^[3-4].

4. AN IN-DEPTH ANALYSIS OF THE INNOVATIVE PATH OF EDUCATION FOR IDEOLOGY AND POLITICS IN COLLEGES AND

UNIVERSITIES

4.1 To build a new media exchange platform

The era of new media is on the way, and the education for ideology and politics in colleges and universities should build their own communication platform under the background of new media. In short, APP under its own education environment can help teachers to carry out teaching, and students can master knowledge in APP, which improves the teaching effect and makes students really feel interesting from APP. Of course, APP is not only interesting. It needs to think deeply that how to integrate the ideas of traditional media and integrate education oriented and entertainment oriented into APP to improve the utilization rate of APP and improve the ideological and political education level of students. In addition to self created Apps, teaching activities can also be combined with QQ, WeChat, microblog and other common environments for students to establish an exchange platform for ideological and political education. Teachers and students can exchange their ideas online without distance, which helps students understand education for ideology and politics and stimulate teachers' creative thinking. It also helps teachers to put education for ideology and politics to a higher platform. When using these communication platforms, teachers must pay attention to the integration of animation, voice and other diversified elements. The traditional and boring content of weapons enables students to learn ideological and political knowledge in their own fields of interest. Teachers should enable students to truly feel the right values and guide students to gradually establish the right values.

4.2 To enrich the content of education for ideology and politics

College students have enough time in school, and their life and study are completed in school, so the campus culture has a significant impact on students' consciousness. In the process of education for ideology and politics, teachers start with campus culture and add appropriate elements to infect students, so as to improve the education and make students receive edification in the correct values for a long time. It is helpful to enhance the ideological and political discourse power of colleges and universities and improve the teaching style. Therefore, the cultural construction in the campus is a good teaching path and innovative path. Starting from the campus culture and using multimedia technology, we can build a campus with the combination of modern elements and ideological and political education elements, highlight and consolidate the main position of students, and enable students to feel the charm of the campus culture and accept the correct values.

4.3 To carry out diversified theoretical courses of education for ideology and politics

New media environment has penetrated into every student's heart, so education for ideology and politics

should also be infiltrated layer by layer. Making full use of new media to carry out ideological and political education is the only way to innovate the education. Such a model as combination of classes and extra-classes and that of online and offline teaching can maximize the creation of a teaching atmosphere. It requires schools to provide a diversified teaching environment, build a teaching environment for ideological and political education, and encourage all teachers to use multimedia equipment. The teaching work should keep pace with the times. Only by accepting the most avant-garde knowledge can we understand what the students think, and then can we better carry out the education. Without understanding the level of knowledge received by students, it is impossible to make a good plan for education, and naturally it is impossible to obtain the desired results.

5. CONCLUSION

It is precisely because of the diversification and universality of the environment of new media that education for ideology and politics will be limited. The centralization of new media is true, and information is rampant. When carrying out education for ideology and politics in colleges and universities, it is necessary to build a multimedia platform to encourage the communication between teachers and students. Education for ideology and politics should be carried out from the rich campus culture. It is also necessary to understand students from a diversified perspective, understand the new knowledge they receive, and understand their thoughts, so as to carry out education for ideology and politics well and obtain better education results.

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Symbolism in *Young Goodman Brown*

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Abstract : As one of the outstanding works in Nathaniel Hawthorne's writings, *Young Goodman Brown* criticized the hypocrisy and selfishness of Puritanism, and inspired readers to find a right way to atone their original sins. Symbolism can be seen everywhere in the book, including characters' names, different colors and specific objects. This article analyzed different symbolic meanings in different aspects, and summarized what Hawthorne achieved in this distinctive writing.

Key words : Puritanism; symbolism; Hawthorne

Nathaniel Hawthorne (1804-1864) was one of the greatest Romantic writers in the 19th century. His unique writing techniques and perspectives on society left us many excellent literary works, such as *the Scarlet Letter*, *The Marble Faun*, and *Young Goodman Brown*. *Young Goodman Brown* is a representative work in Hawthorne's collection of short stories.

Goodman Brown, a young man living in Salem town, was tempted by his evil heart to go to the forest for a party with the devil. On the way he witnessed the ugly nature of human beings, lost his original belief and finally went to the abyss of degeneration. The work uses surrealist techniques to show readers a puzzling world^[1].

The world presented in the story is a gap between reality and imagination, in which the use of abundant symbolic techniques makes the work full of mystery.

1. THE SYMBOLIC MEANINGS OF CHARACTERS' NAMES

Hawthorne was born in a Puritan family and was overwhelmed by Puritan doctrines at his early age. In some Puritan families, they used to add modifiers expressing good moral standards to their names.

Different names in the novel have such symbolic meanings. For example, Goodman means "nice man" in English. His wife, Faith, means "loyal" in English. The names of the couple established an image of a "kind-hearted man" with firm beliefs they want to hold. However, with the development of the story, we can see the irony that Hawthorne wants to express about the symbolic meanings of their names.

Brown was a representative of pure and faithful villagers in the whole Salem village. Even driven out by evil, he will not forget to tell his wife, "pray and keep you safe and sound." Although he always considered himself a voter of God, an honest man and a devout Christian, his slight feeble belief led to his final fall^[2].

At first, Brown thought that occasional temptation to go on a devil's date would not change his life. He

walked into the forest, where he met an old man, believing that his father had burned Indian villages and that his grandfather had whipped Quaker women. From the Puritan standpoint, the evil of human nature was inheritable, which cracked down Brown's faith. He guessed the inheritance and continuity of "evil" exist in him. What broke him down is that on his way to the Devil's Covenant, he saw his spiritual adviser Deacon Gookin and the priest Goody Cloyse, who had taught him the most trusted and respected tasks in his life, which plunged him into the agony of doubting his beliefs. Until his wife Faith was also found at the party, Brown's beliefs finally collapsed and he completely denied his previous convictions. He felt that there was no morality in the world, that human nature was evil, and that he himself could not escape the fate arranged by God. Finally, he lost faith completely and went to degeneration.

Brown's wife, Faith, represents all people's trust in others and society, and Puritan devotion to God and their respect for morality. In the forest, when the old man blamed Brown for being late, Brown returned: "Faith kept me for a while." We can see from this sentence that Brown's inner goodness and belief once prevented him from coming to the devil's party.

2. THE SYMBOLIC MEANINGS OF THE RIBBON AND THE SNAKE

The objects appearing in the story have unique symbolic meanings like Faith's pink ribbon. In the Western cultural tradition, color has its own unique meanings. White symbolizes purity and beauty, while red usually symbolizes violence and evil. Faith's ribbon is pink, mixed with white and red. It implies the good and evil quality intertwined in human nature, neither pure, nor thorough evil, but also represents the unstable human beliefs^[3].

This symbolic meaning is embodied in the change of Brown's inner world. At first, Brown decided to leave Faith for the devil's party. He was bewitched by the evil in his heart, which reflected his unswerving faith. But at the same time, his faith prevailed. He still insisted on faith and resisted evil. He thought that he would return to his wife Faith after the weird party ended. As more and more familiar people appeared at the devil's party, his beliefs gradually collapsed.

The last time the pink ribbon appeared in the story was the next morning when Faith was greeted with a pink ribbon. By this time, Faith was no longer the pure angel in Brown's heart. The ribbon symbolized Faith's hypocrisy.

In addition to the pink ribbon, the snake stick in the hands of the old man is also highly symbolic. Snake is the instigator of evil in Western culture. It once

tempted Adam and Eve, the ancestor of mankind, to steal the forbidden fruit from the tree of wisdom. Therefore, Adam and Eve were expelled from the Garden of Eden. In the story, the old man is Satan in Brown's heart. He leads Brown step by step to understand evil of human nature. The snake stick in his hand is the symbol of desire. In the forest, the old man's stick has been tempting and supporting people who went to the devil's covenant, leading them to the abyss of evil. The old man threw the snake stick to Goody Cloyse to help her get to meeting place smoothly, because the owner of the snake stick lent it to the Egyptian sorcerer, and the snake stick immediately became a living thing in front of Cloyse. These plots showed that the snake stick is not a general stick, but has the magic to lead people to evil.

3. THE SYMBOLIC MEANINGS OF THE DREAM

At the end of the story, Hawthorne left a suspense for readers. When the devil baptized people who are present, Brown suddenly found himself in solitude, like a gust of wind roaring through the forest, and Brown seemed to wake up from a nightmare.

This plot is the embodiment of Hawthorne's contradictory Puritanism. Born in a Puritan family, Hawthorne's first ancestors had brutally persecuted Quaker members. His second ancestor was one of the three judges in the famous Salem Exorcism Case in 1692. The crimes committed by his ancestors left an indelible shadow in his heart, which greatly influenced his writings.

On the one hand, Hawthorne believed in the theory of original sin and felt that he could not avoid being implicated in family crimes. On the other hand, he was not willing to resign to the fate. Therefore, despite his belief in evil of human nature, he actively advocates the ultimate salvation and rebirth through moral force.

Finally, he saved Brown from the devil, hoping that people would persist in the power of good in their hearts and resist the temptation of the outside world and evil in their hearts.

4. THE SYMBOLIC MEANINGS OF SURROUNDINGS

The whole story takes place in forest at night. The forest at night is full of darkness, which established the narrative background of uncertainty. As soon as Brown entered the forest, the forest showed its

illusion and danger. The road was covered by dark trees, revealing a narrow passageway for people to pass through, and then immediately closed.

"Travelers don't know who might be hiding behind innumerable trunks or under dense branches above their heads." "There may be a devil Indian behind every tree." These descriptions symbolize that Brown is walking into a place of evil, ahead of which is the road of the soul. The forest under the darkness is gloomy and concealed^[4], just as the people who enter here show their sins in the depths of their souls without restraint. When Brown saw that his wife had been tempted by the devil to come here, the forest around him had undergone a strange change.

5. CONCLUSION

Influenced by Calvin's Puritan consciousness, Hawthorne's works focus on the inner world of the protagonist and describe the degeneration of the characters and the darkness of human nature. He is not only good at using psychological analysis and description, but also uses a lot of symbolism in his works, which endows his works with deep meanings and romanticism.

In *Young Man Goodman Brown*, there are many other symbolic intentions, such as dark clouds, altars, stars, hymns in the night and so on, which have their own profound implications. The use of symbolic techniques makes the novel full of moral characteristics, and the distinctiveness of the characters is more vivid. The discussion of these symbolic meanings is also conducive to deepening the understanding of the theme expressed in the novel and to understanding Hawthorne's contradictory religious views.

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On the Loneliness in Akiugawa Rinosuke's "Autumn"

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Abstract: Akutagawa Ryusuke is versatile and sentimental. As one of the main writers of the Neo-Trendism, his writer career can be roughly divided into early, middle and late stages. Most of his early works (1916-1920) were based on historical novels. His mid-term creations (1920-1924) began to turn to the real world. This turn was tortuous. For example, *"The Road"* failed to create. Under the pressure of society, he finally was recognized in the work *"Autumn"*. *"Autumn"* is divided into four chapters, and the word "loneliness" appears five times in total, making people feel lonely about the full text. The late (1925-1927) works began to show a clear autobiographical tendency. Therefore, in order to understand the characteristics of Akutagawa's mid-term creation, on the basis of previous studies, this article through the text careful reading, from the two aspects of the evolution of loneliness and the increase of loneliness, tries to discuss the loneliness in the work *"Autumn"*. The protagonist Nobuko experiences from loneliness to solitariness. Due to the cruelty of reality, loneliness is increased, from which you can peep into the loneliness in Akutagawa's heart.

Keywords: *"Autumn"*; Akutagawa Ryusuke; Loneliness; Solitariness.

1 INTRODUCTION

Akutagawa Ryusuke's early creations mostly used the stage of history to show modern things, and the protagonists portrayed were mostly lonely. As his works on historical subjects were widely recognized, he began to change the subject matter and strive to face reality. Most of the mid-term works are enveloped in a lonely atmosphere. But after the reality hit the wall, he tried to escape from reality and closed himself in a lonely world. In the end, he committed suicide in 1927 with "indifferent uneasiness" and ended his young life^[1]. Among them, *"Autumn"*^[6] has a great significance as the last trump card in the mid-term creative career of Akutagawa^[2]. Therefore, on the basis of previous studies, this article discusses the loneliness^[3] in the mid-modern work *"Autumn"*. *"Autumn"* is divided into four chapters, and the word loneliness appears five times in total. This article uses text analysis to deeply analyze the main characters appearing in the text, including sister Xinzi, Xinzi's husband, sister Zhaozi and Zhaozi's husband Junji. Nobuko has experienced loneliness from the initial loneliness to experiencing

solitariness, but also encounters an unfortunate marriage life, icy affection and missed love. She feels the loneliness deeply all over her--Autumn, from which she can peer into the loneliness inside Akiugawa.

2 LONELINESS IN "AUTUMN"

2.1 The Evolution of Loneliness

2.1.1 Lonely Surrounding

The protagonist Nobuko is occupied by the world of filial piety and the world of sentiment^[4]. Taking into account the situation of her sister and mother, she chooses to follow secular conventions. After graduation, she first decides the relatives and then creates some works. She made this choice because of the worldly oppression, which showed her loneliness. Junji is an important male image portrayed by Akutagawa in the novel-timidity. On the one hand, he can't calmly face the doctrine of belief. On the other hand, he hides his true thoughts about love. Nobuko trusts Junji fundamentally, but he shows timidity in both faith and love. He does not really believe in Nobuko, which makes Nobuko feel lonely. The classmates did not really know the relationship between Nobuko and Junji before and after marriage, nor did she really know her thoughts. They talked about Nobuko's marriage as an amateur topic and did not really care about Nobuko^[5]. The ignorance of her classmates made Xinzi lack objects to talk with, and no one could lead her to make the right choice, which made her feel lonely.

2.1.2 Initial Loneliness

After marriage, the husband left home all day long, so that the brand-new rental house in the pine forest enveloped the silence, rendering the silence of the rental house. At this time, the word "loneliness" appeared for the first time in the text, indicating that Xinzi had a sense of loneliness in this silent rental house. In the rented house in the afternoon, whenever Xinzi feels depressed for no reason, she will open the letterhead written by her sister. Zhaozi has always emphasized in the letterhead: my sister sacrificed herself to choose this marriage for me, please ask her never to abandon her. But Nobuko knew deep down that her was not completely sacrificed. Afterwards, her depressed, pine forest, sunshine, and twilight constitute a dynamic image, her heart is struggling, and the sunlight shed in the pine forest gradually turns into golden twilight, setting off the solitude of Nobuko.

2.2 Increasing Solitariness

2.2.1 Unhappy Marriage

In the first three months, they lived a seemingly happy life like all newlyweds. But when the summer heat turned into early autumn, because the sweaty collar could not be replaced, their contradiction was intensified, repeating the quarrel and reconciliation. The dialogue between her husband and Nobuko and the changes in their behaviors and psychology present an unfortunate marriage life, thus increasing the loneliness of life. Since late autumn, Nobuko has peeped into her husband's complexion and became obedient to her husband. But she still didn't understand her husband, and her husband also didn't understand Xinzi, and the marriage life became more lonely. In the fall of the next year, they returned to their hometown, but the husband just hurried to her maiden's house and hardly took her out for a day. Even so, she made excuses for her husband, from which she could deeply feel the loneliness of Nobuko.

2.2.2 Frozen Family

Nobuko thinks that her sister will cry when she knows she is unhappy, and regards her as her only spiritual support. After the reunion, the word "loneliness" appeared for the third time in the text. By comparing the atmosphere of the two tables, the loneliness of the restaurant in the pine forest was brought out. But when Junji got along with Nobuko again, a crack appeared between the sisters. They also became incomprehensible to each other, with a moment of silence, with a lonely sentimentality. Facing the cry of her sister, Nobuko no longer felt that her sister was lovable, but felt the cruel joy. The changes before and after Nobuko indicate that sisterhood is gone. Finally, although the sisters reconciled with new tears, this family relationship has frozen. At this time, the word "loneliness" appeared for the fourth time in the text, and Nobuko had downplayed this affection. The frozen family affects Nobuko's spiritual support and adds nobuko's solitariness.

2.2.3 Missed Love

After marriage, Nobuko never took the initiative to understand Junji's life. By accident seeing his name in the monthly magazine, Nobuko found that she still missed him. Here, the word "solitariness" appears for the second time in the text. Nobuko believes that Junji is also lonely, rendering a lonely atmosphere. Afterwards, she did not want to believe that Junji and her sister were getting married, stubbornly not letting her love go away. After returning to her native land, Nobuko and Junji have two short periods of solitude, which is beautiful and lonely. Because when the three get along, Junji is not Xinzi's cousin. But in the end, Nobuko hesitated again. Junji is like a chicken that has been robbed of an egg, and has no room for retention. What a sadness it is. At this time, the word "loneliness" appeared for the fifth time in the article. Nobuko missed Junji and could not embrace the light

of daylight. The only thing he ushered in was loneliness-autumn.

3 CONCLUSION

Akutagawa is an art supremacist. He is good at reflecting the reality and interpreting life through historical themes and fusion of Eastern and Western literature. In 1919, his beloved teacher's experience inspired his desire to create novels in newspapers. To this end, he began to create works of modern life. During the period, the creation of modern themes encountered a crisis, and society's criticism of its works and style was also very fierce. In 1920, in the context of the times, he wrote "*Autumn*", which was well received and strengthened his confidence in writing modern novels.

"*Autumn*" focuses on Nobuko's unfortunate marriage life and reunion with her sister and Junji. The word "loneliness" appears five times in the full text, covering the lonely atmosphere. Because of the secular oppression, Junji's cowardice, and the classmate's ignorance, Xinzi felt lonely. After marriage, Xinzi often stayed alone in the rental house in the pine forest, accompanied by a letterhead, and the loneliness in her heart sprang up. Real life is cruel. Afterwards, Nobuko and her husband repeated the quarrel and reconciliation. Gradually, she became necessary to look at her husband's complexion of life. Returning to his native land, but having an irreversible conflict with his sister, the loneliness in his heart could not help but deepen. In addition, she passed by Junji again, and she felt lonely all over.

From the above analysis, it can be connected to the life experience of Akutagawa and peep into the loneliness inside Akutagawa. He felt lonely from an early age. The success of his early creations gave him confidence to face reality, so he understood loneliness. Due to the narrow research field of this article, it is impossible to fully introduce Akutagawa's literary features. But it is necessary to summarize all his literary features. The protagonists portrayed by Akutagawa in the early days are mostly lonely, such as "*The Nose*" which is appreciated by Natsume Soseki. Later works began to bring obvious autobiographical tendencies, such as "*The Word of the Gnome*", which dissects his own worldview. These works will be the research object of the author in the future.

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Research on Ways of Integrating Traditional Chinese Medicine Culture into Students' Quality Education

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Abstract: Traditional Chinese medicine culture is the treasure of Chinese traditional culture and has rich humanistic spirit and philosophical connotation. The quality education of students is a grand and far-reaching project, which needs further exploration and continuous development. This paper discusses the effect of traditional Chinese medicine culture on students' physical and mental health and innovation ability, and discusses the content and specific ways of promoting students' quality education with traditional Chinese medicine culture.

Key words: Chinese medicine cultural Quality education

1.CONNOTATION OF TRADITIONAL CHINESE MEDICINE CULTURE

1.1 Connotation and Core Idea of Traditional Chinese Medicine Culture

Connotation of Traditional Chinese Medicine Culture. Traditional Chinese medicine includes traditional Chinese medicine and traditional Chinese medicine, which constitute the basic content of traditional Chinese medicine. In the development process of traditional Chinese medicine, the unique theories, systems and contents of traditional Chinese medicine have been formed. These theories, systems and contents are not only the basis for treating physical diseases, but also the importance of traditional Chinese medicine as a whole. This is also the quintessence of Chinese traditional culture. These theories, systems, contents and ways of thinking of traditional Chinese medicine rooted in traditional Chinese culture constitute the culture of traditional Chinese medicine.

The Core Idea of Traditional Chinese Medicine Culture. Traditional Chinese medicine culture has three core concepts: first, core values, namely, harmony between man and nature, harmonious coexistence and balance of yin and yang; The second is the core cognitive thinking mode, namely, image thinking, intuitive thinking, fuzzy thinking, etc. The third is the core code of conduct, that is, to follow the law of nature and to keep peace for a period of time^[1].

The core concept of traditional Chinese medicine culture has made traditional Chinese medicine culture a set of meticulous system, which has

influenced generations of Chinese people's thinking mode and behavior towards nature, society and themselves in the development process of Chinese civilization.

1.2 Contemporary Value of Traditional Chinese Medicine Culture

Traditional Chinese medicine culture is an integral part of philosophy culture with Chinese characteristics. Traditional Chinese medicine culture has a long history and is a part of philosophical culture with Chinese characteristics. Traditional Chinese medicine culture has a wide range of contents, including people and nature, people and people, and people themselves. This philosophy system can explain and understand the social phenomena in today's society, and can be integrated with Marxist philosophy. The basic principles of Marxist philosophy can be explained with the content of traditional Chinese medicine culture, so as to be better accepted by the public. For example, the relationship between man and nature: harmony between man and nature, harmonious coexistence; People and people and relationship: mutual generation and mutual restraint complement each other. People's own: four times and five elements, five organs to keep in good health.

Traditional Chinese medicine culture can be used as a breakthrough to solve students' educational problems. Students' education faces many difficult problems: students lack motivation to learn; The students' life rules are chaotic. The occurrence rate of psychological diseases among students has increased significantly. The deep philosophy contained in the culture of traditional Chinese medicine can solve the problems encountered in students' education by telling stories and open the door of wisdom when students are confused physically and mentally.

Traditional Chinese medicine culture can be combined with contemporary cultural elements in inheritance and can promote the rich development of traditional Chinese medicine culture. Traditional Chinese medicine culture needs to be combined with contemporary cultural elements to radiate new vitality. This combination of innovation can be combined with modern advanced Internet technology, and can also be mined in content. And

this innovation of traditional Chinese medicine culture can promote the enrichment and development of traditional Chinese medicine culture.

2. QUALITY EDUCATION FOR STUDENTS

2.1 The content of quality education for students

The content and structure of quality education for students include the following aspects: first, physical quality education, which is based on students' innate conditions and develops their intellectual potential; The second is the cultivation of psychological quality, cultivate students' sound personality quality.

2.2 The core concept of quality education for students

Quality education refers to an educational model aiming at improving the quality of the educated in all aspects. It attaches importance to the education of people's ideological and moral quality, ability cultivation, personality development, physical health and mental health. The core idea of quality education for students is the healthy growth of body and mind. The quality education that we once emphasized is actually to cultivate a person who is healthy both physically and mentally: based on students' innate endowment, to cultivate students' healthy psychological quality, to internalize the environmental and educational rights into students' cognitive structure, and to carry out cultural quality education.

3. CHINESE MEDICINE CULTURE INTO THE STUDENTS' LITERACY EDUCATION APPROACH

3.1 Feasibility of Integrating Traditional Chinese Medicine Culture into Students' Literacy Education
First, traditional Chinese medicine culture is an important part of Chinese traditional culture. It is the ideological and methodological system of the Chinese nation for thousands of years to understand life, nature, health, disease prevention and health maintenance. Traditional Chinese medicine culture has a unique philosophical system for the physical and mental health of people.

Second, the content of traditional Chinese medicine culture is extensive and profound, which can be refined and directly applied as the content of students' quality education. Among the methods of education, reasoning, telling stories and learning from history are very important. There are many vivid cases in the culture of traditional Chinese medicine, which can become the material of quality education. Traditional Chinese medicine culture also contains an important force for development and innovation, and is also a very excellent educational resource.

Third, the truth contained in the Chinese medicine culture is broad and simple, and students of all ages can choose materials to enrich educational resources. The educational resources contained in

the Chinese medicine culture not only contain the materials needed for the current education, but also form an effective continuous auxiliary role for the relevant education in the future. The name of the Chinese medicine prescription has profound meaning and educational significance: the Chinese medicine prescription Sanzi soup, the name of the prescription comes from a touching story. The author of this prescription is Han Mao, a famous doctor in the Ming Dynasty and a great filial son. His father was a general, and he led the soldiers all year round. Over time, the elderly began to lose their teeth and hair, their beards became pale, and they became weaker and weaker. Han Mao gave up his merits and studied Chinese medicine. Whenever his father went out, he followed him wherever he went. He saw his father and served soup. Han Mao carefully conceived a prescription for the elderly, cough, irritability, and phlegm. This prescription is "Sanzi soup"! There are three herbs used in this prescription: Radish Seed, Perilla, and white Semen sinapis^[2]. It also shows that filial piety is the most kind. While learning Chinese medicine culture for health, curing and curing the disease, I also learned the true meaning of traditional culture.

3.2 Ways of Integrating Traditional Chinese Medicine Culture into Students' Literacy Education

First, in school education, auxiliary courses can be offered for students to treat their bodies correctly. These courses can be added to common sense courses for prevention and treatment of diseases, and the essence of traditional Chinese medicine culture can be selected for popularization.

Second, in family education, we advocate the development of family education of traditional Chinese medicine popular books, short videos and parent-child interactive games, and carry out targeted selection of effective materials for quality education at ordinary times and in special periods (such as illness, medical treatment and illness), so as to subtly penetrate into students' hearts and affect their physical and mental health development.

Third, in social education, the whole society first builds an atmosphere for the spread of traditional Chinese medicine culture with the historical foundation of traditional Chinese medicine culture. Secondly, the essence and material of traditional Chinese medicine culture should be deeply explored and applied to the quality education of students. Finally, summarize the influence of traditional Chinese medicine culture on quality education in a timely manner, reasonably classify and effectively apply it, reasonably combine traditional Chinese medicine culture with quality education, and play the role of traditional Chinese medicine culture.

Traditional Chinese medicine culture contains many important cultural factors that are worth exploring deeply and affect students. Through the efforts of

schools, families and society, the combination of traditional Chinese medicine culture and quality education for students can solve the bottleneck encountered in quality education and provide new ideas for the sound development of quality education.

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Research on Application of Artificial Intelligence in Education of Polytechnic Colleges under the Information Environment

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Abstract: Under the background of information technology, artificial intelligence (AI) technology has been comprehensively developed and updated, which has a profound impact on industrial skilled personnel and further forms new challenges to the education and teaching management of Polytechnic Colleges. It is necessary for Polytechnic Colleges to change their thinking, improve the teaching pattern and help students grow up, so as to better train students in the context of AI and provide talents for the society. Therefore, the author first expounds AI in the information environment, then analyzes the impact of AI on the formation of Polytechnic Colleges, and finally analyzes the transformation of AI in Polytechnic Colleges under the information environment.

Keywords: Information environment; AI; Polytechnic College; Teaching management; Applied research

1. INTRODUCTION

In the epidemic of pneumonia caused by the novel coronavirus in 2020, intelligent robots replace human beings to deliver materials for the isolated people in the isolation room. In fact, under the information environment, AI has developed rapidly. The modern Unmanned Aerial Vehicle (UAV) can complete the distribution work, the trash robot can complete the classification of trash. What's more, alpha Weiqi has constantly defeated the experts in the field of Weiqi and completed the social transformation. AI has emerged a pattern of blooming, which also has a certain impact on the cultivation of talents. Under the information environment, more and more scholars pay attention to how to combine AI to complete the teaching management of Polytechnic Colleges.^[1]

2. AI IN INFORMATION ENVIRONMENT

Under the background of information age, AI, as a new technology and science field, covers many fields. It includes learning, reasoning, thinking and even planning. It is a kind of intelligent machine produced by using the information environment and combining the principle of computer intelligence. In short, it gives machines the ability to input, process and output, which includes voice, image, thinking, learning, etc.^[2] With the large-scale promotion of big data, AI has gradually developed, and its ability of planning and decision-making and natural language processing has gradually improved.

3. IMPACT OF AI ON THE FORMATION OF POLYTECHNIC COLLEGES

Under the information environment, AI has many influences on Polytechnic Colleges, and the most direct impact is the change in talent positions. Under the background of AI, many intelligent robots appear, and the grassroots personnel in various companies are gradually replaced by machinery and intelligent robots. Most of the talents trained in Polytechnic Colleges will take up basic management positions in the company.^[3] After the pattern of machine substitutions emerges, some highly repetitive and simple jobs are gradually replaced by robots, and the people on the posts have to be fired, which has failed to help talents become self-reliant. It is a new subject that vocational colleges need to be researched. Under the change of talent demand pattern, the teaching management of Polytechnic Colleges is also facing reform. Online teaching resources are rich, and virtualized teaching classrooms and human-machine interactive intelligent learning are gradually formed. It is possible for robots to engage in teaching in the future. The internal governance system of Polytechnic Colleges has gradually formed under the influence of AI.

4. TRANSFORMATION OF AI IN POLYTECHNIC COLLEGES UNDER THE INFORMATION ENVIRONMENT

Under the information environment, with the impact of AI, higher vocational education and teaching work also needs to undergo new changes. The details are as follows:

4.1 To start teaching with new technologies and new concepts

In order to keep pace with the times, teachers in Polytechnic Colleges need to actively learn the knowledge and some skills related to AI. With the continuous promotion of AI technology and the continuous advancement of modern education, teachers need to upgrade their professional knowledge and change their teaching concepts, and develop AI as the future trend. In addition, teachers should correctly understand the impact of AI on duration, and adapt to the advent of intelligent era. And students will be better trained to master knowledge and skills in order to better cope with the artificial era. The school's teaching administrators also need to learn AI technology. The intelligent

teaching system can help teachers and students save complicated processes, and help them carry out more comprehensive teaching activities. Teaching activities involve academic evaluation and decision analysis. The intelligent system can provide more and more accurate data, assist teachers to complete the analysis, dig deeply into the problems existing in the teaching, actively make corrections, and improve the quality of teaching. In addition, the teaching quality of the classroom can be also obtained from the intelligent system to fully grasp student's learning situation to adjust the teaching method and improve the teaching quality. In the information system, students' learning habits, learning interests and other knowledge will be obvious due to the accumulation of big data. Teachers can clearly observe the changes of students. In the limited classroom, the knowledge is imparted. After-class time is sufficient to fully understand the students and master the academic situation of students. And it needs to accurately analyze the students' knowledge of knowledge points, and adjust the teaching plan.^[4]

4.2 To guide students to grow into talents by combining with AI

AI can accurately analyze the learning situation of students, so a more intelligent system can help students learn from the perspective of AI technology and online learning management. Some students know more about intelligent information. Teachers can conduct multi-level guidance in this area to help students better learn intelligent information and help students grow into talents in the future. Of course, comprehensive intelligent information data can help teachers understand the interests and hobbies of most students, and use this as a basis for diversified classroom teaching, which can greatly enhance students' interest in learning and assist students in better learning. At the same time, intelligent learning methods can also remind students that they need to supplement their knowledge after a long period of entertainment, or exercise appropriately during long hours of study, so as to combine work and rest to help students fully grow into talents.

4.3 The top design of AI in future education

The future development of AI is unpredictable, but Polytechnic Colleges should be proactive in the teaching process and have certain plans and ideas for top-level design. Only in this way can we think from the aspects of school resources, school management, education methods, etc., and truly achieve the

combination of AI to assist teaching. It is expected that after 10 years, the construction of AI will enter a new era. At this time, how to manage on campus and how to improve teaching methods are all expected in the future. The school explores, changes, and innovates the infrastructure and make top-level design to form a long-term mechanism and adapt to future changes.^[5]

5. CONCLUSION

AI is the development direction of the whole society in the future. The establishment of intelligent vocational education is a new challenge for vocational education institutions, which may be the direction of future education development. Teachers should actively change their teaching concepts, improve the teaching quality from the perspective of more intelligence, and guide students to grow up with the aid of artificial intelligence. They should also think about how to plan ahead, build top-level designs in future education, and actively make innovations and reforms, so as to adapt to the "survival of the fittest" education environment in the future.

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Analysis on the Necessity of Learning and Development for Modern Enterprises

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Abstract: The learning and development of employees might be the guarantee of the sustainable development of the enterprise and looks like an effective way to enhance the competitiveness of the enterprise. In this article, it would critically analyze the necessity of investing in employee training by analyzing the challenges and achievements that training brings to the company.

Keywords: Learning and development, Training methods and contents, Organization competitiveness, Employees' satisfaction

1. INTRODUCTION

Learning and development is an important way for enterprises to invest in human capital and is also the basis for sustainable development of organizations. Under the premise of cost control, how to position enterprise training is a problem that human resources professionals should pay attention to at present. In this article, it firstly introduces the definition of enterprise learning and development given by many scholars. Secondly, the article will summarize the existing literature and examples. On the one hand, it will list the drivers for learning and development. On the other hand, it will discuss the challenges that enterprises may face when formulating learning and development strategies. In addition, the outcomes of training for organizations and individuals will be summarized by combining drivers and challenges. Finally, according to the points discussed above, it should be possible to solve the issue of whether enterprises should continue to invest in staff training while controlling costs.

2. DRIVERS OF LEARNING AND DEVELOPMENT

As it is pointed that knowledge resources have replaced land, capital and raw materials to become the main factors of production. That means human capital has replaced material capital to become the leading factor of modern enterprise management. Therefore, the learning and development of employees are of positive significance to the development of enterprises. In this part, the two drivers of enterprise training will be analyzed.

2.1. Company competitiveness

The first reason why enterprises and organizations carry out learning and development is the need of the company's competitiveness. Acemoglu & Pischke (1999) believe that in rough market conditions, with the improvement of the level of on-the-job training, the productivity will increase effectively^[1]. The

improvement of the company's competitiveness is directly related to the employees' working ability. In another word, the stable working ability of employees means high productivity of employees. Higher productivity of employees will make the organization more competitive in the industry.

Based on the background of the knowledge economy, the demand for staff skills is even higher, especially in information technology. As an information technology services company, Atrion faces the difficulty of finding new employees who meet the requirements of the job. Most employees get paid early in their graduation, but what they have learned in the four years of college is now outdated and inexperienced in the workplace. Therefore, they urgently need more professional technical training so that the skills of employees can keep up with market requirements, thereby ensuring the company's competitiveness in the industry. Thus, there is a definite link between organizational competitiveness and the development of internal training.

2.2. Employee's satisfaction

Employee satisfaction should be a possible factor that encourages enterprises to implement training. Another essential purpose of advanced enterprise training is to stabilize and retain excellent employees by meeting their development needs. When an employee's personal development needs are met, the employee's confidence in completing the work and future career development could be improved, thus further improving their satisfaction with the workplace (McCarthy & Garavan 2001)^[2]. For an enterprise, a high turnover rate means that the cohesion and future productivity of the organization are both declining, which will lead to an increase in employment costs and financial losses. The improvement of satisfaction can effectively reduce the turnover rate, which is of considerable significance to reduce the cost of employment.

Taking a study by the Canadian Federation of Nurses (2008) as an example, it finds that newly graduated nurses expect the workplace to provide support so that they can adapt to the increased workload and work demand as soon as possible to provide high-quality care. In this case, nurses need to ensure that their skills are up-to-date through continuous learning and development to ensure the sustainability of their career.

In conclusion, when employees' needs for self-development are met, their loyalty and satisfaction to the workplace may continue to

improve. It is a positive significance for reducing the turnover rate and employment cost.

3. CHALLENGES

In the process of employee training, enterprises may incur direct or potential losses due to many negative influences such as concept, organization, technology and environment. In this part, the three challenges of learning and development for corporate will be discussed.

3.1 Challenge of training methods selection

There are many ways for enterprises to train their employees, such as lecturing by lecturers, case studies, job rotation (Ashar et al. 2013). In addition, it also includes sending employees to attend degree courses (Felstead & Jewson 2012). Targeted training for employees through the training method of matters can improve their work skills and help employees to update their knowledge to ensure that employees complete various tasks arranged by the enterprise. However, if the training method chosen by the enterprise is inappropriate, on the one hand, employees may fail to reach the organization's goals and their working ability may not be improved; On the other hand, the training effect may exceed the capacity requirements of the original job or even the organization, which will make employees no longer feel at ease to work in the original enterprise.

Thus, the choice of training methods has a significant impact on the training effect, so how to correctly choose training methods is an urgent problem for the human resources department.

3.2 Challenge of trainees' selection

After formulating the training plan, another problem faced by the enterprise is how to select suitable employees to participate in the training. The basic purpose of sending employees to participate in training is to meet the needs of enterprise development by improving the quality and skills of employees (Felstead & Jewson 2012)^[3]. Therefore, the company should evaluate the possibility of returning employees to serve the enterprise after receiving training when selecting personnel to participate in the training. This possibility is considered to be related to the loyalty of employees to the enterprise. Staff loyalty can be divided into active loyalty and passive loyalty. When the goals of the organisation are highly consistent with those of the employees, the enterprise helps the employees to develop and realize themselves through training and other means, which makes the employees have a strong loyalty to the company. This kind of employees will tide over difficulties with the enterprise even when the enterprise is in trouble (Ashar et al. 2013)^[4].

On the contrary, employees with passive loyalty are temporarily staying in the enterprise due to objective restrictions. They will leave the company once they encounter good opportunities or when the enterprise is in bad conditions.

Therefore, the selection criteria for participating in the training of employees should also examine their willingness to participate. In order to maximize the benefits and effects of training, a variety of conditions, such as employee loyalty and personal ability, should be taken into consideration when selecting training objects, which will virtually bring additional workload and increase the difficulty of work to the human resources department.

4. OUTCOMES

Learning and development has a positive impact on both enterprises and individuals. In this section, the outcomes of enterprise training will be described from two levels of employees and enterprises.

4.1. Outcomes for organizations

4.1.1. Improving the competitiveness

The first outcomes of training and development might be the improvement of competitiveness. The core competitiveness of an enterprise is the guarantee for its long-term personalized development. Under the condition of the knowledge economy, the competition among enterprises is more manifested in the competition of the quality level and learning ability of employees. Enhancing the competitiveness of enterprises by improving the skills and qualities of employees has become the basis for enterprises to seek development. Practical training could comprehensively improve the comprehensive quality of employees, including labour skills, technical strength, service level and production efficiency, and provide the impetus for the sustainable development of enterprises. From this perspective, learning and development are essential factors in the formation of enterprise competitiveness.

4.1.2. Decreasing the turnover

The second outcome for the organisation is that the appropriate enterprise training also effectively reduces the turnover rate (Newman et al. 2011)^[5]. The training courses arranged for the employees effectively improve the personal ability of the employees, enable the personal development needs of the employees to be met, enhance the loyalty of the employees to the enterprise, thus reducing the turnover rate and the cost of employing new employees.

4.2. Outcomes for employees

Learning and development not only has a positive effect on the organization but also may be of great significance to individual employees.

From the perspective of employees, training can enable employees to better master work skills and become more competitive. For new employees entering the workplace, professional training can enable them to master basic skills and experience faster, thus enabling them to become better more confident in their work. For employees who have been employed for many years, a large number of new employees pour into the workplace every year, and the work pressure is increasing day by day. Only

by constantly updating and improving their professional skills can employees ensure a long and stable career. In 2000, Johnson and Stewart considered that the trained staff are more likely to take responsibility and obtain satisfactory work performance than the untrained staff.

5.SUMMARY

Enterprise training accounts for a certain proportion of enterprise cost investment. Due to its indirect benefits and the influence of cost pressure, organizations have doubts about the necessity of its investment.

From the perspective of improving competitiveness, and meeting the development needs of employees, training is necessary and meaningful for enterprises. After training, the productivity is seemed to be improved and employees' turnover could be decreased, which is of positive influence for the improvement of the reputation for the enterprise. Besides, for employees, professional training is the basic guarantee for their personal development. The improvement of skills, the renewal of knowledge and the accumulation of experience would make them indispensable in the workplace. Meanwhile, to ensure the maximization of the investment income, the training methods and the selection of trainees are extremely important.

Generally speaking, the investment of talents for enterprise is a long-term and indirect investment, which may not yield direct benefits in the short term. However, according to the existing literature and

investigation, it could be seen that the long-term benefits and good reputation brought by investment and training are worth more than the value for the enterprise. Therefore, under the pressure of cost control, enterprises are advised to conduct reasonable and scientific learning and development investment.

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Otential Side-Effects Of Antidiabetic Chalcones Isolated From A Traditional Herb, *Angelica Akeiskei* In Curing Diabetes Mellitus Type 1

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Abstract: Diabetes Mellitus is a chronic disease characterized by hyperglycaemia caused by insufficient insulin action and usually needs life-long medication. However, existing medications may not be preferred by the nondiabetic subjects with impaired fasting glucose. *Angelica Keiskei*, a folk Japanese herb, contains "chalcones" that exhibit such function to ameliorate diabetes by inducing adipocytes cells and supplement glucose uptake. Through the measurement of ALP, ALT, AST, GGT, LD 50, and cell viability, we found that chalcones have little damage to the liver cells.

Keywords: Diabetes Mellitus, Chalcones, *Angelica Keiskei*, Liver

1. INTRODUCTION

There are two types of diabetes mellitus: type 1 diabetes refers to the insufficient produce of insulin and type 2 diabetes refers to the insensitivity of the insulin receptor when insulin is produced sufficiently. According to the Centre of Disease Control and Prevention (CDC), though only 5% of people with type 1 diabetes in the US, long-term medication still be a serious concern^[1]. Normally, glucose levels are maintained within narrow limits 4-5.5 mmol/L before eating and up to 7 mmol/L two hours after eating^[2]. In diabetes mellitus, this blood glucose levels is out of control, resulting in many undesirable effects on the body. Nowadays, diabetes has become one of the most serious health issues worldwide. Especially, in middle- and low-income countries^[3-4].

Aiming to ameliorate diabetes, many medicines have been investigated, such as insulin secretion agents. One way that these medications work is by inducing differentiation from preadipocytes to small adipocytes that can enhance glucose uptake with insulin stimulation^[5].

Adipogenesis turns stem cells into specialized fat cells that acts as a huge energy reservoir to store fatty acid in triglyceride form^[6]. To an extent, any energy intake that is higher than its expenditure would lead to expansion of the cell and undergoes mobilization^[7]. Therefore, it is easy to tell if a cell has changed from preadipocyte to adipocyte^[8].

However, existing medications may not be preferred. Therefore, investigations of alternatives like herbs or plants are considered.

Recently, a new research on *Angelica keiskei* by Tatsuji Enoki and his team proved that *Angelica* extract can exhibit such functions. This is determined through the measurements of fatty acid during the adipogenesis stage and the glucose uptake^[9]. Besides, animal experiments have also been performed to test the effectiveness of *Angelica keiskei*, which further proven the effects of 4-HD and XA in regulating insulin action. However, there are some potential side effects, such as increasing weights. Recognizing the side effects of a drug is important for future pharmaceutical use. Therefore, to determine other possible side effects and influence of *Angelica keiskei* on nondiabetic subjects with impaired fasting glucose, this paper intended to test whether a range of concentrations of either angelica extract or the 2 isolated molecules are toxic to liver using measurements of ALP (alkaline phosphatase), ALT (alanine transaminase), AST (aspartate aminotransferase), and gamma-glutamyl trans-peptidase (GGT) in blood and also test for LD50 in mice and cell viability by trypan blue, and annexin V/Propidium iodide for 3T3-L1 cell line.

2. METHODOLOGY

2.1 Preparations of AE extract

AE was prepared by extracting dried, powdered roots of *A. keiskei* (4g) in 100% ethanol for 30 min (twice) under gentle agitation, followed by concentrating the combined extract in vacuum evaporation and dissolving it in 1 mL of dimethyl sulfoxide. This solution contained 12.5 mM XA and 11.1 mM 4-HD.

2.2 Preparing Mice Samples

Animal experiments were conducted under the Ethical Guidelines. In the experiments, 5-week old mice were divided into six groups of 7-10 mice each by body weight and blood glucose level and fed a powdered CE-2 diet (without chalcones) or injected with test samples of salty buffer water and drug (0.15% for chalcones). Then, waited for some days, extracted the blood and measured for the liver enzyme samples, LD50 and cell viability.

2.3 Liver Toxicity Measurement

Blood samples were collected from the tail vein for further analysis. First, all the protein in the blood sample was isolated by serum protein electrophoresis (SPEP) test. Then, the monoclonal antibody of ALP, ALT, AST and GGT were applied to the sample. Next, ELIZA (enzyme-linked immunosorbent assay) with a specific reader measurement was conducted to see whether the AE, XA and 4HD extract is toxic to the liver or not. The colour change is detected by an electronic plate reader so that more specific and quantitative data could be produced and analysed.

2.4 LD 50 in Mice

For the determination of LD-50, an exploratory assay with each tested mouse strain was performed to exactly determine the dose range to be used. After the initial exploratory assay, the dose range was set between 0 and 300 mg/kg/day. The elected

doses for the lethality test were those capable of inducing mortality from 20% to 80%^[10]. The AE, XA, and 4HD LD-50 was calculated by performing analysis with 95% confidence limits from data pooled from at least three experiments. The data were submitted to variance analysis to verify if they obeyed a linear regression by the χ^2 test. The LD-50 value was expressed as micrograms of AE, XA, and 4HD per mouse and the confidence limits were determined using the Fieller theorem^[11].

2.5 3T3-L1 Cell Culture and Cell Viability Assay

3T3-L1 preadipocytes were maintained at lower than 80% confluence in DMEM containing 10% CS, 200 μ M ascorbic acid and antibiotics. Then, the cell was either put under trypan blue or used the modifies Annexin V/Propidium Iodide Apoptosis Assay for accurate assessment of cell death(as in Table 1)^[12].

2.6 Control Groups

Table 1: control groups of different mice groups

Controlled groups	Positive Control	Negative Control
5-week-old male ICR mice fed with different amounts of Chalcones: 50, 100, 200, 500,1000,1700 mg/kg.	Each dosage group is further divided into 14-days group and 90-days groups to investigate the long-term and short-term effect.	Mice fed with the normal diet that doesn't contain the Chalcone extract.

3. POSSIBLE RESULTS

3.1 Liver Toxicity

In lower dosage amounts, there was no visualized change in colour, but if looking at the quantitative data analysed by the electronic plate reader, both ALT and AST concentration remain constant throughout each dosage amount - with an estimate of 25IU/L and 50 IU/L each. However, in higher dosage such as 500,1000,1700 mg/kg, there were slight changes in colour. And the number produced by the electronic plate reader, which indicates the concentration of antibodies in the solution is much higher. Moreover, there is a possibility of overlapping the error bar between 200 mg/kg and 500mg/k. By the same token, antibody concentration of ALP and GGT will exhibit the similar trend, but overall lower value.

In general, 90-days groups are most likely to show the deficiency of liver function. However, the antibody concentration change between two groups can be further analysed.

3.2 Acute Oral Toxicity

During a 14-day observation period following injection of 0mg/kg to 300 mg/kg Ashitaba chalcone powder in aqueous solution, no abnormal clinical toxic signs were observed; Surprisingly, by the end of the period, distinctive weight gaining can be observed for those injected with high dosage of Chalcone powder.

3.3 Cell Viability

By using flow cytometry, possible damage or inhibition of specific DNA pathway may be known.

One example would be the upregulation of p21, check point proteins (Chk1, Chk2) and their phosphorylated forms.

4. DISCUSSIONS

ELIZA assay detects the presenting of the specific antibody of one type of enzyme against its specific antigen. Therefore, in a healthy liver enzyme, there would be no change in colour^[13]. However, once the liver cell is damaged, antigens may present and allow a visualized change in colour. The darker the color, the more toxic the cell is affected, as more antibodies are produced in order to balance the toxicity.

ALT and AST are the two most common enzymes found in the liver. If the liver is damaged, they will pass into the bloodstream and their values will be higher than normal^[14]. Still, it is possible for a patient that have normal liver enzymes levels to have liver damage. Specifically, ALT and AST exist mainly in bile ducts and osteoblasts in the bone that involve in the formation of bones^[15]. Therefore, as the antibody concentration, IU/L, remains constant compared to the positive control group of 0mg/k throughout each enzyme measure, there's no significant toxigenicity of Chalcone can be concluded.

Besides, the long day group is more likely to show side-effects due to the addiction and the accumulation of toxigenic substance. In the short-term, the efficiency of the liver enzyme will be high and therefore inhibit the significant damage of the liver from toxic substances. However,

14-days (2 weeks) and 90-days (12-weeks) are in far separation, in which the difference of two groups' antibody concentration change may not that much of a difference as Figure 1 shown below. Thus, further investigation on the side-effects of Chalcone in a 35-days (7-weeks) controlled group might be proposed.

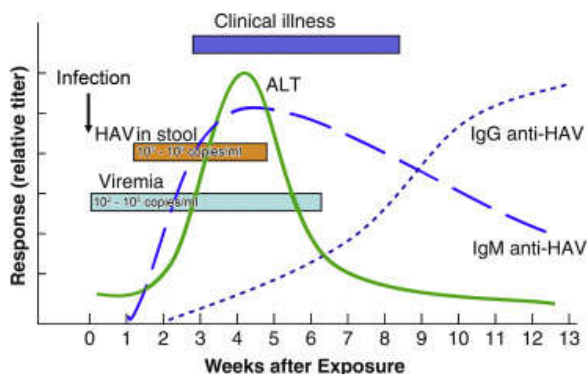


Figure 1. Two groups' antibody concentration change

Though the dosage from 0mg/kg to 300 mg/kg may not show significant LD-50 for mice, but based on the trend presents in Figure 2, we can try to predict the lethal dose of mice to Chalcones would be much higher. Therefore, further study is needed to test higher dosage and possibly in the human body^[16].

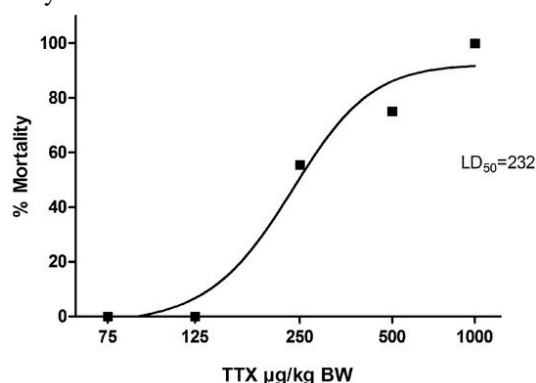


Figure 2. the common trend for LD50 exhibition
For the method used in determining cell viability, however, it is subject to the problem that viability is being determined indirectly from cell membrane integrity. Thus, it is possible that a cell's viability may have been compromised even though its membrane integrity is maintained. Conversely, cell membrane integrity may be abnormal yet the cell may be able to repair itself and become fully viable. Furthermore, the dye uptake ability may vary^[17]. Therefore, small amounts of dye may possibly be ignored.

At last, there is another possibility that the cell exhibits potential death signs under the cell viability methods, but not shown liver damage through ELIZA and the measurement of LD50. This could infer that Chalcones are toxic to a some-what degree; but in general, most cells in liver remain its

integrity and not enough to cause the liver deficiency.

5. CONCLUSION

Angelica Akeiskei chalcone has a long history of human use as a dietary supplement with claims of multiple health benefits. However, precious studies have only revealed the potential side-effect regarding of increasing weight. Based on the genotoxicity and rat studies reported here, ashitaba chalcone powder is not genotoxic and is of general low toxicity with even in high dose (1700 mg/kg). All in all, *Chalcone* is suitable to be used as a daily edible ingredient that complement the insufficient insulin action and ameliorate diabetes with very few side effects.

6. ACKNOWLEDGMENT

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Factors that affect customers' purchase intention in AR Advertising: Applying a revised UTAUT model

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Abstract: This paper explores how AR advertising affects customers' willingness to buy and proposed a revised UTAUT model with content perception, locality preference and individual innovation. Based on the research, it has shown that these are significant factors for customers' purchase intention, which will further affect the purchase behavior.

Keywords: UTAUT, Augmented reality, Advertising industry, Purchase intention

1. INTRODUCTION

The emergence of augmented reality (AR) technology has reshaped the world people used to know. It refers to the overlay of virtual three-dimensional objects onto one's physical environment,^[1] which describes the visual alignment of virtual content with real-world contexts.^[2] Users can experience these hybridized realities via digital sensor projections by triggering the AR set.^[3] As the impact of advertising on people is changing from a one-way mode to bidirectionality, a rise in user participation blurs the line between production and consumption activities.^[4] AR marketing strategies put the customers in the driver's seat with mutual benefits to brand establishment as well. In 2015 Consumer Electronics Show, AR has the potential to "disrupt anything with a screen" was raised.^[5]

The purpose of this research is to reveal general factors that influence customer's purchase intention in AR advertising. We applied a revised Unified Theory of Acceptance and Use of Technology (UTAUT) model, with seven hypotheses based on the variables and proposed some advice for advertisers to optimize their AR campaign.

2. LITERATURE REVIEW

Venkatesh & Davis (2003) first proposed the concept of UTAUT.^[6] After that, UTAUT model is widely used by researchers. For example, Chen

(2019) applied the UTAUT model to information services.^[7] Wu (2019) used it to study knowledge sharing behavior of academic virtual community.^[8] In the field of mobile applications, Ramon (2019) used the UTAUT model to evaluate the quality of user experience.^[9] Han (2017) proposed that behavior intention directly determines user behavior.^[10]

Herron (2016) and Furht's (2011) both recognized the diversity of AR uses, such as the display of real-world maps in computer games and GPS maps.^[11-12] In recent decades, many researchers believe that interactive advertising will become the development trend of the future advertising industry, which can be seen in the study of Sheehan and Morrison (2009), Evans (2011) and Wong et al. (2015).^[13-15] A pilot study conducted by (Scholz & Smith, 2016) discussed four typical AR marketing paradigms: Active print/packaging, Bogus window, Geo-layer and Magic Mirror.^[16] Hopp & Gangadharbatla (2016) looked at the novel effects in AR advertising marketing and also empirically tested that self-efficacy and exposure time in technological contexts had played a role in audience's reaction towards an AR campaign.^[17] Adopting the concept of perceived experiential value which will motivate customers to make faster and more positive purchasing decisions. Some researchers suggested that convenience, enjoyment and brand attitude will contribute to customer satisfaction in AR marketing.^[18-19] To sum up, the benefits of AR as a form of experiential marketing has extended from being only a promotional tool, to effectively contributing to a positive customer-brand relationship^[20] and to customer satisfaction through the creation of perceived experiential value.^[21]

Based on literature review, following hypotheses are formulated.

Table 1. List of hypotheses

H1: Content Perception directly and positively affects consumers' purchase intention.
H2: Locality Preference directly and positively affects consumers' purchase intention.
H3: Efforts expectancy directly and positively affects consumers' purchase intention.
H4: Individual Innovation directly and positively affects consumers' purchase intention.
H5: Performance Expectancy directly and positively affects consumers' purchase intention.
H6: Purchase intention directly and positively affects the purchase behavior
H7: Social impact directly and positively affects consumers' purchase.

3.METHODOLOGY

Considering that AR executions can be seen and experienced in different context and are not

restricted to personal mobiles, facilitating condition is not perfectly applicable in this study. Therefore, we added other elements as shown below.

Table 2. Definitions of the research constructs

Construct	Definition
Content Perception	The way customers perceive AR experiences designed by marketers in regard of how an AR ad is furnished with targets and digital content.
Locality Preference	Paradigmatic launching place of augmented reality marketing campaign
Effort Expectancy	The degree to which effort is required for individuals to use the system
Individual Innovation	An individual's ability to innovate and the willingness to learn and share new things
Performance Expectancy	The degree to which the individual feels that the use of the system is helpful to the work
Purchase Behavior	The degree to the action that the audience go to buy the product that he/she wants.
Purchase Intention	The audience's thoughts or willingness to purchase a product.
Social Impact	The degree to which an individual perceives that significant others believe he or she should use the new system

The new model is shown as follow:

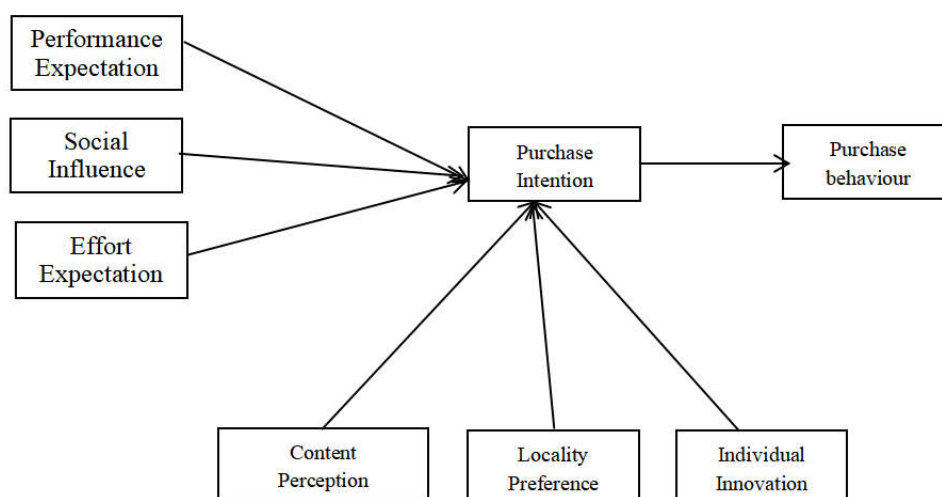


Figure 1. Proposed model of research

4. DATA COLLECTION

Quantitative methods were used by issuing a questionnaire online. The questionnaire was divided into three different sections: personal information, AR awareness and user experience. A five-level Likert scale was applied from strongly disagree to

strongly agree. A total of 540 questionnaires were distributed to Chinese citizens, 534 of which were considered valid. Table 3 below provides an overview of participants' personal background information.

Table 3. Demographics of respondents

Variable	Description	Frequency	Percentage
Gender	Male	241	45.13%
	Female	293	54.87%
Age	15-20	188	35.21%
	21-25	138	25.84%
	26-30	50	9.36%
	31-35	55	10.30%
	Above 36	103	19.29%
Monthly disposable income(/yuan)	Below 1500	116	21.72%
	1500-3500	187	35.02%
	3500-5500	67	12.55%
	5500-7500	57	10.67%
	7500-9500	38	7.12%
	More than 9500	69	12.92%
Augmented Reality experience	YES	269	50.37%
	NO	265	49.63%
ADs-driven purchase frequency	1-5 times per year	357	66.85%
	6-10 times per year	106	19.85%
	11-15 times per year	21	3.93%
	16 times and above per year	50	9.36%

4.1 RELIABILITY

The Cronbach's alpha was used for the measurement of reliability. From the table below, the test results show that the overall reliability

coefficient value is 0.96, and all of the reliability coefficient for variables exceed 0.75, which means the reliability of the data is of good quality and can be used for further analysis.

Table 4. Construct Reliability and Validity

Variable	Item	Cronbach's Alpha	rho_A	Composite Reliability (CR)	Average Variance Extracted (AVE)
Content Perception	4	0.789	0.793	0.877	0.704
Effort Expectancy	4	0.905	0.906	0.941	0.841
Individual Innovation	2	0.821	0.823	0.918	0.848
Locality Preference	3	0.854	0.858	0.901	0.696
Performance Expectancy	3	0.888	0.890	0.930	0.817
Purchase Behavior	1	1.000	1.000	1.000	1.000
Purchase Intention	3	0.877	0.878	0.916	0.731
Social Impact	4	0.863	0.868	0.907	0.709

4.2 VALIDITY

The validity test includes content validity and construct validity. From the above table, the values of CR and AVE satisfy the threshold value of 0.7

and 0.5 respectively, which indicates internal consistency is reasonable and the reliability of the research instrument support the convergent validity of the data.

Table 5. Results of Discriminant Validity by Fornell-Larcker Criterion

	Content Perception	Effort Expectancy	Individual Innovation	Locality Preference	Performance Expectancy	Purchase Behavior	Purchase Intention	Social Impact
Content Perception	0.839							
Effort Expectancy	0.424	0.917						
Individual Innovation	0.376	0.459	0.921					
Locality Preference	0.707	0.550	0.390	0.834				
Performance Expectancy	0.527	0.616	0.458	0.661	0.904			
Purchase Behavior	0.121	0.106	0.123	0.124	0.107	1.000		
Purchase Intention	0.785	0.546	0.461	0.768	0.624	0.145	0.855	
Social Impact	0.701	0.569	0.491	0.752	0.665	0.143	0.765	0.842

4.3 OUTER LOADING

Most of the factor loadings of the measurement

items exceed 0.7 (table 6), which noted satisfactory reliability and validity.

Table 6. Rotated Component Matrix

	Content Perception	Effort Expectancy	Individual Innovation	Locality Preference	Performance Expectancy	Purchase Behavior	Purchase Intention	Social Influence
LP1				0.860				
LP2				0.854				
LP3				0.831				
LP4				0.790				
CP1	0.846							
CP2	0.875							
CP3	0.794							
EE1		0.912						
EE2		0.925						
EE3		0.914						
II1			0.917					
II2			0.925					
PB1						1.000		
PE1					0.896			
PE2					0.911			
PE3					0.905			
PI1							0.845	
PI2							0.880	
PI3							0.844	
PI4							0.850	
SI1								0.878
SI2								0.888
SI3								0.818
SI4								0.781

5. EMPIRICAL RESULTS

As a non-parameter testing method, bootstrapping

usually provides more accurate results in the structural equation (see Figure 2).

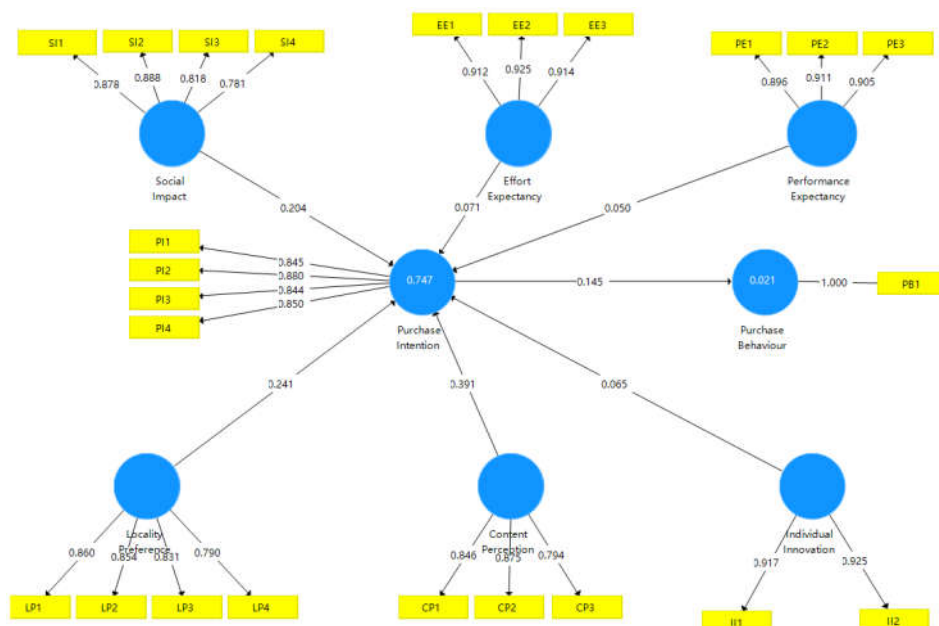


Figure 2. Results based on bootstrapping

By running the Smart PLS 3.0 software, path analysis results are shown in Table 7. The analytical results have shown that with P value less than 0.01, CP, LP, II, EE and SI are directly and positively related to customers' purchase intention as significant factors and purchase intention

significantly and positively affects the purchase behavior, supporting H, H2, H3, H4, H6, H7. However, H5 is rejected according to the empirical results, indicating that performance expectancy did not have a significant effect on customers' purchase intention in AR marketing.

Table 7. Paths Analysis Results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ((O/STDEV))	P Values	Result
Content Perception -> Purchase Intention (H1)	0.391	0.391	0.047	8.377	0.000	Supported
Effort Expectancy -> Purchase Intention (H2)	0.071	0.072	0.034	2.069	0.039	Supported
Individual Innovation -> Purchase Intention (H3)	0.065	0.065	0.029	2.197	0.028	Supported
Locality Preference -> Purchase Intention (H4)	0.241	0.241	0.052	4.603	0.000	Supported
Performance Expectancy -> Purchase Intention (H5)	0.050	0.050	0.038	1.330	0.183	Not Supported
Purchase Intention -> Purchase Behavior (H6)	0.145	0.144	0.040	3.636	0.000	Supported
Social Impact -> Purchase Intention (H7)	0.204	0.203	0.047	4.386	0.000	Supported

6. DISCUSSION AND CONCLUSION

Prior studies have suggested that the performance expectancy construct is the strongest predictor of intention and remains significant at all points of measurement,^[22] of which extrinsic motivation (David et al., 1992) and Job-fit (Thompson et al,

1991) are two root constructs, indicating how much capabilities a system have in helping users achieve valued outcomes in job prospects.^[23-24] People who would like to watch an AR advertisement are shown in this research to be motivated by more intrinsic needs, for example, to have fun and do not

expect promotion in job performance and individual development, despite that it may lead to a successful purchase.

The study has empirically examined investigation the efficacy of augmented reality (AR) advertising. Based on relevant research, an extended UTAUT model that considered both technological aspects and individual personality is proposed as a theoretical framework. The results of the study have revealed that Effort Expectancy, Content Perception, Locality Preference and Social Impact significantly influences users' adoption of AR advertisements and buying intention, while Performance Expectancy is identified as a non-significant factor. In future work, we will consider other crucial variables of UTAUT model and work on managerial solutions to optimize AR campaigns.

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Using CCAAT Enhancer Binding Protein to Repress the Growth of Skin Cancer Cells

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Abstract: In this experiment, CCAAT Enhancer Binding Protein (C/EBP) was used to investigate whether the size of skin cancer can be reduced when the C/EBPB expression is high, and C/EBPA is low. SiRNA was used for gene editing on mice line with overexpression on skin cells and the survival time of the mice was measured. Although the siRNA is unstable in vivo environment, after the experiment with control groups and experiment groups, it still shows that the potential of tumor repression function of C/EBPA and C/EBPB when they are working alone.

Keywords: C/EBP, C/EBPB, C/EBPA, SiRNA

1. INTRODUCTION

In this paper, the characteristics of the cell cycle and apoptosis in skin cancer are analyzed through immunotherapy and hormone therapy to figure out potential treatments for cancers. Learning from breast cancer researches that in triple negative breast cancer (TNBC) and HER2-positive breast cancers Tumor-infiltrating lymphocytes (TIL) has the function to track cancer cells metastasizes [1]. According to recent research, after the binding of the epidermal growth factor receptor (EGFR) and epidermal growth factor (EGF), downstream Ras proteins are triggered causing the activation of cell


multiplication. By interrupting the function of EGFR signaling pathway can stop constant cell multiplication, reduce the metastasis of breast cancer [2]. Thus, some proteins play an essential role in cell cycle either prevent cells from over-multiplying or overexpressing. Leading by previous research, we find such two potential proteins, which are C/EBPA and C/EBP Beta (C/EBPB). C/EBP is an essential leucine zipper transcription factor that inhibits cell cycle and involves on regulating differentiation in various cell types [3]. C/EBPA has a possible tumor suppressor function [4]. It tends to block the cell cycle by blocking the activity of E2F [5]. For C/EBPB, it shows potential tumor cells repression nature when express at high level. Preventing the degradation of C/EBPB triggers the restoring of the endoplasmic reticulum (ER)-dependent apoptosis in triple-negative breast cancer (TNBC) [6].

We hypothesized that by using mice as the model organism, if cells with low expression C/EBPA and high expression of C/EBPB, tumor cell's proliferation would be inhibited and eventually the size of tumor will be smaller.

2. METHOD

Table 1 shows the experiment groups, mice line and how to prepare the crossing mice.

Table 1. Overview of the experiment

Table 1: Overview of the experiment					
Groups	Control A	Control B	Experiment A	Experiment B	Experiment C
	Over-express tumor mice	-C/EBPA, -C/EBPB	+C/EBPA, -C/EBPB ++C/EBPA, -C/EBPB	-C/EBPA, +C/EBPB -C/EBPA, ++C/EBPB	+C/EBPA, ++C/EBPB
Mice line	C57BL/6; 129/SV & C57BL/6; DBA (129/SV are over-express tumor mice and DBA are normal mice which have both C/EBP proteins) PS: Normal protein expression are represented by "++", PSS: The less "+" represents less expression. PSSS: "-" means knock out.				
How to produce	C57BL/6; 129/SV	Cross Experiment A mice with Experiment B mice	C57BL/6; 129/SV cross with siRNA targeted C57BL/6; DBA	C57BL/6; 129/SV cross with siRNA targeted C57BL/6; DBA	Cross Experiment A mice with Experiment B mice
Age & amount	6-9 weeks old, 3 mice for control A, 24 parental mice for experiment A and B				
siRNA treatment	+C/EBPA	Higher concentraiton of siRNA		+C/EBPB	Higher concentraiton of siRNA
	++C/EBPA	C57BL/6; DBA		++C/EBPB	C57BL/6; DBA
How to collect protein	Using organic solvents to denature DNA and other compounds, discard the supernatant and solubilized the proteins.				
How to analysis	Compare tumor size (mean and std), measure the present of proteins (western blot), and survival dates (days)				

SiRNA can be degraded in the bloodstream by ribonucleases (RNase) or eliminated by renal excretion. Since siRNA has large molecular weight and is highly hydrophilicity with negative charge, it cannot pass cellular membrane. Previous research has discovered that polymeric micelles of nm in diameter showed penetration. And Chitosan (CH) allows high

molecular weight molecule to bond to siRNA and form nanoparticles that is biocompatible, low immunogenic and low toxic. It is possible to inject siRNA/CH in to target cells [7]. The reason to choose C57BL/6 mice as model organism is the fur color is dark brown, while the skin cancer cells are lighter

pink. This makes it easy to observe and measure tumor cells.

Preparing nanoparticles by mixing siRNA with 0.25% CH and TPP. Incubating the mixture at 4°C for 40 min. Inject siRNA/CH nanoparticles to Experiment A and Experiment B mice (5 microliter pre mice) by 25-G needles. Collecting 200 microliter

of blood and mix with 600 microliters of Trizol each day after the injection. Quantification of siRNA by using stem-loop qRT-PCT to ensure the siRNA is introduced successfully.

3. POSSIBLE RESULTS

Possible results are shown as below.

Table 2. Possible result

Possible Result I					
	Contrl A	Control B	Experiment A	Experiment B	Experiment C
Tumor size	normal	lethal at birth	+A, smaller ++A, normal	+B, normal ++B, smaller	smallest
Present of genes	mixed	lethal at birth	+A, lighter ++A, darker	+B, lighter ++B, darker	A lighter, B darker
Survival dates (days)	5 to 7	lethal at birth	+A, 14 ++A, 5 to 7	+B, 5 to 7 ++B, 14	20+

The tumor size shrinks to the smallest level, and the survival dates for mice is longer than other groups.

Table 3. Possible result

Possible Result II					
	Contrl A	Control B	Experiment A	Experiment B	Experiment C
Tumor size	normal	lethal at birth	+A, smaller ++A, normal	+B, normal ++B, smaller	normal
Present of genes	mixed	lethal at birth	+A, lighter ++A, darker	+B, lighter ++B, darker	A lighter, B darker
Survival dates (days)	5 to 7	lethal at birth	+A, 14 ++A, 5 to 7	+B, 5 to 7 ++B, 14	5 to 7

Table 3 shows that Experiment C's tumor size and survival dates shows no significant differences between Control A.

Table 4. Possible result

Possible Result III					
	Contrl A	Control B	Experiment A	Experiment B	Experiment C
Tumor size	normal	lethal at birth	+A, smaller ++A, normal	+B, normal ++B, smaller	normal
Present of genes	mixed	lethal at birth	+A, lighter ++A, darker	+B, lighter ++B, darker	A or B present
Survival dates (days)	5 to 7	lethal at birth	+A, 14 ++A, 5 to 7	+B, 5 to 7 ++B, 14	14

From table 4, experiment C have similar tumor size and survival dates compare to both low expression of C/EBPA and high expression of C/EBPB.

The above tables all show that +A and ++B groups have smaller tumor size and longer survival dates (smaller and 14 days) than ++A and +B groups

(normal and 5-7 days). Control A has very mixed result in western blot, tumor size is considered normal and the survival dates serve as base line for this experiment. Control B is lethal at birth as C/EBPA and C/EBPB have essential roles in the formation of skin.

Table 5. Possible result

Possible Result IV					
	Contrl A	Control B	Experiment A	Experiment B	Experiment C
Tumor size	normal	lethal at birth	+A, smaller ++A, normal	+B, normal ++B, smaller	tumor cells disappears or bigger
Present of genes	mixed	lethal at birth	+A, lighter ++A, darker	+B, lighter ++B, darker	more than just A and B
Survival dates (days)	5 to 7	lethal at birth	+A, 14 ++A, 5 to 7	+B, 5 to 7 ++B, 14	20+ or less than 5

Table 5 shows an unexpected result. More proteins have been expressed and the tumor size have potential to be too small to reggeized or being the greatest in size. The survival dates depend on the size of tumor.

Table 6. Possible result

Possible Result V					
	Contrl A	Control B	Experiment A	Experiment B	Experiment C
Tumor size	normal	normal	+A, smaller ++A, normal	+B, normal ++B, smaller	smallest
Present of genes	mixed	normal	+A, lighter ++A, darker	+B, lighter ++B, darker	A lighter, B darker
Survival dates (days)	5 to 7	Vary between 5 to 20 days	+A, 14 ++A, 5 to 7	+B, 5 to 7 ++B, 14	20+

This table displays another unexpected result. Control B is not lethal at birth, though the Experiment C show hypothesized results.

Table 7. Possible result

Possible Result VI					
	Contrl A	Control B	Experiment A	Experiment B	Experiment C
Tumor size	normal	normal	+A, smaller ++A, normal	+B, normal ++B, smaller	normal
Present of genes	mixed	normal	+A, lighter ++A, darker	+B, lighter ++B, darker	A lighter, B darker
Survival dates (days)	5 to 7	normal	+A, 14 ++A, 5 to 7	+B, 5 to 7 ++B, 14	5 to 7

This table also shows that Experiment C's tumor size and survival dates shows no significant differences between Control A.

Table 8. Possible result

Possible Result VII					
	Contrl A	Control B	Experiment A	Experiment B	Experiment C
Tumor size	normal	normal	+A, smaller ++A, normal	+B, normal ++B, smaller	normal
Present of genes	mixed	normal	+A, lighter ++A, darker	+B, lighter ++B, darker	A or B present
Survival dates (days)	5 to 7	normal	+A, 14 ++A, 5 to 7	+B, 5 to 7 ++B, 14	14

Table 8 still shows that Experiment C has similar tumor size and survival dates compare to both low

expression of C/EBPA and high expression of C/EBPB.

Table 9. Possible result

Possible Result VIII					
	Contrl A	Control B	Experiment A	Experiment B	Experiment C
Tumor size	normal	normal	+A, smaller ++A, normal	+B, normal ++B, smaller	tumor cells disappears or bigger
Present of genes	mixed	normal	+A, lighter ++A, darker	+B, lighter ++B, darker	more than just A and B
Survival dates (days)	5 to 7	normal	+A, 14 ++A, 5 to 7	+B, 5 to 7 ++B, 14	20+ or less than 5

The results shown in table 9 is unexpected as well.

4. DISCUSSION

In Table 2, when C/EBPA is expressed in low level and C/EBPB is expressed in high level, both regulation factor can work spontaneously and reduce the size of tumor at greatest level. The lethal of double knock out (KO) in Control B shows the siRNA has been introduced successfully. From the +A and ++B groups, C/EBP can work alone to shrink the size of tumor size. However, when both express at the same time and certain level, the tumor repressing function has been amplification and leads to better survival dates than Control A. Meanwhile, it also implies that if C/EBPA is expressed in high level or C/EBPB is expressed in low level, there is no significant differences compared to Control A, which means the tumor repressing function only appear at certain expression level. In Table 3, C/EBPA gene may complementation to C/EBPB gene. As for Table 4, C/EBPA gene epistasis to C/EBPB gene, when A can be seen in western blot, which means that as one gene is expressed at certain level, the other gene will be silenced or lose function. In regards to Table 5, the promoter region of C/EBPA and C/EBPB may activate other proteins expression.

From Table 6, Control B is not lethal at birth, therefore the introduction of siRNA/CH is not successful. As all three experiment groups and Control A are developed on successful siRNA regulation. The result is not trustful and new methods of injecting siRNA to mice skin cells is necessary. However, this also shows the same results. Although, it is unclear what causes this result, C/EBP has potential tumor repressing function when one of them have been expressed at certain level. It is also possible that when Control B is not lethal at birth, the Experiment C's result might be similar to Result II, III and IV, as the entire experiment is out of control. However, since siRNA has been quantified and checked by stem-loop qRT-PCR, it was rare to even see Result V. Control A are original mice line, they are all overexpressed tumor mice. Based on that, only most possible results and some reasonable unexpected results are listed and discussed.

5. CONCLUSION

The mechanism of each C/EBPA and C/EBPB has been well discovered. Their anti-cancer effect is very obvious in mice models. However, the interrelationship between these two proteins is unclear and possible results are diverse and difficult to quantify. In this experiment, it shows a method to introduce siRNA to mice model by using siRNA/CH nanoparticles. It is possible that with larger sample size, the effects would be better understood. Future research about the unknown protein(s) is necessary. To separate those proteins and introduce them to yeast model are proposed. Because yeast share similar gene expression and cell development mechanism to humans. The survival rate and expression of protein(s) can be done by using control experiment similar to this one or using plasmids and GFP to indicate what mechanism or pass-way triggers the expression of new protein(s).

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Application of Schema Theory to English Reading Teaching in High School

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Abstract: It is of great significance to apply schema theory to English reading teaching in high school. It helps teachers to clarify the goal of teaching, and to promote students to develop comprehensive language ability, form positive emotional attitude and develop the ability of autonomous learning. This paper specifically analyzes reading comprehension and schema theory, and explores how to better apply schema theory to English reading in senior high school.

Key words: Schema theory, Reading comprehension, English reading teaching

1. INTRODUCTION

The current situation of high school English reading teaching in China is worrying. Students and teachers lay emphasis on the translation of discourse, the analysis of structures and the recitation of grammar, while ignoring the comprehensive language ability based on the overall development of language skills, language knowledge, emotional attitude, learning strategies and cultural knowledge. Schema theory inspires teachers to improve teaching model of English reading, and helps to cultivate students' reading awareness and improve their ability of English reading comprehension.

2. READING COMPREHENSION

2.1 The definition of reading comprehension

Reading comprehension is the process in which readers collect relevant ideas through articles and connect them with their original thoughts. Some experts on second language reading believe that reading is a process of reading and understanding texts. ^[1] The essence of reading is understanding. And the ultimate purpose of reading is to develop students into effective and independent readers. ^[2]

2.2 Three models of reading comprehension

I Bottom-up Model

Bottom-up Model is also called Mind-Driven Model. This model describes the whole reading process from the moment readers see the symbols to the moment they understand the meaning of words. There is a consensus among people that reading should begin with letters and words. Reading is a process of decoding. The task of readers is to begin from the recognition of letters and words, then gradually turn to the interpretation of phrases and clauses, and to the understanding of sentences, paragraphs and texts. Although this model explains some phenomena in the process of reading, it ignores some important

contextual factors. This model regards the reader as an individual who receives information passively. Readers lack understanding of the whole article and will gradually lose the interest of reading.

II Top-down Model

Top-down Model^[3] is also called Information-driven Model. This model holds the view that reading is a process of constant selection, especially emphasizing the role of background knowledge in reading comprehension. Readers are active participants who use their own relevant background knowledge to sample, predict, verify, confirm or revise the reading materials. This model overemphasizes the role of individual existing knowledge and experience, which leads to the neglect of readers' basic knowledge in reading teaching, resulting in the decrease of students' reading skills. This model is likely to lead to students' weak command of basic English language knowledge, thus affecting the further improvement of students' reading ability. In the long term, the model can not give students sustainable help.

III Interactive Model

Interactive Model^[4] is also called Comprehensive Model. Both model 1 and model 2 have certain theoretical defects because they emphasize the role of a certain factor in the process of reading comprehension. This theoretical model holds that the reading material itself does not convey meanings to readers, but only points out the direction of understanding, and guides readers to reconstruct the information based on their original knowledge.

2.3 Factors affecting reading comprehension

There are three main reading variables: reader, text variables and author. In the reading class, discourse variables and author variables are determined factors because textbooks are determined. Thus, the variable we can control is the reader variable. The knowledge of words, background and strategy stored in the minds of readers are the main elements affecting reading comprehension.

3. SCHEMA THEORY

3.1 The definition of schema theory

Schema is an important concept in constructivism theory. According to this theory, schema refers to the way an individual perceives, understands and thinks about the world. Schema is the starting point and core of cognitive structure, or the basis of human cognition.

3.2 Classification and functions of schema

According to schema theory, readers' reading ability

is determined by three kinds of schema: linguistic schema, content schema, rhetorical schema.

Linguistic schema refers to readers' language knowledge of phonetics, vocabulary and grammar. A reader who does not know the corresponding language schema will not have the basic ability to manage the input information language.

Content schema^[5] refers to readers' understanding of the theme and content of the reading materials. When the language of the reading material is difficult to understand, readers cannot use the Bottom-up information processing method to solve their understanding problems, they have to use the Top-down method. At this point, content schema is extremely important.

Rhetorical schema^[5] refers to the knowledge of the genre and textual structure of materials. If readers have the knowledge of rhetoric and relatively understand the structure and characteristics of various genres, they will better understand the content of the article according to different genres and structures.

4. APPLICATION OF SCHEMA THEORY TO HIGH SCHOOL ENGLISH READING TEACHING

In the process of high school English reading teaching, teachers should abandon the bottom-up teaching model. It's harmful for teachers to stop at the level of imparting language knowledge and interpret texts literally.

Teachers should fully recognize the role of schema knowledge in reading comprehension and guide students to use interactive reading patterns in the process of reading. In the process of reading, students flexibly choose the model of information processing according to their language level and the difficulty of reading materials. When reading an article, students can first judge the general meaning of the article, and then determine the meaning of the new words. When the reading material is too complex, students should try to mobilize their existing knowledge from the title, so as to guess the general meaning of the article. In addition, the topic sentence in each paragraph can also help students better understand the outline of the article. Top-down model helps students to reduce their dependence on language knowledge and remove the obstacles to understanding.

During teaching, it's necessary for teachers to adopt some specific methods to help students read according to their actual conditions such as alternative addition, preview before class, direct comprehension, keyword syntax, train to predict and so on. Under the guidance of these methods, students will better expand the schema in the brain and activate the schema to integrate new information into existing schema so as to generate the new schema.

The specific operation of schema reading teaching includes pre-reading activities, while-reading activities, post-reading activities and after-class assignments. The purpose of the pre-reading activities is to activate students' content schema and introduce cultural background knowledge related to the text. According to the specific content of the text, teachers can choose picture import, video import, music import, story import, news import, suspense setting, discussion, debate and other import methods. The purpose of while-reading activities is to help students establish content schema by providing schema framework. Through comprehensive training of listening, speaking, reading and writing, students will gradually understand the text, thus promoting the consolidation and mastery of language schema and improving language skills. Post-reading activities are designed to enrich students' content schema and consolidate linguistic schema. After-class assignments, which is the extension of post-reading activities, are useful to consolidate the content schema and linguistic schema, and promote the depth of schema knowledge.

5. CONCLUSION

English reading teaching based on schema theory should not only be supported by related theories but also be promoted through practice. Teachers can't stop at the level of traditional language teaching and literal understanding of materials. They ought to foster a sense of schema teaching and try their best to maximize the effect of it. In actual teaching, teachers need to achieve balance between the improvement of scores in the examination and advancement in students' capacities. Only by stimulating students' interest and giving full play to their enthusiasm, initiative and creativity, can the ideal teaching effect be achieved.

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The Application of Discourse Analysis to English Reading Teaching in Senior High School

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Abstract: Reading is an important means of getting information. The conventional teaching mode doesn't meet the new requirements any more. Based on the theory of discourse analysis and the characteristics of senior high school students, this study propose a new reading teaching mode. It contains four main steps on the whole: providing background information; structural analysis; cohesive device analysis and critical and creative thinking. This mode can contribute to solving some existing problems in reading teaching today.

Key words: discourse; discourse analysis; English reading teaching

1. INTRODUCTION

It is universally acknowledged that reading is an essential language skill. In the traditional reading teaching mode, the teacher explains new words and complex grammatical structures to help students understand the gist of text. However, tests are becoming more and more difficult today. The questions whose answers can be found directly from the text are decreasing. The traditional pattern can't make students be prepared for the challenges. An innovative reading teaching mode is needed.

According to *English Curriculum Standards for Senior High Schools (2017)*, there are four key competencies of English: language ability, cultural awareness, thinking quality and learning ability. After the publication of it, many scholars, like Cheng (2016), emphasize the function of discourse in English teaching^[1]. For example, students can develop thinking quality by analyzing the textual structure, concluding the author's opinions and commenting on them. Discourse deserves more attention in the teaching reform and the theory of discourse analysis does meet the latest requirements.

2. LITERATURE REVIEW

2.1. Definition of discourse

In the 1930s, Firth proposed to study the meaning of language in conversation first. Harris' (1952) essay called Discourse analysis is the origin of the theory^[2]. He was the first person who broke the situation where sentence is the largest language unit. Halliday and Hasan (1976) define discourse as a meaningful language fragment. It can be oral or written. They think discourse is a semantic unit^[3]. Cook (1989) puts that it is a stretch of meaningful and purposeful

language^[4]. Widdowson (1979) holds that discourse is the language used for pragmatic meaning^[5].

In China, there are also some typical opinions. Hu (1994) refers to discourse as the natural language. It is not limited absolutely by grammar^[6]. Huang (1988) thinks discourse is a series of paragraphs or sentences and it is supposed to be correct and coherent^[7].

To conclude, there are various definitions of discourse, but some points are agreed universally. Discourse is a series of sentences or paragraphs. It can be oral or written. It appears in the process of communication.

2.2. Genre analysis

Genre was originally a term in rhetoric and was introduced to linguistics later^[8]. The researches on genre can be divided into different schools. One is North American School, represented by Swales and Bhatia^[9]. Swales (1990) thinks genre is a kind of communicative event in which language plays an important role. All the members obey and use customary ways of expression. Bhatia (1993) developed his theory and put that genre is a kind of communicative event which has purpose and a clear structure^[10]. Another school is Australian School, represented by Martin. He holds that genre is a process of social communication with purposes and steps^[11]. It is widely agreed that genre restricts the article's content, style and organization. It reflects the macro-structure of a discourse.

Genre analysis is based on Halliday's theory of systemic functional linguistics. It is also connected with sociology and psychology. Genre analysis uses different kinds of analytical approaches to study a discourse's linguistic characteristics, social functions and cognitive structure. Qin (2000) puts forward that genre analysis answers the question why the author chooses these words and organizes the text in this way. It is beyond the description of linguistic features. It studies the various kinds of methods used by the author to serve the communicative purpose^[12].

2.3. Cohesion and coherence

In 1976, Halliday and Hasan put that cohesion exists in the discourse and makes contributions to the whole article with many kinds of semantic relations. They divided cohesion into two main kinds. Grammatical cohesion includes reference, substitution, ellipsis and conjunction. Lexical cohesion consist of reiteration and collocation^[13].

Reference has three categories: personal reference, demonstrative reference and comparative reference. Substitution and ellipsis have the similar expressions. Substitution is used to avoid repetition in the context. Ellipsis is an exceptional case of substitution. It has no substitute. Conjunction employs transitional words to show the relation between sentences. There are four types of it: supplement, comparison, cause and time. Lexical cohesion means employing the same or related words. Reiteration connects the meaning by antonyms, synonyms, superordinate, hyponyms and general words. Collocation means related words are always used in the same context.

In the 1970s, Cook (1989) put that coherence makes the discourse a whole instead of the combination of many words^[14]. Nunan (1999) holds that coherence doesn't refer to a series of irrelevant sentences. It is perceived as a whole. What are the differences between cohesion and coherence? Cohesion is the relationship between explicit expressions marked by language, while coherence is the relationship between speech performances. In China, Liu (1999) argues that cohesion is one of the features of a text. Coherence is a criterion for evaluating a text.. Huang (1988) thinks that cohesion shows a discourse's surface structure and tangible network. Coherence reflects semantic connection through logic and shows the deep structure.

3. READING TEACHING MODE BASED ON DISCOURSE ANALYSIS

In light of previous studies and the real conditions of senior high school students, the researcher concludes the main steps of a discourse-analysis reading teaching mode and show them in Figure 1.

First of all, enough background information is

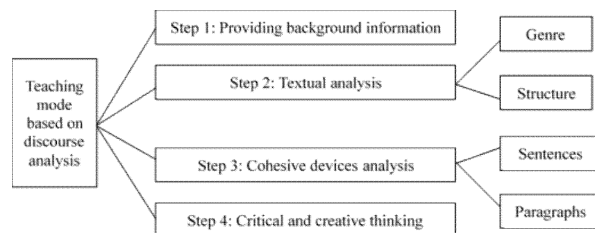


Figure 1 Discourse-analysis reading teaching mode provided at the beginning. This can attract students' attention and help them recall previous experiences or knowledge, which makes them be prepared for learning new texts. Lead-in is very important in teaching design. Showing a video or some pictures is not enough. The teacher had better ask some questions and interact with the students. By the way, supplementary information or materials can also be presented later in the class. It will encourage students to consider more and think critically about the opinion in the textbook.

Secondly, the genre and structure of discourse are analyzed. There are different types of genre. Each kind of articles have some similarities in structure,

device, expression or other aspects. The teacher can ask students to identify the genre after glancing through the text. That will help them comprehend the text and similar texts better. Then students read the passage, divide it and summarize the key point of each part. Some other tasks, like retelling the text and completing the mind mapping, can help students learn the author's train of thought and understand how the article is organized from the macroscopic perspective. In the process, the teacher had better explain some new words and difficult sentences which are critical to the understanding. It is a good choice for the teacher to have students guess implications from the context first and then elaborate the implications. Only in this way can it be easier for students to follow the teacher.

Then, the functions of cohesive devices are studied. Cohesion concerns the flow of sentences and paragraphs from one to another. To convey coherent meanings, the author always uses some important devices. They appear in different contexts and have different functions. By studying them, readers can comprehend the author's attitudes and purposes better. Generally, senior high school students have few opportunities to learn it before, so the teacher should present the key points first. After that, students should identify the important cohesive devices and work together to analyze the functions of them. It is challenging for some students with low English proficiency to understand the theory, so the teacher can spend more time on this part when introducing it to the class for the first time.

Lastly, there are some exercises meant to make students think critically and creatively. These exercises are based on the characteristics of a discourse. As mentioned above in chapter three, different types of genre have different features. Therefore, the teaching designs of different texts are different. For example, if a text is narration, its character, time, place and plot need further discussion. The personality of characters is a good question for students to consider. In addition, students can rewrite a part of it, according to their understanding. Provided that a text is description, the teacher can help students appreciate the words used and well-organized sentences, especially when learning some classic literary work. It is significant to explore the profound meanings. In a reading class on exposition, the target of it and the aspects covered deserve to be underlined. The teacher can give a new topic for students to apply what they learn to practice. If a text is argumentation, the topic, arguments and evidences of it should be identified. Students need to find out, judge and comment on the author's opinions and attitudes. They are supposed to have their own point of view. It is necessary to notice that a class doesn't have to cover all the points. A text is supposed to be discussed according to its own characteristics. However, the purposes of these

assignments are similar. Students focus on not only what the article says, but also how it says that and why it says in that way. Besides, there should be opportunities for students to use what they learn in practice to encourage their participation in class. The teacher can organize them to do some creative work, like speech, writing, debate, role play and so on.

4.CONCLUSION

This paper proposes a reading teaching mode based on the theory of discourse analysis. It can improve senior high school students' ability to analyze and comprehend a text and fulfils the requirements of the latest curriculum standards. To apply the mode in practice effectively, teachers must develop their ability of discourse analysis. They should prepare to introduce the theory to students and answer students' questions. Moreover, it takes much time and efforts for students to cultivate a habit to use the knowledge about discourse analysis spontaneously in daily life. So teachers had better create more opportunities to let students practice that and integrate the theory with their reading approaches.

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A Survey of the Application of Multimedia Courseware in English Reading Teaching in Middle School in China

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Abstract: Reading, as an important part in English learning, has always raised public's concern. With the development of technology, computer-assisted language learning (CALL), especially the multimedia courseware is becoming more and more popular in teaching reading in China. Through questionnaires, this paper is aimed to investigate the attitudes of students and teachers towards the application of multimedia courseware in reading teaching and problems arising from the use of multimedia courseware in reading class. Based on the results, analysis and suggestions will be given.

Key Words: Multimedia Courseware; Reading Teaching; Middle School

1. INTRODUCTION

Conventionally, Chinese teachers are inclined to teach reading in traditional ways--by lecture. However, nowadays, with the proposition of new curriculum standards and key competencies, some teachers have realized the limitations of conventional reading teaching class and try to combine the new tech, especially the multimedia courseware with reading class. Theoretically, Krashen's input hypothesis, Swain's output hypothesis and blended learning all confirm the effectiveness of multimedia courseware in reading teaching. This paper aims to investigate the applications of multimedia courseware in English reading teaching in middle school in China. By questionnaire, this paper can help teachers know the application of multimedia courseware in reading class more comprehensively so that they can better understand the attitude of teachers and students. Besides, problems during the application of multimedia courseware can be explored in order to help it play a greater role in teaching.

2. RESEARCH BACKGROUND

With the widespread of globalization, English, as a lingua franca, plays an increasingly prominent role in the daily life. Thus people attach more importance to learning English, especially the reading part. However, with more attention focused on reading teaching, a number of problems have been raised^[1]. With the traditional approach, that is, by lecture, the current status of English reading teaching in China is not satisfying. Quite a number of students show poor performance in reading. What's worse, some middle school students even have no idea of

dealing with an English text. In 2001, the new curriculum standards and key competencies raised higher requirements for reading teaching^[2], some teachers have realized the limitations of conventional reading teaching class. Many schools thus have turned to blended learning to help improve reading sustainably and effectively^[3]. In other words, teachers turn to blend the traditional reading teaching with multimedia courseware.

3. RESEARCH DESIGN

(1) Research Questions

This paper is going to collect teachers' and students' views and attitudes towards the overall application of multimedia courseware in middle school English reading teaching in an all-round way. The research questions of the paper are as following.

Firstly, what do students and teachers think of the applications of multimedia courseware in reading class?

Secondly, are there any problems during the process of using multimedia courseware?

(2) Research Subjects

In order to get an all-round and scientific investigation, the questionnaire will include two parts: teachers and students. This survey will select Xinqiao Middle School and Beijiao Middle School in Changzhou as samples. During the survey, two classes of students and 48 teachers are sampled for questionnaires.

The age groups of teachers surveyed were as follows: 10 teachers are among 20-30, 28 of them are 31-40, 10 of them are over 30. The selected teachers all have the experience of using multimedia, which also shows the universality of multimedia teaching. Through investigation, it is found that teachers use multimedia courseware for different years (ranging from 1-20 years).

Considering the special factors such as the examination-oriented education in the third (ninth) grade and the lack of classroom learning experience in the multimedia courseware environment in the first (seventh) grade of junior middle school, only the students in the second (eighth) grade of junior middle school are selected. These students have at least one year of classroom learning experience in the multimedia courseware environment.

(3) Research instrument

This paper designed two versions of questionnaires,

namely the teacher's questionnaire and the student's questionnaire. The questionnaires are abstracted from Wang Xun's questionnaire model^[4]. The questions were compiled from multiple dimensions and the questionnaire is set in the form of Richter scale, which is convenient to use SPSS software to make statistics and analysis on the contents of the questionnaire and the corresponding answers.

4. RESULTS AND DISCUSSION

(1) Teachers' attitude towards multimedia courseware
The teacher's questionnaire survey was conducted in May 2020. A total of 48 questionnaires were sent out and 48 questionnaires were recovered with a recovery rate of 100%. The reliability of the questionnaire was 0.862.

From the questionnaire, it can be found that teachers use courseware frequently in English reading class (average score=4.38). It is also found that teachers are all positive towards the effect of using courseware (average score=4.17). However, problems still arise (average score=3.76). For example, most teachers have difficulty in making and using PowerPoint because of limited time and lack of training and creativity. As a result, some teachers cannot independently design and make a multimedia courseware. Instead, they simply patch up several power points or use the old courseware.

Therefore, teachers are expected to follow the design principles of PowerPoint and produce high-quality courseware. In addition, teachers should also use courseware flexibly in the process of classroom teaching, instead of becoming appendages of courseware, so that multimedia courseware can serve English reading class to a greater extent.

(2) Students' attitude towards multimedia courseware
The students' questionnaire survey was also conducted in May 2020. A total of 94 questionnaires were sent out and 92 questionnaires were recovered with a recovery rate of 97.87%. The reliability of the questionnaire was 0.815.

Upon the questionnaire, it is found that students' reading level is mainly influenced by 3 factors: vocabulary, interest and skills (relatedness=3.76). Over a half of the students are positive towards the effect of multimedia teaching methods (average score=4.68). The majority of the students said they are more willing to have an English class with beautifully designed coursewares (average score=4.49).

The application of multimedia courseware is welcome by students with its dynamic visual stimulus as well as relaxing class atmosphere. However, it cannot be ignored that the design of some teachers' courseware affects the teaching effect (relatedness=4.76). The design and use of PowerPoint are closely related, and it is also the precondition for multimedia courseware to achieve certain teaching effect. Therefore, teachers should attach importance to the making and use of teaching

courseware and constantly improve it in all aspects in order to improve teaching efficiency.

(3) Problems of using multimedia courseware

By analyzing the data, this study has found that both students and teachers take positive attitudes towards the applications of multimedia courseware. But there are also numerous problems when they advocate the effectiveness of the courseware. For instance, teachers are not competent enough to design and apply the courseware; students may be distracted by the poor arrangement of the courseware and so on.

To sum up, multimedia courseware in reading teaching has received recognition from both teachers and students. But in order to help it play a greater role in reading class, there's still a long way for teachers to go since they have to find practical solutions to tackle the problems found.

5. CONCLUSION

(1) Suggestions

Based on the results, many problems are found. For example, some teachers lack the awareness of CALL; there are difficulties in making and using courseware and so on. On the basis of the existing problems, two possible suggestions are raised.

First of all, teachers and students are hoped to raise their awareness of CALL. Informatization is becoming a leading trend in education modernization that causes the need for advancing a level of teachers' training^[5]. Since some teachers haven't realized the importance and advantages of courseware, they will feel reluctant to use it in class. It will be much better to help them understand the significance of CALL or blended learning.

Secondly, to help teachers tackle some technical problems while applying multimedia course, teachers are better to develop the ability of information-based teaching. He once listed some teachers' problems of designing courseware^[6]. For example, some teachers can't use courseware flexibly in reading classroom teaching and some teachers do not try other applications to make courseware and lack the spirit of innovation and so on. Therefore, teachers should make use of their spare time to search for more information related to modern educational technology and receive necessary training so as to facilitate the use of computer-assisted instruction in the classroom.

(2) Limitations

This survey explores the application of multimedia courseware in middle school English reading teaching based on the results of questionnaires. Due to the limited personal energy and limited geographical and sample size, there are still many limitations. Firstly, this survey only conducted a small-scale survey in two middle schools in Changzhou, Jiangsu Province in China. The specialty and typicality of samples may have been overlooked. In addition, the sample size is too small to draw a persuasive conclusion. Secondly, there are also some

limitations in the process of analysis. So it is hoped to overcome these shortcomings in the researches in the future.

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The Present Oral English Level of Rural Primary School Students

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Abstract: Under the background of Belt and Road Initiative, English has become an even more important tool for people to communicate. Nowadays, the qualities and number of teachers in rural areas are relatively indigent, and studies on rural students' oral English level are few. Thus, this paper aims to study the present oral English level of rural primary school students in GaoGuanJiuNian School. Through data analysis, it is found that students are weak in stress, intonation, grammar, liason and plosive. Students' oral English is far from satisfaction and the phenomenon of "dumb English" still exists. Based on interviews and classroom observations, this paper holds that the main causes for such problems are rural pupils' lack of accesses to learning resources, teachers' inappropriate teaching methods and materials and schools' less time and places for oral English practice.

Key Words: oral English; primary school students; rural area

1. INTRODUCTION

In the process of new curriculum reform, man-machine dialogue has emerged in English examination. International English tests like IELTS and TOEFL also include tests of students' oral English. However, since oral English had been added to CET 4 and CET 6, students' oral performance fell far short of expectations. At present, studies on rural primary students' oral expression ability was relatively scarce, and most of them focused on the current situation of teaching and communicative competence. This

paper uses oral English tests, interview and classroom observation to investigate the present oral English level of primary school students in GaoGuanJiuNian School. First, based on *Secondary English Curriculum Standards(2011)*, *Common European Framework of References for Languages*, *China's Standards of English*, the oral English competence scale for primary school students had been formed, which includes three parts. They are oral communicative part, listening and retelling part and text organization part. Each part is based on a 5-point scale. The full score is 15. Next, 43 boys and 39 girls from Grade 3 to Grade 6 were tested one by one randomly, and the test process was recorded with the form of video. For each grade, three sets of parallel oral test papers were designed. The material was mainly from their textbooks, involving the tests for

daily communication, grammar, intonation and communicative ability.

2. PRESENT ORAL ENGLISH LEVEL OF RURAL PRIMARY SCHOOL STUDENTS

For data analysis, full score rate means the ratio of students who gain 5 points; excellent score rate means the ratio of students who gain greater than or equal to 4 and passing rate means the ratio of students who gain greater than or equal to 3.

2.1 Results of Oral English Tests

85% students in Grade 3 can answer questions about their familiar topic (greeting, names and physical condition) quickly and accurately. They can understand others' orders and do corresponding actions (point to the desk.). Students hardly know what plosive is. 20% students even don't know how to read words like "blackboard". They have no sense of liason at all. 10% students can read accurately. For intonation test, students can't form raising tone in yes-no questions and wh-questions. 50% students can speak out the occupation, articles and specify color in the picture, but they can't spell words. They don't know the word "car", which has been listed in the *Secondary English Curriculum Standards* as an essential vocabulary.

Students in Grade 4 do well in oral communicative part. 75% students can answer questions about their familiar topic (willingness) quickly and accurately. But 25% students can't answer can-questions. They don't know how plosive works in a word. They rarely read sentences with different intonations. 15% students even have difficulty in reading sentences that they have learned in their textbooks. 15% students have the ability to make up a dialogue according to the picture and example. 25% students can't speak out a complete sentence. 25% students can describe the picture in Chinese clearly. 35 % students can speak out several words for describing the actions in the picture with the hints of examiners.

95% students in Grade 5 can answer questions about their familiar topic (family and activities) freely. They can read 26 letters clearly. 20% students can answer questions with the translation of examiners. 10% students use "yes or no" to answer wh-questions. 5% students can't answer wh-questions. Students don't know what stress is. They read sentences with the same intonation. 15% students can describe the picture like a short essay, while 60% students can just speak out less than three sentences. 15% students just read the hints that appeared in the paper. 10%

students can just answer questions which the examiners have used to guide them. 96% students in Grade 6 can answer questions about their familiar topic (favorite festivals, hobbies and hometown). 14% students can answer questions with the translation of examiners. They can read letters clearly, but they still don't know what stress is. 32 % students can try to express their opinions with 3 or 4 sentences. 35% students can just speak out within 2 sentences. 27% students can answer questions with the guidance of examiners. 6% students can just read the requirements on the test paper.

2.2 Results of Interview and Classroom Observation

With interviews and classroom observation, teachers' teaching methods in oral English had been observed. When entering into a new module, most teachers used whiteboard to help. Students followed the tape for three times. After that teachers read the text once or twice, aiming to tell students the important points in the text, and then students read the texts in pairs. If time permitted, teachers would ask students to recite or read the text in pairs. Sometimes, teachers guided students to finish the oral practice after texts with some given sentences. However, the practice was just limited in texts. According to the examination requirements in Benxi County, it was enough for students to remember the sentence in texts. Their homework was two exercise books matched with the textbook. There was hardly oral English practice in their homework.

2.3 Discussion on Oral English Level of Students

As the score shows, students' oral English level is far from meeting the requirements of the curriculum standard. Through the analysis of the video, students' participation in oral communication is not positive. Among four grades, students in Grade 3 possess the best oral communicative ability. Generally speaking, students are good at greeting and talking about their personal information. However, they are weak in making responses to yes-no questions and Wh-questions. They hardly have sense of changing subjects. They prefer to answer all questions from a first-person perspective. For listening and retelling ability, excellent score rate for each grade is higher than 8%, no students gain full score in listening and retelling part. This result indicates that students' intonation in an English sentence lack rise and fall of the voice at approximately syllables. Two elements affect the scores on intonation. One is the length of sentence. The longer the sentence is, the more likely the student is to encounter intonation problems. The other is the stress. Some polysyllabic words (like exercise) and compound words (like grandma, football) cause students difficulties. Allan (2018) thinks that most of the common flaws in pronunciation occur in the lack of discrimination of paired vowels, particularly short and long 'a, e, i, o, u' sounds^[1]. Comparing with oral communicative ability and listening and retelling ability, students

have gained the lowest score in text organization part. Their performance falls far short of the requirements of the curriculum standard. Even for students in Grade 6, the highest grade in primary section, 68% students can't speak more than 3 sentences. They don't have the awareness of speaking English actively. Faced with the picture from their textbook, students are still unconscious of what they should talk about. They can speak out only under a certain context. When they have to speak English, they perform to be shy or refused to say anything. For students in other grades, they perform better than students in Grade 6, but their pronunciation, grammar, intonation and stress are also far below the requirements of the curriculum standards. Students in Grade 4 even have difficulties in asking and answering questions about the given picture.

3 REASONS FOR CAUSING STUDENTS' ORAL ENGLISH PROBLEMS

Based on classroom observations and interviews, reasons for causing the current situation can be summarized as the following three aspects.

3.1. Students

On the one hand, students were lack of motivation. Learning a language is closely related to the attitudes towards the languages. Gardner (1985) sees attitudes as components of motivation in language learning. He believes motivation to learn a foreign language is determined by basic predispositions and personality characteristics such as the learner's attitudes towards foreign people in general, and the target group and language in particular, motives for learning, and generalized attitudes^[2].

On the other hand, their basic knowledge of English is weak. In their minds, they subjectively thought that it was sufficient for them to read and write English words. Their English homework often didn't include spoken English practice. The content was just surrounded about the text. This was not enough. They didn't know what plosive was.

3.2. Teachers

Many English teachers teaching methods in rural primary schools were inappropriate. They weren't major in English. They constrained their teaching mode in "reciting words, reading texts and teaching grammar". All kinds of tests focus on the spelling, meaning and understanding of words, phrases and sentences. The examination of oral English practice had been ignored.

3.3. Schools

English courses in rural primary schools generally started from Grade 3. The number of English classes per week was 2~3. For rural students, their opportunity to speak English was only 45 minutes in one class, and there were no other places for them to practice English.

4 CONCLUSION

This paper aimed to explore two questions: What were the oral English levels of rural primary school

students? What were the reasons for the current situation of primary school students in rural areas? The results showed that although some students did well in the exam, but their oral English was pretty bad. For the questions raised by teachers in the class, they were used to waiting for answers rather than expressing their opinions. They could understand teachers' simple instructions, but they couldn't express themselves freely in English. They couldn't form a complete paragraph or conversation about certain topics or pictures. Students' non-motivation, teachers' inappropriate teaching methods, schools' less time and places for oral English practice were the

main reasons for the poor oral English level of rural primary school students.

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Technology Enables Service Design More Personalized: Delivering the Truly Service Experience

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Abstract: This paper aims to discuss how service designers should be equipped by technology in the service design process and what kind of technology could support service design programs to deliver a more personalized service experience. In the first stage, digital data as a technology tool and what could they bring by service designers will be discussed. Following these, how to integrate technology to enhance genuinely personalized service experience and filled the satisfaction of users will be addressed, about adopting a case about technology integration project in the healthcare area, and to consider how it works.

Keywords: Service design, technology, digital data, technology integration, personalized experience

1. INTRODUCTION

Nowadays, the design has used qualitative and quantitative data to inform the development of products, services, and systems for many years ^[1]. Technology is a hot topic, discussing as one of core parts in Service Design process: Technology is an essential part of the new service economy ^[2] even service design without technology is no longer an option ^[3]. With the developments of a series new high technologies come out- IoT, of cloud service, database platforms and etc., technology applied in service is not just to improve the service interface through information and communication technology (ICT), but also, "Technology - be able to create realistic concepts/design in real world" ^[4]. It expands much broader and develops sharply in these years, which provides more tools and methods to stimulate and arouse user's excitement since to enhance service processes.

On the other hand, personalization is a core element of user experience in today's service. It is a vital part of service experience, with intelligent use of technology allowing service designers to create relevant and unique experiences that hold attention for longer and generate loyalty in the long-run. Moreover, the era of "Living services" ^[5] has been published, combining technology into service design process to enhance the human-centered and truly personalized service experience is a mainstream trend. While

sometimes, consumers don't have fixed or universal values, expectations, or preferences, there is one commonality-- consumers expect a personalized experience that is tailored to meet their needs ^[6]. So, in the meantime, service design should do leading design ^[7] and be in a leading position to integrate technology and define what the actual user needs in the service area.

2. DIGITAL DATA IS THE PRIMARY TOOL USED IN SERVICE DESIGN

With the development of technology, it becomes a pretty useful tool in service design process and even service design without technology is no longer an option. And the most basic and considerable thing of technology is digital data. Some of the data which people interact with can be considered "research data", which is collected to notification the design of products and services in some sense. While, sometimes, data (big or small) is itself a significant part of a product or service, even data is claimed as the next frontier for innovation, competition, and productivity^[8].

The significance and value of data as the new raw material of the 21st century become a common sense in these years. Designers have used qualitative and quantitative data to inform the development of products, services, and systems for many years. However, there is a sharp growth in the figure of digital touchpoint, and vast exploration of data, the usages of data expand much more comprehensive in these years, which as a fundamental tool provides more functions and methods in service design process. Digitization of everything and liquid expectations will be the analyzed were claimed in "Living Service".

Meanwhile, that means the generating data is also increasing dramatically, which is setting up difficulties and challenges for analytics, while also provide more opportunities to collect them and analyze in an invisible way to help service develop and deliver a truly personalized experience. For examples, just simple surfing some websites online could include data grasped via their preferences, loyalty, intentions, and even the type of their customer journey. On the other hand, data could help designers to gather of qualitative insights from user research that allow the designer to better understand the context of the use of a given artifact or service^[9].

Moreover, aggregated data could support single customer views, and also would enable service design to provide accurate and personalized service contents and service interactions. Data is an essential and mandatory tool of technology in setting up a customized service process, which could provide more flexible approaches, while not just single and straightforward solutions, instead of being multiple segmented and highly tailored service modes.

In the real world, service design needs to focus on the actual needs and voices of users of data-driven engagement^[10] and personalization to survive against the data and optimization providers. In the past, there is a Voice of the Customer (VoC) programme to understand customers' opinions and feedbacks of the service. However, direct interviews could only gather a piece of limited information, most of them are about customer's emotions, but not the objective facts, since it is difficult to set up the connections among the vast and complex feedbacks. As for designers, especially service designers should be able to specific extensive digital data in their design process. Apart from these, designers need to update their skills and toolboxes to enable to manage, and control data, not only in delivering compelling products and services but also could let them provide information and inspiration for design process.

3. TECHNOLOGY INTEGRATION LEADING THE PERSONALIZED EXPERIENCE

In the following years, technology cannot exist independently; more and more designers focus on integrating technology into service process to enhance the quality of service and personalized experience. The most common things are wearable devices, always control or get feedback via applications. However, whether they improved the real expertise and filled user's needs is a widespread issue which is still discussed.

Consumers expect a personalized experience that is tailored to meet their wants becomes a shared sense of each service designer. However, most of the time, people do not have exceptionally Clarified considerations or specific expectations about what they truly need or wants.

There is a typical comment from a participant who was invited to participate in an experiment organized by Amanda Lazar^[11], University of Washington. He said, "Wearing the watch is not going to give me better sleep or make me healthier. It just tells me whether I have a good sleep or a bad sleep... it's not productive or useful." As for this type of wearable devices, but without processing, so they are not useful for users who do not become interested in the series of data provided by them, receiving and looking through the data and figures is not the truly user's needs in some extents. However, more and more wearable supervision devices come out, especially some intelligent wristbands, like apple watch, designers notice that just collecting the data

via the sensor inside wristband, and receiving data and feedback via your cellphone application cannot match with indeed personal needs of users, so they selected data and information useful for people, and generate a report, also develop the interface to have more benefits of arousing people to consider about self-management, for some people.

However, most of the time, consumers cannot describe what they want in a clear and specific way, they always expect a personalized experience that is tailored to meet their wants. Based on these, service designers figure out their pain points firstly. Then, selecting different types of technology to combine them into service system to achieve user's needs is essential. Through combinations of technology with smart mobile technology, individualized service can be administered more efficiently and more effectively. Besides, integrated technology also could help service system to make an orderly queue^[12] to enhance the experience. At the meanwhile, integrated technology also stimulates users as a participant who participates into service design process and to define the actual service they prefer.

AI doctors as services, building a bridge between healthcare organizations and patients to deliver a compliant and conversational healthcare experience at scale. Clinics set up trusted databases which integrate medical content, including useful information on conditions, symptoms, specialists, medications, and procedures. Providing reliable classification and personalized diagnosis is the mandatory target of AI doctors, via leveraging built-in language models tuned to medical and clinical terminology to understand physical intentions. Meanwhile, dealing with interruptions, topic changes, errors, and complex medical problems as the secondary aim^[13].

As benefits for patients, the most significant element is building a new medical model to deliver better medical service to satisfy customer needs of personalized and privacy medical diagnosis and consultations, which patients could do them in different situations extraordinarily convenient and time-saving, such as when they feel uncomfortable, or even in an emergency, they can make medical diagnosis and consultations immediately. Besides, these services also make excellent considerations on psychological factors of patients, instead of making an appointment and visiting the hospital, customers more prefer to do them on their application in privacy and comfortable environment. Moreover, service designers and this kind of services played a leadership role, which could stimulate customer's excitements and motivation to engage into service process, like "patient as a partner" (Karazivan P et al., 2015), participating into the service process, making service more personalized and individualized, which can be used for far more than just tracking your daily steps.

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The Reform Exploration of Vocational English Course

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Abstract: With the development of vocational education, English teaching has been paid more and more attention in order to expand students' view about the whole world. So a lot of colleges are attempting the reform in the Vocational English Course. According to the difference of students' academic level and the individualized demand of career development, the study group explores the reform based on the "Foundation+", which cultivates students' profession competitiveness and sustainable development potential.

Keywords: Vocational English Course, Foundation+, curriculum system

1. INTRODUCTION

Since the establishment of the course in vocational colleges, Vocational English Course has experienced the following three stages. At the beginning, the public English course basically follows the curriculum system of College English in universities, which only compresses the teaching hours and contents. With the rapid development of vocational education, vocational colleges pay more attention to improving the quality of professional skills, while the public courses are gradually marginalized. Recently, the research and reform of Vocational English courses is paid more attention, with the purpose of expanding students' international vision and enhancing students' intercultural communication ability.^[1]



Fig .1 Schematic diagram of Vocational English Reform

2. DEFINITION OF "FOUNDATION+"

"Foundation" refers to the compulsory module which is unified, suitable for various specialties in accordance with the general needs of personnel training required.

"+" refers to the optional modules, which can be decided and adjusted by different majors according to regional economic development and students' personal demand.

"Foundation+" Reform is not a simple list or superposition of teaching contents. It gives opportunity optimization adjustment to each major, according to the needs of profession and student growth needs.^[2]

3. DESIGN OF CURRICULUM SYSTEM

According to the difference of students' academic level and the individualized demand of career development, to solidify basic knowledge, strengthen application skills and widen international vision, the vocational English course is set to 6-10 credits. Each major can organize the corresponding content by choosing the basic module, the application module, the improvement module.^[3]

Foundation Module, 2 credits, is arranged in the first semester. The module covers all majors and meets the most basic requirements. So it is compulsory.

Application Module, 4-6 credits, scheduled in the 2-3 semesters. The module refers to the "Polytechnic English", "Business English", "Medical English", "Art English", which are designed for the application of four main fields, named science and engineering, finance and commerce, medicine and health, culture and art.

Improving Module refers to all 3 categories and 11 optional courses, opening in the fourth semester. students can choose the 0-2 credit teaching module according to their individual learning foundation and career development differentiation.

Table 1 Curriculum System of Vocational English

Module level		Sub-module	Credits	Term	Category	Requirements
Foundation	Foundation	Basic English	2 credits	First semester	Required courses	All students are required
+	Applications	Polytechnic English	4-6 credits	Semester 2-3	Limited options	By category of major Limited selection
		Business English				
		Medical English				
		Art English				
	Increase	Optional Module	0-2 credits	Semester 4	Selection	Students choose according to their professional and personal development requirements
		Practice module				
		Community module				

4. DESIGN OF COURSE CONTENT

Based on "Foundation+", Vocational English Course Content, is designed to construct "Ability Transfer, Contents Integration, Quality Extension" content system. In the system, listening, speaking, reading and writing skills are the basic content that can be transferred to train students to have the common language skills; the core contents of medical English, architectural English, science and engineering English, art English and other professional courses are selected in different major categories, and the emphasis is placed on cultivating students' application ability; through oral English contest, special promotion tutoring, cross-cultural

communication, provide students with personalized learning services to develop students' ability of sustainable development.^[4]

The course is also divided into "ability module" and

"knowledge module", constructing "Curriculum, teaching modules, knowledge points (skill points), resources" four-level curriculum framework. Taking Medical English as an example:

Table 2 Design of Medical English

Module	Contents	Hours	Credits	Term
Basic English	About introduction, greetings, thanks, apologies, farewell, directions; weather, study, hobbies, diet, health and other daily communication topics related to English knowledge and listening, speaking, reading and translation skills.	32	2	First semester
Medical English	Knowledge of English, listening, speaking, reading, writing and translation skills in the fields of medical profession, professional spirit, human body structure, diagnosis and treatment.	96	6	Semester 2-3
Improved modules	Foreign Language, World Culture Tour, English Phonetics, Advanced English, CET English, etc.	32	2	Semester 4
	English Skills Competition Training			
	English, French, Korean and other foreign language community activities			

5.SUMMARY

(1)The effect of the reform is recognized by the students. Students can choose what to learn in all different modules in accordance with personal needs, Students' attitude is no longer "it doesn't matter whether to learn or not", but "I want to learn, and I will learn well".^[5]

(2)The teaching reform is endless. With the development of society, the existing curriculum system design will change. Therefore, it is necessary to constantly close the relationship with society, specialty and students, in order to ensure the advanced nature and effectiveness of the teaching content.

(3)The integration of IT and teaching will help to promote the Vocational English reform. In recent years, how to carry out the reform of curriculum content based on concept of "foundation +" and how to deepen the reform through further optimizing design, implementing blended learning and online

teaching, has become hot topics.

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Internet Protocol Version 6 Migration

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Abstract: With the advancement of technology in recent years, more and more devices need an IP address, which resulted in the insufficiency of IP address. So, IPv6 (Internet Protocol Version 6), as an upgrade to the old one has emerged. To understand its structure, it was divided into three different parts. Firstly, we have a global routing prefix, which has the first 48 bits of the address. Next, we have the following 16 bits that are known as the local subnet identifier. Lastly, we have interface identifier, which is the last 64 bits of the address. It is derived from the physical or MAC address.

Keywords: IPv6, IPv4, IP

1. INTRODUCTION

The development of IPv6 can be roughly divided into three phases: Stagnation [1995-2009], Emergence [2009-2011], and Acceleration [2011-present]. As the increasing demand of IPv6, both requirements and qualities of it has grown significantly.

It has many unique features. Firstly, it has simpler header format than IPv4. And in IPv6 end to end connection, integrity is achievable. Second, IPv6 has neighbor discovery (ND) protocol, it helps in the automatic configuration, which is the ability of generating their own IPv6 addresses, making address management easier and efficient.

To understand why IPv6 migration is divided into three phases, and why it is evolving this way, we need to know which factors affect IPv6 migration, how the decision makers influence IPv6 migration and under what circumstances they are willing to upgrade IPv4 to IPv6.

2. MIGRATION

2.1 ITDs

Internet technology developers (ITDs) are the developers of IPv6 technology and others can implement the IPv6 Internet through it. If we consider all ITDs as a whole, there is only one case, and that is when the market demands for IPv6 increase. The quality of IPv6 depends on the total input of ITDs into IPv6 products. As time went by, the market demand for IPv6 was increasing daily. But ITD is not a single. It is made up of multiple competitors. ITDs' investment in technology eventually led to quality

parity between IPv4 and IPv6. This in turn drives the migration from IPv4 to IPv6.

2.2 ISPs

Internet service providers (ISDs) provide internet connectivity to users through equipment purchased from ITDs. Their adoption of IPv6 is through upgrading their infrastructure. The main reason ISPs started using IPv6 was the increasing scarcity of IPv4 addresses. As the quality of IPv6 improved, the cost of it will decrease. However, it should be noted that in the early stage, due to the low quality of IPv6, ISPs were reluctant to upgrade. In the early days, this was driven by external factors, such as the government's strategic investment decisions. Once upgraded to IPv6, there will be new costs associated with providing IPv4 Internet access to new users. Overall, ISPs need to balance the factors to decide when to upgrade.

2.3 ICPs

Internet content providers own the content that makes up for much of the Internet's value. For an ICP, IPv6 adoption implies native IPv6 access to its content. This requires upgrades to its local infrastructure, and advertising IPv6 accessibility to users. The cost of ICPs upgrade is similar to that of ISPs. Increased use of IPv6 will push the ICPs to upgrade. In addition to hardware costs, there would also be costs associated with the connection of dual-stack users. So ICPs periodically assess the popularity of IPv6 to determine when is the best time to upgrade to IPv6^[1].

3. TRANSITION TECHNOLOGY

IPv6 protocol has larger address space and more efficient forwarding. Thus, it is essential to go through the process of the global transition from IPv4 to IPv6. The three existing mechanism is dual stack, translation and tunneling.

3.1 DUAL STACK

The most direct way to achieve the interconnection between IPv6 nodes and IPv4 nodes is to add IPv4 protocol stacks to IPv6 nodes. Nodes with dual protocol stacks are called "IPv6/v4 nodes". The dual stack technology does not need to construct a tunnel, but it is used in the tunnel technology. IPv6/v4 nodes can only support manual tunnel configuration or both manual configuration and automatic tunnel.

3.2 TRANSLATION

The translation contains mainly two parts, which are the location of the translator and the translation algorithm BIS and BIA structure. For BIS, it means the translator and translation process in the internet layer. As for BIA, the whole translation process happens in the socket layer. Thus, the translator will not know every data in the IP packet. For ordinary Internet users, private IPv4 addresses can be allocated, and NAT (Network Address Translation) technology is used to solve the exhaustion of IPv4 addresses. The conversion technology that converts private IPv4 addresses into legal public ones. NAT not only solves the problem of insufficient IPv4 addresses, but also effectively avoids attacks from the network.

3.3 TUNNELING

There are two types of these addresses: IPv4-compatible addresses and IPv4-mapped addresses. IPv4/IPv6 nodes can automatically tunnel IPv6 packets over IPv4 networks. Dual-stack nodes use the same address for both IPv4 and IPv6 packets. Such nodes can be used as routers to link IPv6 networks and automatic tunneling to traverse IPv4 networks.

3.4 OTHER TECHNICAL ISSUES

There are still some issues that remain unsolved. The dual-stack technology itself does not solve network interconnection and interworking. The tunnel technology can solve the two-way communication, but it still needs a powerful tunnel server. In addition, the tunnel is actually implemented through a double-layer IP header. This increases the length of the packet and the occupied bandwidth. There was a draft standard NAT-PT for address translation technology, but it has been abandoned by the IETF. Obviously, these interconnection technologies are not satisfactory, and can only be adopted temporarily.

4. FRAGMENTATION

Every path inside networks has specific MTU (Maximum Transmission Unit) value and fragmentation only performs in the network layer. This section focuses on the comparison of IPv4 and IPv6 packet fragmentation, then briefly introduce the reasons of discard issue's occurrence and a new protocol.

4.1 COMPARISON

An IPv4 packet can be split into fragments by any router in the network. Each fragment comprises duplicated IP portion of original packet header and split data. This process is controlled by fragmentation control field, which exists in every IPv4 header of original packet, reassembled packet and fragmented packet. IPv6 packet is different from IPv4 packet because of its simplified header format and additional extension headers.^[2] IPv6 packet consists of unfragmented part. During the process of

fragmentation, the first IPv6 fragmented packet copies the unfragmented part. At high data rates, issues such as incorrectly assembled IP fragments and delivery of corrupted datagram to upper protocol layers occur under some conditions^[3]

4.2 DNS AND DISCARD

The DNS is a typical representative of UDP protocol users. Researchers study IP packet fragments discard problem by sending two DNS queries and observing the message size received information. The result shows that when the size of DNS response is bigger than the size of DNS service, the response is fragmented and the service sends back a SERVFAIL failure notice. The reason of this issue is firewall's failing to identify the fragmented packets. As for IPv6, only the first fragmented packet has transport protocol header. It shows that when it comes to DNS queries and responses over IPv6, the capability of DNS resolver to receive fragments is disappointing.^[4]

4.3 TCP AND DISCARD

To analyze the extent to which this issue occurs in TCP, researchers use a front-end unit to a web server, which is set up to fragment outbound IPv6 packets with certain size. The results show that approximately 21% of the end points fail to receive packet fragments, which is still unacceptable in practice. (ibid)

4.4 PMTUD TO AVOID FRAGMENTATION

In actual transmission of large packets, new protocols are designed to avoid the fragments discard issue. In this subsection, PMTUD (Path MTU Discovery) protocol will be introduced. PMTUD works on both IPv4 packet and IPv6 packet. Assuming two servers need to transmit large packet through networks and every path of the networks has respective MTU value, then each packet sent by a server is marked to ensure it will not be fragmented by intermediate nodes before arriving at the destination server. When the packet is larger than the MTU of next path, the present node will discard this packet and send back ICMP PTB message to the sender, which contains the MTU value of next path.^[5-6] PMTUD deeply relies on ICMP messages. Therefore, PMTUD is still considered harmful sometimes since it has a long history of software bugs, failures and misconfigurations.^[7]

5. TARGET GENERATION

5.1 PAST WORK

Target generation is used to figure out the network environment, which can benefit the detection and track of vulnerabilities by scanning a wide range of target machines. The idea behind it is simple - guess and hit, as much as possible.

5.2 GENERATION MODE

There are currently two models that people used to perform IPv6 target generation. The first method is

heavily dependent on seeds. People assumed that there are dependencies and patterns between all the seeds. Therefore, it is called dependent model. The other one is called independent model. In this model people seeds are treated only as individual entities. This seems like a less smart and optimized way of doing the job. But it can be used on a wider range of targets.

5.3 ADDRESSES ALIASING

Due to the physical limitation of the hardware and our network construct, this task cannot be performed perfectly. One of the major problems is IPv6 aliasing, which is a common practice for major service providers worldwide. It might cause a scanning result that cannot represent the real situation of a network environment. Thus, we need a better way to reduce the effect of these. One solution is to use a feature called “dual stack”. Another very interesting thing about address aliasing is that most of the aliases are pointed to the top few physical target, which reflect the function of address aliasing itself.

5.4 LOOSE RANGE VERSUS TIGHT RANGE

There could be many variables that affects the performance of the target generation algorithms. Loose range scan means there would be multiple uncertain bits, it is possible that only few bits are the same. Doing so would require a lot of budget, especially at the beginning of the scanning. The tight range scan means that there will be only one unknown bit. All the budget refers to the calculation power and communication power.

6. FUTURE WORK

Since the scanning process and quality are restricted by the budget. It is hard to make major breakthrough

in this area. But instead we should put more emphasis on efficiency optimization. And the following questions can be considered. For example, what is the minimum amount of seeds that can still power the scanning? Can we design a co-op between scanning and DNS server? What if we use machine learning? In this way, more advanced ways to deal with IPv6 alias might be proposed.

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Mars probe program simulation

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Abstract: Using the database in Python to simulate the orbit of Mars in two-dimensional image. This simulation is the first step of arranging plan of Mars probe. It is simple but essential and fundamental. For a student, the program of Rocket must be so complicated and untouchable. When I do this work, I feel excited because I can contact with aerospace industry. I can flight in the universe surrounded by planets. The greatness of this work, highly praise. However, the result of simulation is disappointing. My rocket does not reach enough close to make Mars capture it.

Keywords: Probe, rocket, simulation, program;

1. INTRODUCTION

To think about getting from Earth to Mars, it is helpful to divide the problem into multiple steps.

The first step is to adopt the Hohmann transfer. If you neglect Earth's gravity and Mars's gravity, you can find the speed, which a satellite would need to have at the Earth to be on an elliptical orbit around the Sun in order to reach Mars. The perihelion of this orbit would be the Sun to Earth distance, and the aphelion of this orbit will be the Sun to Mars distance.

Theoretical preparation

We need some preparation for the calculation about gravitational potential energy and orbits.

We said the gravitational potential energy, U , of two masses M and m separated by a distance r is given by $U = -\frac{GM}{r}$

G is the gravitational constant and has the value. $G = 6.67 \times 10^{-11} \text{ m}^3 \text{ kg}^{-1} \text{ s}^{-2}$. The sum of the potential energy of a planet in orbit will remain constant:

$$E = U + K = \text{constant}$$

The energy of the planet moves between gravitational potential energy and kinetic energy, but the total energy is conserved. Let us find the energy of a planet in a circular orbit with radius r . The gravitational potential energy is

$$U = -\frac{GM}{r}$$

The kinetic energy is

$$K = \frac{1}{2}mv^2$$

However, we have to find v . To find v we can use Kepler's third law of planetary motion:

$$P^2 = \frac{4\pi^2 r^3}{GM}$$

The period is given by $P = 2\pi r/v$, so

$$\frac{4\pi^2 r^2}{v^2} = \frac{4\pi^2 r^3}{GM}$$

Thus, we find

$$v^2 = \frac{GM}{r}$$

The total energy of a planet in a circular orbit is

$$E = U + K = -\frac{GMm}{r} + \frac{1}{2}m\frac{GM}{r}$$

or

$$E = -\frac{1}{2}\frac{GMm}{r}$$

Because the energy is less than zero, the orbit is bound. A parabolic orbit has an energy of zero, and a hyperbolic orbit has energy greater than zero. After these formulas prepared, we can figure out which orbit we need, at least approximately. Using Kepler's third law, you can also find the time to get from Earth to Mars, which will be half the period of the orbit. The average distance between the Sun and Earth is define to be one astronomical unit (AU). The average distance between the Sun and Mars is 1.5 AU (1.524 AU). Thus the semi-major axis, a , of this ellipse is $a = (1\text{AU} + 1.5\text{AU})/2 = 1.25\text{AU}$.

Kepler's third law tells us that

$$P^2 = \frac{4\pi^2}{GM}a^3$$

Putting in values, we find

$$P^2 = \frac{4\pi^2}{\left(6.67 \times \frac{10^{-11} \text{ m}^3}{\text{kg} \cdot \text{s}^2}\right) (2 \times 10^{30} \text{ kg})} (1.5\text{AU})^3 (1.5 \times 10^{11} \text{ m/AU})^3$$

Or $P = 5.8 \times 10^7 \text{ s}$, which is 671 days or 1.8 years. Half this period, the time to get from Earth to Mars, is 0.9 years or 11 months. This gives us a good first approximation for how long the trip will be.

Now let us figure out what speed the satellite needs to have at Earth's orbit. Kepler's second law tell us a that the satellite will sweep out equal areas in equal times. We will not work it out here, but the result for the speed of the satellite in its orbit is given by.

$$v = \sqrt{GM\left(\frac{2}{r} - \frac{1}{a}\right)}$$

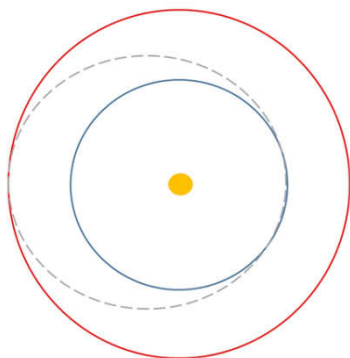


Figure 1: Geometry of Hohmann transfer. Earth's orbit is blue circle. Mar's orbit is red circle. Hohmann trajectory is the elliptical dashed line. Where r is the distance between the Sun and the satellite. Thus, when the satellite is at the Earth, this reduces to

$$v = \sqrt{\frac{GM}{a}} = \sqrt{\frac{(6.67 \times \frac{10^{-11} \text{m}^3}{\text{kg} \cdot \text{s}^2})(2 \times 10^{30} \text{kg})}{(1 \text{AU})(1.5 \times \frac{10^{11} \text{m}}{\text{AU}})}} = 29800 \text{m/s}$$

Program design

Getting from Earth to Mars is more complicated than it may seem at first. Imagine a spacecraft ~ 400 km above the surface of the Earth, and let us suppose that Earth and Mars are at conjunction. At a height of 400 km, the acceleration due to gravity is not much smaller than it is at the surface of the Earth. We cannot just launch in a straight line from the Earth to Mars. Both Earth and Mars are in orbit around the Sun, so Mars will have moved by the time the spacecraft arrives at the orbit of Mars^[1]. Thus, we need to send the spacecraft from the Earth on a path such that it intersects with Mars when the spacecraft arrives at Mar's orbit. Not only that, but we want the spacecraft to approach Mars on a path such that it can enter an orbit around Mars. Thus, travel to Mars typically to has a minimum of three steps: 1. Launch spacecraft into circular orbit around the Earth. 2. Give a speed boost to the spacecraft at the appropriate point in its orbit around the Earth to convert the spacecraft orbit into an elliptical orbit around the Sun such that the aphelion of the spacecraft orbit is at Mars's orbit. 3. When the spacecraft approaches Mars, slow the spacecraft the correct amount so that it enters orbit around Mars. In step 2, in addition to firing the rocket at the correct point in its orbit, the rocket also needs to be fired on the correct day and year, so that the spacecraft will arrive at Mars and not just at Mar's orbit^[2]. When the spacecraft is leaving Earth's orbit, it is influenced by both the gravity of the Sun and of the Earth, but not so much by Mars (which is less massive than the Earth and much farther away).

How to Get from Earth to Mars

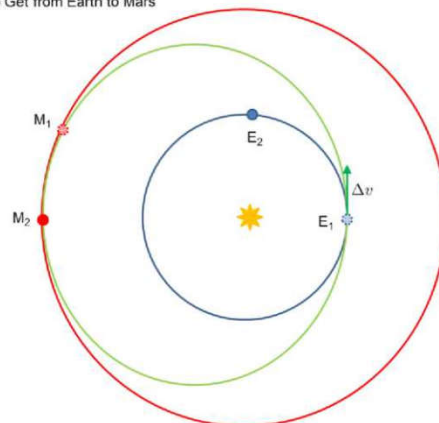


Figure 2: Hohmann transfer trajectory

When the spacecraft is approaching Mars orbit, both the gravity of the Sun and Mars influence it. There are additional complications. Both the orbits of the Earth and Mars are not circular. Earth's orbit is nearly circular with an eccentricity of 0.0167, but Mar's orbit has an eccentricity of 0.0934. As a historical note, it was Tycho Brahe's observations of the peculiarity of Mar's motion that led Kepler to finding the three laws of planetary motion. The orbital planes of Earth and Mar's orbit are also tilted with respect to each other by an angle of 1.85° . Due to the simulation in two-dimensional plane, it is natural to simplify the three-dimensional features and ignore them. My program chooses to keep the sun at a certain point. The rocket, the earth and Mars move in the same plane. The angle between the planes of three objects is ignored.

Programming

Program Earth orbiting the Sun. You can do this either just assuming the Earth moves around the Sun in a circle or by programming the gravity between the Sun and the Earth and giving the Earth the correct velocity to be in a circular orbit. Do the same thing for Mars^[3]. Program a satellite to orbit Earth. For this, you will need to program the gravitational interaction between the Earth and the satellite. Choose a height above the Earth's surface for the satellite's orbit, for example, 400 km. However, remember that the Earth is orbiting the Sun, so the satellite will have the velocity of the Earth around the Sun *plus* the velocity of the satellite around the Earth. You will need to calculate the gravitational pull on the satellite from the Earth *and* the Sun. Check that your satellite is in a circular orbit around the Earth by plotting the position of the satellite in the Earth's reference frame; the Earth will be stationary (0,0). Now add the extra velocity to the satellite to send it to Mars. When the satellite gets far enough away from the Earth, you can stop calculating the gravitational interaction between the satellite and the Earth. When the satellite gets close to Mars, you will need to start calculating the gravitational interaction between Mars and the satellite. At some point, you will have to add a velocity to the satellite to get the satellite to enter an

orbit around Mars. Check that your satellite is in an orbit around the Mars by plotting the position of the satellite in the Mars's reference frame; the Mars will be stationary (0, 0) You will need to choose a time step to update the acceleration, velocity and position of the satellite. Near Earth and Mars, you may need to use a smaller time step than when the satellite is far away from both Earth and Mars^[4].

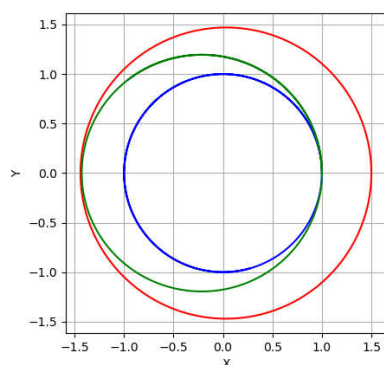


Figure 4: the blue is earth, the green is satellite and the red is Mars.

2. RESULTS AND DISCUSSION

The modeling process is not difficult, and the model is very simple, but the rocket should consider three forces, and consider the initial speed is more difficult. The early modeling was completed very smoothly. I first built a model of a rocket with random initial speed. Mars could not capture the rocket. The second step was to adjust the initial speed and launch time. It was that Mars could meet the rocket. As I reduced the

step size, the model became more and more accurate.

3. CONCLUSIONS

Both the earth and Mars do a circular motion, without considering the role of other celestial bodies, they actually do an elliptical motion. The rocket will also receive more forces, and its motion will be three-dimensional. The position of the sun will not change, and its motion is quite complex. In short, this design has some shortcomings and it is still far away from using theory to experiment. It is just a student work and the real aerospace is a huge complicated problem. You can glimpse a part of it in this program. The universe is a chaotic system, and it is very difficult to predict in 213. The aerospace industry is really a great and difficult work.

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On the Communication of Public Relations in the New Media Environment

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Abstract: With the continuous growth of national economy and the continuous innovation of science and technology, the construction and development of new media industry in China has made a qualitative leap. Based on the wide application of new media technology, it also has a far-reaching impact on the way of public relations communication in China. The most remarkable feature of new media is its fast communication efficiency, wide range and strong interaction, which can attract more social audience groups. Compared with the characteristics of traditional media, new media has greater communication advantages. Scientific application of new media in public relations communication can effectively improve the work level and promote the harmonious and healthy development of social construction. This paper will further analyze and discuss the public relations communication in the new media environment.

Key words: new media environment; public relations; communication strategy

1. INTRODUCTION

At present, it is a digital era. The construction and development of public relations communication in China should keep pace with the times and keep up with the pace of the times. As an advanced means of digital communication, new media is more interactive than traditional media, and can fully understand the needs of the public. The contemporary people are using new media all the time. Their work, study and life are closely related to new media technology. The formation of new media environment has a wide range of impact on the connotation of public relations, which makes the communication mode and content of public relations more diversified, and can meet the personalized needs of social groups to the greatest extent.

2. MAIN PROBLEMS IN PUBLIC RELATIONS COMMUNICATION UNDER THE NEW MEDIA ENVIRONMENT

2.1 Being lack of optimization and integration of new media channel resources

Based on the new media development environment, China's public relations communication work should give full play to the value of new media technology, break the disadvantages of traditional media technology application, strengthen the

interaction with social audience groups, expand the scope of public service and network publicity to the greatest extent, and contribute more practical value to the construction and development of a harmonious and healthy society in China. However, the actual situation is that the main body of public relations communication in China has not been able to fully grasp the advantages and characteristics of various new media channel resources, unable to optimize and integrate the use of new media channel resources scientifically and effectively^[1], and the relevant staff lack a good sense of practice and innovation. So, they are too conservative or blindly follow, resulting in the public relations communication being short of certain competitiveness and influence in the market. Some public relations departments still use traditional media to track and report public relations events. To some extent, they ignore the use of new media to interact with the Internet public and timely grasp the information feedback of Internet users, which makes it difficult for public relations work to be recognized and supported by the public.

2.2 Being lack of scientific knowledge of new media public relations

Under the new media development environment, the main body of public relations communication must set up advanced public awareness of new media. Only in this way can we correctly understand the importance of simultaneous interpreting and disseminating public relations information by innovative ways. However, in the process of market economy development in China, there are still many enterprises and institutions that fail to pay attention to public relations publicity work. They generally lack scientific understanding of new media functions, do not have the ability and quality to skillfully use various new media technologies to carry out public relations publicity work, and can effectively combine public relations communication with new media, so as to comprehensively improve the public relations publicity work, and the quality and efficiency of public relations communication. The main body of market public relations communication is lack of in-depth analysis and understanding of new media public relations content, unable to grasp the massive data information scientifically and accurately, using these valuable information to carry out the correct decision-making management,

which leads to the difficulty of smooth development of various public relations activities.

2.3 Being lack of actual impact of elimination fragmentation

The wide application of new media in various industries makes the communication object become fragmented, and the operation of social public relations relationship will also show the characteristics of fragmentation. In order to effectively eliminate the adverse effects of fragmentation on the communication effect of public relations and meet the individual needs of the fragmented communication object, it is necessary to reasonably use new media technology in combination with the characteristics of the communication object. In the face of social public relations communication objects, the mode of "providing content firstly and receiving communication objects passively" adopted by traditional media has been unable to meet the development requirements of the times^[2], while the emergence of new media technology can meet the personalized needs of different levels of communication objects. However, due to the limitations of their own development factors, some public relations departments lack the sense of work to eliminate the impact of fragmentation, fail to effectively provide the audience with the content of the selection menu, let users choose the media content according to their own needs, so as to affect the work effect of using new media channels to carry out public relations activities to a certain extent.

3. PUBLIC RELATIONS COMMUNICATION OPTIMIZATION STRATEGIES IN THE NEW MEDIA ENVIRONMENT

3.1 To optimize and integrate new media channel resources and strengthen communication and interaction

Under the background of the vigorous development of new media technology, China's public relations communication work should break the disadvantages of traditional thinking. It not rely solely on traditional media to carry out the communication work of public relations information, but neglect the interaction and communication with the audience. In view of this, the communication subject must establish advanced awareness of new media innovation and application, optimize and integrate new media channel resources, innovate and improve public relations. Regarding the content and methods of information dissemination, we attach great importance to the interaction of the modes of dissemination. Enterprises and institutions should combine their own development and nature of work, choose more reliable new media officials to report and disseminate news information, and actively convey positive energy to the community based on new

media technology. It can help to ensure that they can establish a good image in the society, which can help enterprises effectively eliminate the resistance of the public. In addition, the enterprise should optimize the integration and application of resources from different media channels to launch the publication and dissemination of investigation information, comprehensively grasp the comments of Internet users, scientifically guide the direction of public opinion, avoid the public relations crisis to develop in a worse direction, and generate greater social contradictions after the public relations crisis, .

3.2 To correctly understand new media public relations and realize mass information dissemination

In the new media environment, the essence of public relations communication is to integrate public relations work with innovative Internet thinking, to carry out scientific public relations planning and public relations activities for social enterprises and institutions from a strategic height, and to observe the development trend of social public information communication in real time. Therefore, modern enterprise organizations should correctly recognize the essence of new media public relations, strengthen the activity exchange with social public groups by taking new media as the bridge hub between the participants of social public relations activity organizations^[3], realize the high efficiency and wide range communication goal of massive information, and create a good corporate culture image in the society, so as to win the recognition and support of more citizens. Modern enterprises and institutions should dare to break the shortcomings of traditional media public relations and communication work, and change the thinking of public relations work in time. Only when they really understand the essence of new media public relations and communication work, can they play their practical role and realize mass information communication and efficient interactive communication.

3.3 To eliminate the impact of fragmentation to meet personalized needs

Based on the new media environment, market enterprises and institutions should pay attention to eliminate the impact of fragmentation in public relations communication work, try to meet the personalized needs of social audience groups, and greatly improve the overall level of their own public relations communication work. Enterprises should innovate and improve the means of communication, and comprehensively improve the utilization rate of valuable information. It can ensure that it can bring certain benefits to market communication objects, avoid various crisis contradictions in public relations work, and affect the positive image building of enterprises. The

public relations department of the enterprise should give full play to the information publicity and communication function of new media platforms such as Wechat, microblog, and forum; it should effectively tell their own event experience and feelings to the corresponding communication objects, and communicate and interact with them with a positive attitude to meet the information needs of the feedback of the communication objects. The main body of social public relations communication should take the initiative to meet the personalized needs of the communication object, use new media to optimize the organization of the corresponding promotion activities, meet the needs of the communication object, and help enterprises establish a good image.

4. CONCLUSION

To sum up, the formation of new media environment not only brings various challenges to the communication of social public relations, but also brings more development opportunities to the

main body of public relations communication. The main body of public relations communication should actively cater to the personalized needs of the audience, innovate the use of multimedia planning to carry out public relations publicity activities, realize the efficient communication of massive information, and interact with the audience.

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Women in Japan After the Meiji Restoration

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Abstract: This paper examines early Meiji period writings such as *Ukigumo* by Futabatei Shimei and *Separate Ways*, *Child's Play*, and *The Thirteenth Night* by Higuchi Ichiyō in an attempt to show the shift changes in clothing, education and the stubbornly unchanged social status for women in Japan before and after the Meiji Restoration. Although the restoration brought quick changes to Japan with the inrush of new ideas, feudal beliefs remained strong. Women quickly adopted new fashion and were officially required to go to school for the first time, which exposed them to new thoughts. However, as the restoration was not thorough, other changes, such as equality for women, were slow.

Keywords: Japanese Literature, History, Women's Studies

The Meiji Restoration opened up Japan and dragged it into modernization. Of a sudden, western ideologies engulfed Japan, which fundamentally changed people's lives and society as a whole. Women at that time saw great advancement in areas such as independent thoughts and access to education. However, the changes mostly remained superficial because the feudalistic ideology was inveterate. As a result, the emergence of their fight for equality was extremely sluggish.

1. ONE OF THE MOST OBSERVABLE AND QUICKLY ADOPTED CHANGES WAS ARGUABLY IN CLOTHING STYLES.

In Futabatei Shimei's *Ukigumo*, the author comically describes a scene where Osei, the heroine, dresses up completely in a different way after she starts studying English at school. She switched "from a Japanese underrobe to an undershirt and adopted a western-style hairdo, strangled herself with a scarf, and donned eyeglasses which ruined her perfect vision" (Ryan 210).^[1] As a teenager, Osei starts to be aware of what she is wearing. The western style became the symbol of fashionable women, and as a student learning a foreign language, Osei, of course, appreciated a dress over a kimono. Pioneering girls like Osei were the epitome of this fast-evolving era where changes were brought in.

In 1873, five years after the start of the Meiji Restoration, the Meiji government issued the *Gakusei*, Japan's first national plan for education. This proposal drafted by several towering intellectuals who had been exposed to western education systems made sure that all children, regardless for their gender, should at least have

access to elementary education (Duke 72)^[2]. As a result, the social status of girls changed, and opportunities of getting education increased. Coming from an enlightened family, Osei started grammar school at the age of seven (Ryan 209).^[3] The newly moved-in neighbor's daughter was also a big influence on Osei. Her counterpart was gentle and demure, enjoying her studies and did well in school. Being a faddist by nature, Osei also picked up the habit of reading and writing. After learning that her friend was going to a private school after grade school, Osei desperately tried to persuade her parents to let her go along. She argued that there was no point in living if she could not go to school. She also moaned and groaned and even went on a hunger strike before her parents agreed to let her go, which would not have happened if it were not after the Meiji Restoration since she was just a poor and defenseless girl. First published in 1887, the heroine's ability to enter school in *Ukigumo* was inseparable from the restoration. The implementation of those policies had a profound impact on women's education.

2. ACCESS TO EDUCATION AND WESTERN BELIEVES ALSO FUELED INDEPENDENT THINKING FOR WOMEN.

More and more women were hoping to break away from feudal ideas and sought their own happiness. When her mother Omasa tried to instill her the conventionally agreed importance of marrying a good husband, Osei rebelled by saying that "I have my own ideas on the subject. It's up to me to decide if I'll marry or not" (Ryan 232). Her mother was astonished because the only women that she could think of who lived alone without a husband were nuns. With the opening up of the borders, new, western thoughts also flooded in. For women of the new generation, hazy thoughts of free love were being conceived.

Indeed, women's appearance had changed, and they started to have their own voices. However, the transformation was still inadequate, mostly still on surface level. A large number of feudal remnants preserved, and the patriarchal society was still oppressing women. As depicted in several books by famous Meiji period female author Higuchi Ichiyō, their fights for rights were fruitless. To many, the name Higuchi Ichiyō does not strike as emphatically as other applauded authors such as Kawabata or Tanizaki. Surprisingly, my first acquaintance with Ichiyō, by serendipity, was almost 10 years ago, long before my interest in Japanese literature emerged. It was my first trip to Japan, and

I was really intrigued by the lady on the ¥5,000 bill since I grew up in a country where Mao's head is printed on every single banknote. Later, it turned out that her portrait of lives of women in the Meiji period is even more captivating. From her own arduous life, she was able to vividly describe in her stories the plights of women who had no control of their lives. Usually coming from a humble background, her female characters commonly struggle economically or romantically, although they still have some bravery and tenacity facing reality.

Although access to schools was granted, clearly the expectation was still for women to be the supporting role, taking care of the mundane tasks in the household. For Ichiyō, these beliefs, dating back to the Heian period, posed obstacles in her education. Her mother argued that schools "did not do a girl's future any good" and she should instead learn "how to sew and how to run a household", leaving her heartbroken (Danly, 14). In *Separate Ways*, the woman figure Okyō starts as living a poor life but still hopeful about it. When her friend Kichizō is dismal about his mysterious identity, she encourages him that "I wouldn't let it bother me. I'd make something of myself" (Danly, 290).¹ At that time, she is confident that by working hard with her hands sewing clothes, there is a decent future for her. But later, after being hit by life, she submits and becomes a mistress to a rich man. Ichiyō did not describe in detail how Okyō's perspective changes in the process but the agony and struggle she feels is evident from how outraged Kichizō gets when he knows about her decision. Facing condemnation from her best friend, she first argues "It's not a bad thing that's happened" as if she is pretending that she likes the change, then goes on confessing that "It's not that I want to. I don't have much choice." In fact, she is tired of washing and sewing and "would do anything for a change" (Danly, 293). When she realizes that it is impossible to change the destiny of poverty with her own hands, she finally chooses to compromise to money, commits the rest of her life to a rich pawnshop owner. This leaves the reader wonder if that was the life Ichiyō pictured for herself had her father not supported her in her education.

Another story by Ichiyō, *Child's Play*, features the Yoshiwara pleasure quarter in Tokyo. Through the portrayal of the heroine Midori, the tragic lives of women living in the Meiji society are reproduced. Pure and careless as childhood is, the reality is cruel. Being the younger sister to a renowned prostitute in the district, Midori is expected to enter the brothel house when she comes of age. The last passage of the story ends suddenly in this fashion One frosty morning, a paper narcissus lay inside the gate. No one knew what it was doing there, but Midori took a fancy to it, for some reason, and she

put it in a bud vase. It was perfect, she thought, and yet almost sad in its crisp, solitary shape. That same day-she wasn't sure exactly where-Midori heard of Nobu's plans. Tomorrow he was leaving for the seminary. The color of his robes would never be the same (Danly, 287).

The whole story poignantly comes to an abrupt stop here, leaving only a touch of melancholy, and what seems to herald an ominous grief. Caving in to the harsh reality, Midori has to move on.

3.EVEN SADDER IS THE STORY *THE THIRTEENTH NIGHT*

While in *Separate Ways* Okyō gives in and becomes a mistress in hope of a better life, *The Thirteenth Night* shows how miserable life is even for a legally married wife at that time. The narrative begins when the heroine, Oseki, fled back to her parent's house hoping to get support for leaving his husband. Although being married to him she can dress in tasteful gowns and wear jewelry all she wants, she has been sick of his active and passive aggression since marriage. She is willing to "take on any kind of work" to "live life alone" (Danly, 244).

While her mother is somewhat distressed for her misfortune, her father thinks she should try harder since Oseki's only responsibility is to make her husband happy. He consoles her that many people have to bear a burden like this. Although she has the option of getting a divorce in the Meiji period, that means abandoning her son because women could not get custody, her brother losing his job, and parents living in shame. After acknowledging and lamenting the life of their daughter, her father comes to a conclusion that she must return to her husband and quietly put up with all the humiliation for the sake of her son, brother, and parents. Resigning to fate, Oseki says in tears

"It was selfish of me to think of a divorce. If I couldn't see Tarō, there'd be no point in living. I might flee my present sorrows, but what kind of future would I have? If I could think of myself as already dead, that would solve everything...Then Tarō would have both his parents with him. It was a foolish idea I had, and I've troubled you with the whole unpleasant business. From tonight I will consider myself dead-a spirit who watches over Tarō. That way I can bear Isamu's cruelty for a hundred years to come. You've convinced me, Papa. Don't worry. I won't mention any of these again." (Danly, 249)

Thinking about leaving the abusing man is a step forward in independent thinking but, that option is not available to her. She decides involuntarily that she has to be docile and live as a property to her man, like a corpse. For her family and son, she surrenders herself to a torturing life. Men, even her father, stops her from pursuing happiness. When she wants to stand up and leave, she is kicked back.

When facing the awakening of female independence in the Meiji period, men wanted to maintain the feudal tradition and the status of male power. Higuchi revealed this phenomenon and criticized the darkness of such a social system. In this society, women were pathetically helpless.

As a woman living and writing on the edge between the old and modern societies, Higuchi Ichiyō sharply depicted the lives of women in the Meiji period. Beautiful as her writing is, tragedies like these prevailed for women at that time.

4. CONCLUDE

To conclude, rapid modernization brought changes to women in Japan and fueled the emergence of the fight for equality. While superficial changes such as the ones seen in *Ukigumo* were adopted quickly, because the restoration was by no means thorough, from Higuchi Ichiyō's works it can be observed

that their fight was almost fruitless. Their attempt to raise their voices was submerged by feudal thoughts which were still dominating. While change is inevitable, their pursuit for a more equal society still had a long way to go.

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The value orientation and the strategy selection of enterprise financial management

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Abstract: The rapid reform of the economic system puts forward new requirements to the development of enterprises. Enterprises need to clear their own positioning under the premise, improving efficiency, to ensure the normal flow of funds. The reform of the financial system is an effective tool for enterprises to improve their market share at the present stage. How to stand out in the market competition is an important issue for the development of enterprises. This paper will discuss the value orientation of enterprise financial management in depth, and distinguish the direction that enterprises should improve management under different financial conditions, so as to ensure the market share of enterprises and ensure sustainable and stable operation.

Key words: Financial management, Value orientation, Strategy choice.

1. INTRODUCTION

the development of enterprises cannot be separated from the overall economic environment, and the global economic development has taken on a new shape. Chinese enterprises have changed the development situation of low quality and great fluctuations in the past, and the efficiency of capital invocation has increased year by year. These changes are inseparable with financial management. The advantage of financial management is that, under the same market situation, scientific financial management can reduce the risk of the enterprise, so that the internal capital of the enterprise has a stable flow. At the same time, in the face of large and small financial management problems existing in enterprises, how to accurately locate the enterprise form and management methods is a problem that managers need to continue to explore, which will be discussed as the core point below.

2. CURRENT SITUATION

The financial management of enterprise covers a wide range and has a complex structure. Besides, it needs to fully coordinate with various functions from inside and outside, so the difficulty of management is rising day by day. At present, when choosing a bank, financial users have changed their previous habit that they just support the Chinese five major state-owned Banks, from to focus on the international financial market, and the previous mode of the asset management, their financial business form is extended and the business scope expands to

comprehensive direction, at the same time, these changes bring a lot of new achievements, which promotes the market share in the international financial business. However, the other side of development is the challenge. In terms of the current situation, corporate financial management still faces the following problems:

2.1 Management of cash flow and intangible assets

In financial management, the cash flow management and the intangible assets management are the main aspects of management. The cash flow forecasting formula shows that the management level is restricted by the net income and corporate liabilities, and the increasing of net profit is closely related with the national major policy, after calculating reserve interest rates, the corporate can determine the accuracy through the model. Similarly, in the management of intangible assets, the main control factors are merchant reputation and evaluation means. The reputation is a form of stream of consciousness from word to mouth, which is difficult to be quantified through the standard and runs through the whole process of buying and selling. To sum up the above contents, it can be seen that the management level of cash flow and intangible assets is difficult to form quantitative standards, hindering the detailed proposal of management methods ^[1].

2.2 Industry evaluation

The evaluation of the financial industry is led by the government. The evaluation process led by the government restricts the independent evaluation standard, and it is difficult to give play to the market efficiency. The evaluation level of enterprises is not of reference value. Because the enterprise economy has the meaning of fragility, the industry evaluation should combine the macro and micro levels to decide.

3. VALUE PROPOSITION

3.1 Basic functions

Financial management is a management module to ensure enterprises to give full play to their own efficiency, and it is a basic position of enterprise management. The management level focuses on the asset flow, determination of direction, the control of investment cost and decision of capital investment, which play a key role in enterprises' development plans for the next stage. In order to ensure the stable implementation of the plans, in terms of financial management, it is necessary to ensure smooth capital channels, excellent forms of capital allocation, stable

input of internal and external resources of the enterprise, and realize the overall promotion of the value of enterprises' development. Enterprises' development is to carry out efficient economic activities in combination with economic environment and development trend under the premise of complying with legal provisions and market operation system, so as to improve enterprise image and evaluation level, and ensure the faster flow of resources into the enterprise [2].

3.2 Classification

Enterprise value positioning is determined by three factors: the proposition of value, the choice of customer and the content of value. Financial management should build a management system on the basis of comprehensive consideration of the three factors, in order to ensure the operation effect of strategic objectives. The proposition of value is mainly positioned on invisible customers, who have potential purchasing power for products. After in-depth research on the financial needs of customers, according to the service projects that have been launched by the enterprise, reasonable purchasing schemes are designated for customers to penetrate into enterprise values. The purchasing ability of potential users is often positively correlated with the detailed requirements. The staff, on the basis of fully understanding the value orientation of customers, provides alternative scheme and design that are connected with the customer's needs, with personalized characteristics, and fully meet the customer's requirements. Customer's choice should be highly consistent with the enterprise positioning, starting from the needs of customers, subjecting to the impact of commodity profits and leading to the decline of some economic efficiency. In the face of customers' different demands and contents, enterprises should pay attention to gradually infiltrate enterprise values while providing services, ensure the smooth transmission channels, and grasp the use requirements of the three elements of value proposition, customer choice and value content [3].

3.3 The necessity of financial management for enterprise development

The orientation of management value should be based on the recognition of the value of financial management, and only the level of consciousness is paid enough attention to, can it provide conditions for scientific decision-making. It is not difficult to see that, in the development of enterprise, it is often desperate to survive, in other words, to draw development value from the risk. At the same time, when an enterprise obtains development opportunities, risks come with it. In order to ensure the effectiveness of its business activities, an enterprise should set up a risk management department, which dynamically controls the enterprise's ability to bear risks, provides risk countermeasures, timely adjusts strategic objectives,

and ensures a long-term market share. The upward development of enterprises is bound to face capital problems, financial management effectively solves the loan, financing and other aspects of the demand, to ensure that enterprises upward development trend. In addition to controlling funds, financial management should also take into account the legal effect of controlling funds. Before signing the fund lending contract, it should strictly examine the qualification of the financing objects to reduce financial risks.

3.4 Form of goal-driven value positioning

Driven by goals, corporate financial management has two forms of value orientation: economic goals and social goals. The form of value orientation, which is subject to economic objectives, is a concrete form that reflects the functions of money, goods and production, and plays a role in ensuring the value of production and operation. Under the condition of proper handling of the capacity level, it should improve the flow from the purchase of raw materials to the sale of products, ensure the short-term capital period, and improve the operation effect. Social goals control the legal characteristics of enterprises, clarify the rationality of enterprises through the requirements of social goals, strengthen the communication with the external market, and improve the interactive benefits. At present, this form has been widely used in enterprise management, promoting the effective allocation of funds and other links, helping enterprises to develop new processes, improving product technology, and adapt to the general direction of economic and ecological environment [4].

4. SUGGESTIONS TO IMPROVE THE FINANCIAL MANAGEMENT LEVEL OF ENTERPRISES

4.1 Strengthen the construction of financing channels

As the driving force for the development of enterprises, financing has become an important measure in the direction of financial management and plays a role in improving the operation effect of enterprises. At present, the information society is gradually taking shape, and the Internet is widely used in various industries, providing new ideas for broadening financing channels. The financing method adopted by enterprises in the past was mainly bank loans, which had certain limitations and was difficult to control finance. With the development trend of network finance, traditional financing concepts should be changed, diversified financing channels should be actively explored, and the construction of enterprise financial management system should be completed. The benefit chain relationship between the financing enterprises and the original enterprises should be controlled by means of the community of interests, which can indirectly penetrate into the financial management of the financing enterprises and create the same development goals, so as to strengthen the deepening of the strategic deployment

of the original enterprises. At the same time of broadening the channels, the dispersion of risks should be reflected in the region, so as to ensure smooth operation of enterprises by taking advantage of the government's macro-control under the premise of capital integration advantages.

4.2 Enhance the awareness of qualification examination of cooperative enterprises

The qualification of the cooperative enterprise provides the possibility for the long-term development of the enterprise and guarantees the economic benefits while reducing the investment risks of both parties. Therefore, in the process of selecting the cooperative enterprise, it is necessary to strengthen the examination of the qualification and examine the enterprise's credit and relevant evaluation, so as to provide a factual basis for the establishment of cooperation.

4.3 Improve the management level of financial budget

In enterprise management, the control of cost is related to the net profit of products, and it is the key point to improve the overall gross profit of enterprises. Before formulating relevant measures for financial management, we should fully control the process of financial budgeting and strengthen control. Financial budget is a reasonable interpretation of macro-control policies on the basis of fully grasping the basic national policies ,finally,to complete the formulation of budget . Big data processing technology is used to compare the deviation between the actual situation and the budget, actively explore the factors causing the deviation, improve the deficiencies of the traditional financial management system, improve the efficiency of data processing,

and shorten the time to generate investment intention [5].

5.CONCLUSION:

Through the analysis of the content above, the valuable position of the enterprise's financial management influences development of enterprise, reduces the risk of financial management of enterprise, improves risk control level of enterprise, and has a vital role for accurately positioning investment projects. Enterprises should strengthen the financial management level of capital investment, control the output of cost, improve the efficiency of enterprises, in order to expand corporate influence and gain consumer word of mouth.

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A Study on the Translation Strategies of Business English from a Cross-cultural Perspective

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Abstract: With the rapid development of the world economy, international exchanges are becoming more frequent. As the foundation of social development, economy has always played a vital role in international exchange activities. Business English is a specific language used in international business activities. Translators must pay attention to the use of appropriate translation strategies to achieve the desired translation effect without misunderstanding and affecting communication. Factors such as cultural differences, ways of thinking, and vocabulary accuracy all affect the accuracy of business English translation from a cross-cultural perspective. To this end, only by starting from the problem itself, by standardizing and unifying words, rationally grasping cultural differences, and focusing on the use of professional terminology, can we ensure the accuracy of business English translation from a cross-cultural perspective and achieve "seamless" communication.

Keywords: cross-cultural perspective; business English; translation strategy

1. INTRODUCTION

Language is an important medium for cultural exchange. Under the wave of economic globalization, international business exchanges are getting closer. Business English, as the language for communication in business activities and trade exchanges, the accuracy of its translation will directly affect international exchanges. It must be acknowledged that because of the influence of various factors such as cultural differences and ways of thinking, business English has frequent problems in the translation process, which seriously hinders international communication. Therefore, it is necessary to break the barriers and barriers between different countries and effectively improve the accuracy of business English translation through a series of effective translation strategies, from a cross-cultural perspective.

2. FEATURES OF BUSINESS ENGLISH TRANSLATION FROM A CROSS-CULTURAL PERSPECTIVE

Business English translation is an important factor to promote economic and trade development. Compared with ordinary English, business English is more professional and has special requirements in terms of language and format. Through induction, business

English shares the following characteristics:

2.1 Special professional words

With the continuous development of society, the field of business English has become more and more extensive, and business English has different ways of use in different industries. In addition, due to different environments, special professional words and abbreviations have appeared. Business English has a large vocabulary, and many words have professional translations. For example, "free" itself has the meanings of free and unpaid. "Board" has the meanings of template, upload, boarding, payment, etc., but "free on board" indeed means FOB prices. It can be seen from this that business English translators must master professional words when translating, and use specific words in specific environments and occasions to achieve the desired translation effect.

2.2 Efficient and concise sentences

Efficient and concise sentences are also a feature that needs attention when translating business English. Because in international business activities and economic and trade activities, both parties will pay attention to time efficiency. So, in the process of exchanges, the two parties should try to complete business cooperation with the most efficient work efficiency on the basis of ensuring interests. Therefore, in this process, the role of business translation is highlighted. Only by using brief, accurate, and efficient sentences can business English maximize translation efficiency and save intermediate time.^[1] It is worth noting that translators should not neglect the accuracy in order to save working time, but should use relatively concise sentences to translate on the basis of ensuring accuracy.

2.3 Complete and accurate meaning

From a cross-cultural perspective, business English translation must also ensure a complete and accurate meaning. Because every country in the world has different languages, cultures and customs, it is necessary to use professional business English as much as possible in international business exchange activities to ensure the accuracy of business translation. During the translation process, translators should try their best to integrate with the national characteristics and historical customs of the country where the translation target is located, and then express the meaning of business English more

completely and accurately. Only when both parties receive accurate and complete information in the process of cooperation and exchanges can the cooperation be effectively carried out.

3. PROBLEMS FACED BY BUSINESS ENGLISH TRANSLATION FROM A CROSS-CULTURAL PERSPECTIVE

Language is the embodiment of national culture and an important carrier of expression and inheritance. However, because of the difference between Chinese and Western cultures, it has a negative impact on business English from a cross-cultural perspective. The main issues affecting business English translation include the following:

3.1 Cultural differences affect translation habits

Among the factors that affect business English translation, cultural differences are the primary issue. Because there are certain differences in the cultures of different countries, the accuracy of translation will be affected more or less in the process of business translation.^[2] The scope of business English is global. Thus, in business cooperation, people and partners of different countries must be faced; but because of cultural differences, different countries and ethnic groups have different habits in the process of communication and translation. Westerners are relatively direct in the process of communication, and Chinese companies are relatively euphemistic when communicating, so different translation habits will also affect business translation.

3.2 Thinking mode affects translation accuracy

As China's opening to the outside world and the advancement of its economic globalization development strategy, the frequency of exchanges between China and foreign countries is increasing. However, due to cultural differences, translators in different countries have different ways of thinking. This leads to different results from different translators in the process of business communication. For example, the word "lucky dog" means lucky in the translation process, and it is not a derogatory word in itself, but some people will translate it into "a lucky dog", so that the meaning of the word will change. Translation accuracy will be affected.^[3]

3.3 Being lack of accuracy in vocabulary translation

The vocabulary of different countries and the meanings expressed by the same vocabulary also vary, so it is difficult to ensure the accuracy of translation during the translation process.^[4] Because different translators have different interpretations of vocabulary, it is easy for translators to have contradictions and conflicts in the translation work, which will affect the development of translation work, if they cannot regulate the meaning of words.

4. TRANSLATION STRATEGIES OF BUSINESS ENGLISH FROM A CROSS-CULTURAL PERSPECTIVE

4.1 To standardize and unify the words to ensure the accuracy of translation

When translating business English from a cross-cultural perspective, we must ensure the standardization and unification of words, and then ensure the accuracy of translation. In business translation work, a lot of professional content will be involved. If there is no standardized and professional words, it is easy to affect the development of translation work. To this end, it is necessary to standardize and unify the vocabulary in business English, so that the translator can accurately translate, and the content of the document is expressed as accurately as possible. Moreover, the standardization and unification of words can also ensure the simplicity of translation.^[5]

4.2 To reasonably grasp cultural differences and reduce the impact of cultural differences

In the process of business English translation, it is also very important to reasonably grasp cultural differences. In the process of translation, translators should understand the cultural differences between different countries and ethnic groups, and then adjust the language expression in the process of translation to ensure the accuracy of cultural translation.^[6] During the translation process, you can also make notes to reduce the impact of cultural differences, if obscure words appear. In short, in the process of translation, translators must reduce the impact of cultural differences on business translation through measures, such as changing expressions and adding comments.

4.3 To focus on the use of professional terminology to improve translation efficiency

In the process of business English translation, we must pay attention to the translation of professional terms to avoid inaccurate translation. Business translation focuses on the accurate expression of business content, and professional words are an important part of eliminating translation barriers and standardizing business translation.^[7] Especially in the translation process of contracts and important documents, we must pay attention to the use of professional terms to ensure the accuracy of translation and avoid the impact of cultural differences. For example, the professional term of Mercedes-Benz is Benz; the professional term of Coca-Cola is Coca cola. Through the use of professional terminology, you can make the translated content more accurate.^[8]

5. CONCLUSION

In short, compared with general English translation, business English pays more attention to the accuracy of translation. Therefore, in the process of translation, a translator must firstly understand the cultural differences between different countries, and then use standardized words and professional terms as well as apply various of translation strategies, by which can he make it possible to achieve effectiveness of cross-cultural business translation.

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The Influence of Puritanism on American Literature in the 19th Century

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Abstract: American literature is well known all over the world for its strong religious consciousness and deep humanistic care, which stem from the accumulation of American literature in the past three hundred years from the 17th to 19th centuries. Especially in the 19th century, the unique national spirit and the “American Dream” became the special marks of the American people and American literature. Therefore, Puritanism is not only the source of American ideology and culture, but also the cradle of American literature.

Keywords: Puritanism; American Literature; National Spirit; “New Adam”

1. INTRODUCTION

Puritanism originated from Religious Reform in Europe. While Calvinism, which emerged in this great Religious Reform movement, became the theological basis of Puritanism. Puritanism was formed during the process of Anglican Communion further reform, but it had a far-reaching impact on the history of Britain and the United States. “Puritanism” is derived from the word “Puritans”. It mainly consists of Puritans’ thoughts and actions. During the process of Religious Reform in the sixteenth century, the Puritans were oppressed and persecuted because of their opposition to the religious dictatorship and economic oppression of the Royal family. Since then, the hope that trying to reform the Church of England has been dashed. It was with this disappointment that they left their homeland and went to the desolate land of North America^[1].

2. THE IMPACT OF PURITANISM ON EARLY AMERICAN LITERATURE

The influence of Britain can be seen every aspect in the early American colonies. Political system, law, religion, customs and even literature are all indiscriminately imitated Britain. On the basis of imitating English literature, American literature in this period created an unique literary model in the Puritan era^[2].

Literature in the colonial period of North America was mainly adapted to introspection of Puritanism and divine revelation in the Scriptures. Most of them were descriptive and narrative works. These works mainly describe the arduous cross-ocean voyages of immigrants, the natural environment of the New World and the daily lives of the original inhabitants.

As a transitional period in the history of American literature, the most important event in the 18th century

is undoubtedly the Independent Revolution. American literature in this period is obviously different from colonial literature in terms of its main content and form. The literary forms of this period were mainly political prose, argumentative literature, satirical literature as well as some fighting poems. Although sermons are still a regular activity, the number of sermons works has decreased significantly^[3].

3. THE REFLECTION OF PURITANISM ON AMERICAN LITERATURE IN THE 19TH CENTURY

American literature in the 19th century mainly includes Romantic Literature and Realistic Literature, which mainly eulogizing the relationship between “myself” and “nature” and describing objective reality respectively. While the watershed between these two periods is the American Civil War in 1861. American literature matured and flourished in the 19th century. It is generally known that although the religious color of Puritanism has gradually faded away in literary creation in the 19th century, it is still the “soul” of American literature. It is just gradually revised and sublimated with the change of people’s thinking in different periods^[4].

3.1. American Romanticism: *Uncle Tom’s Cabin*

American Romanticism Literature began at the end of the eighteenth century until the outbreak of the Civil War. This period was the most important time in the history of American literature. In this period, the most distinctive manifestation of Puritan idealism was their “Pioneering the West”. Since the early Puritans migrated westward from decadent Europe to the New World, the concept of the West began to take root in North America. Novelists are also deeply influenced by this concept. The protagonists in their works usually travel to the west optimistically and hopefully. For Americans, the West means a free land and a harbor to escape all kinds of bonds. Therefore, the West has become the spiritual sustenance of the people of the Eastern Region, especially the Puritan tradition of the middle class.

Uncle Tom’s Cabin is just one of the few novels with strong preaching color in American literature. It highlights the controversy about the abolition movement and shocks Christians’ hearts strongly. Uncle Tom, the protagonist, is a model of good behavior in the world. he is a person who honest, loyal, hard-working and able to sacrifice himself for others. He is a devout Christian. Although he suffered

a lot, his faith in Christ was stronger in his heart. He also exhorted his masters, friends, companions and enemies to obey the guidance of Christ and praise his good deeds. As a result, the painful person gets tranquility; the lost person finds his way; the guilty person gets redemption; but himself was tortured to death for shielding the escaped slaves. Finally, he was sold and died under the master's whip. However, he still forgave the man who killed him. It seems to reproduce the last crucifixion of Jesus Christ, reflecting the idea of Christ's redemption through death. George, who also suffered a lot but did not believe in Christ, eventually took his wife, children, sister and mother-in-law to Africa to preach as a patriotic Christian and a Christian priest.

Under the influence of Eva and Miss Ophelia, Topsy, a stubborn and ill-bred slave girl, not only converted to Christianity, but was also sent to a church in Africa as a missionary. In addition, other people who are in pain and no one to rely on eventually find hope in the faith of Christ and achieve their inner peace. As can be seen from the plot arrangement, the whole novel runs through a theme ----escape. The only person who did not flee was Uncle Tom, who became a symbol of Christ's redemption for the sake of saving others. The slaves who stayed in the manor were finally liberated. At last, they could breathe free fresh air on the free land. It can be said that the author poured Puritan idealism into her characters.

In the last chapter, Harriet Beecher Stowe preaches directly in the tone of a New England clergyman and she explain her views about slavery clearly. According to her, Institution of Slavery and slaveholders' attitude toward slaves do not conform to the spirit of Christ. So she criticized slavery system in the south of American with the book *Uncle Tom's Cabin* and also accused the North of American indifference to blacks. She called on all American Christians to uphold the integrity of this unprecedented Republic in accordance with religious principles. Therefore, Parrington Vernon Louis, the author of *History of American Thought*, called Harriet Beecher Stowe the greatest contributor to New England literature among all Puritans.

3.2.American Realistic Literature: *The Adventure of Huckleberry Finn*

American realistic literature is the real beginning of American national literature. While Abolition literature and Rural literature is a start point of American realistic literature, represented by Howells, Mark Twain and Henry James. Realistic became the mainstream of American literature in the 1970s. American realistic literature absorbs and accepts the characteristics of European realistic literature. Although emphasizing objective authenticity and exposing and criticizing the real situation of society, it also forms its own unique feature of American realistic literature. Another typical characteristic is politics. Writers comment on various images in the

real society through their works or characters. Their words are fierce and they have a clear idea of what one should hate or love, which endows the works with important social significance. This totally conforms to Friedrich Engels' definition of realism. Realism, in addition to the reality of details, also needs to truly reproduce the specific characters in the typical environment.

Mark Twain pushed the 19th century realist novel to its climax. He is the first person to positive describe the black people and disclose the "Gilded Age" boldly. In the book *Adventures of Huckleberry Finn*, Huck is an innocent person, who is not contaminated by the so-called "civilization". He sympathizes with the blacks and exposes the hypocritical religion, feudalism and backward racial discrimination. For the first time in the history of American literature, black people have been endowed with noble personality.

He thought the most valuable capital, culture and education in fiction creation is personal experience. As an ordinary worker, he can feel the hardship and misery in life. So, *The Adventures of Huckleberry Finn* is the crystallization of his life experience.

The story takes place in the Mississippi River Basin. The hero, Huckleberry, a kind and a simple "problem boy", has experienced strange adventures in pursuit of free life. The story in the American Civil War, when the discrimination and prejudice against black people were deeply rooted. But this white boy with his black slave companion, Jim, went through all kinds of hardships and reached freedom in their hearts. The author continues Puritanism and criticizes the idea that white people oppress black people in that society. At the same time, the work also shows all aspects of social life before the Civil War in the 19th century, similarly, anti-racial discrimination is deeply rooted in the hearts of the people.

First of all, the article begins with a black-and-white and an old-and-young comparison, which symbolizes racial inequality within the United States. This discrimination is not only reflected in their skin color, but also in people's attitude towards them. Negro Jim did not want to be sold by his owner and fled. In the process, he met Huck, a white child who could not bear his father's torture, so they met and went together. Along the way, Jim took good care of Huck carefully. This journey is not so much the criticism of black and white racial inequality as the author's sarcasm of hypocritical white people and praise of the good hearts of black slaves. On the other hand, the master-servant relationship between Jim and Watson is the epitome of oppressing and oppressed under the southern slavery system.

Finally, there is a striking contrast between "land civilization" and "Hanoi freedom". Mark Twain's special love for the Mississippi River is actually his hatred of violence and death on civilized land and his deep yearning for nature. The Mississippi River

revived Huck. In order to escape from his father's control, he faked the scene of the murder, jumping into the river and drifting away. This means that the old Huck has been strangled by the civilized society and the autocratic system and the new Huck has been reborn on the river. He finds himself in the river and regain the paradise in his heart. He built his home on the river and enjoyed the happy time. Whenever he was exhausted, the river always let him get rid of his fatigue and be in a good mood. Once he met white people again, his fate is doomed. Racial inequality is manifested through the status, freedom and activities of characters, which seems to be a appeal for human rights and a perfect interpretation of the *Declaration of Independence*.

4.CONCLUSION

American literature in the 19th century is the confluence of religious literature in the 17th century and secular literature in the 18th century, which is the confrontation of religious humanism consciousness and secular humanism consciousness. It is because of the contradiction between secularity and religion that constitutes the collision and integration in the

evolution of American literature in the 19th century. In this paper, there are still many deficiencies. For example, many writers in the 19th century did not have Puritan background. So, at that time, the relationship between Puritanism and literature was more complex. Because of the length of the article, the author has not further explored it. In addition, the author only reveals his Puritanism through the analysis of two representative works, but does not analyze more works. But the author still hope this article will be helpful to following researchers.

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Prediction of steam coal price in Qinhuangdao based on ARIMA model

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Abstract: Based on April 30, 2019 to April 30, 2020 of Qinhuangdao steam coal price data using ARIMA model to forecast the future 20 days of coal prices, according to the sample data analysis and processing, eventually determine ARIAM(1,1,4) (1,1,1) ^s model, and forecast the result is good. The results show that the next 20 days the price of coal is still showed a trend of decline, thus government can maintain the stability of coal prices by adjusting the structure of the coal industry.

Key Words: steam coal price ; ARIMA model ; Prediction effect

1. INTRODUCTION

In 2018, raw coal accounted for 68.3 percent of China's energy production structure, down from 2017. However, coal is still one of the main sources of energy for China's economic development, both coal demand and coal price have certain impacts on the development of the national economy. At present, the continuous decline in coal prices is mainly affected by two factors: first, the slowdown in the growth of energy consumption caused by downward pressure on the domestic economy, and the severe decline in the coal industry; Second, the international energy landscape has changed. With the development of social, the energy structure has become cleaner and low-carbon, and the proportion of coal demand has declined. How to stabilize the domestic coal price, adjusting the structure of the coal industry and promoting the development of the coal market under the background of energy conservation and emission reduction is a question worth pondering.

At present, domestic scholars on the price of coal research more. In terms of coal price forecasting , Wang Pengjun and Zhu Chaoqun ^[1] (2017) predicted the coal price in the second half of 2017 after the continuous decline in the first half of 2017 through the ARIMA model and the weekly thermal coal price data from 2010 to 2016 as a sample under the background of overcapacity reduction; Li Wenying ^[2] (2015) predicted the fluctuation of coal price based on GRNN neural network and combined with the influencing factors of coal price. Eventually the accuracy was 87.5%. In terms of coal price factors, Zhang Tonggong and Zhao Dezhi ^[3] (2018) explored the influencing factors of coal price through the combination of qualitative and quantitative analysis and the gradual regression method. Finally, they concluded the influence degree of coal output,

international crude oil price, coal import and export volume and other factors on domestic coal price. Xu Yue ^[4] (2017) concluded through the regression model that the main influencing factors of China's coal price include the price of coal substitutes, coal demand, international coal market price and coal inventory. Based on solstice on April 30, 2019 and steam coal price in Qinhuangdao on April 30, 2020, this paper uses ARIMA model to forecast coal price in the next 20 days, and proposes relevant Suggestions for the development of the coal industry based on the predicted results.

2. MODEL PRINCIPLE AND RESEARCH IDEA

2.1 Model principle

ARIMA model, known as auto-regressive moving average combination model, is mainly used to analyze stationary time series or stationary time series after differential processing. The specific forms of the model can be divided into the following two types: the first is ARIMA (p, d, q), the second is ARIMA (p, d, q) (p, d, q)^s, The equation is expressed as follows:

$$y_t = \varphi_0 + \varphi_1 y_{t-1} + \varphi_2 y_{t-2} + \cdots + \varphi_p y_{t-p} + \varepsilon_t - \theta_1 \varepsilon_{t-1} - \cdots - \theta_q \varepsilon_{t-q}$$

In the above formula, y_t is the sequence after difference. The non-negative integer p is the auto-regressive order, q is the moving average order, and d is the difference series. The following figure shows the features of auto-correlation and partial auto-correlation functions of various models(as in table 1).

Table 1. Features of auto-correlation and partial autocorrelation functions of various models

model equations	AR (p)	MA (q)	ARMA (p, q)
Auto-correlation function	trailing	q step hysteresis truncation	trailing
Partial auto-correlation function	P step hysteresis truncation	trailing	trailing

2.2. Research idea

In this paper, the coal price in the next 20 days is predicted by ARIMA model based on the steam coal price of Qinhuangdao on April 30, 2019 at solstice on April 30, 2020. The data in this paper are from the official software of flush ifind and China coal market trading network. The specific research ideas are as follows: The first step is to test the stationarity of the

data. Through preliminary observation of sequence diagram, auto-correlation diagram (ACF) and partial auto-correlation diagram (PACF), it can judge whether the data is stable, or seasonal and trending. In the second step, if the data is stable, the prediction can be conducted directly; if the data is not stable, the data needs to be processed by difference to make it stable, including gradual difference and seasonal difference. After the first-order difference processing, the stability of the first-order difference sequence can be judged by observing the ACF and PACF graphs. The third step is to determine the parameter values, establish ARIMA (p, d, q) (p, d, q)^s, and use SPSS software for prediction. The fourth step is to judge the accuracy of the model prediction according to the model results and residual error test.

3. MODEL BUILDING

3.1. Data processing

The data on April 30, 2019 at solstice in Qinhuangdao, April 30, 2020 are the samples of this analysis. Import the data into SPSS software and make a sequence diagram, as shown in figure 1. It can be observed that as time goes on, the steam coal price in Qinhuangdao shows a trend of fluctuation and decline, and the decline is more obvious from the end of 2019 to the beginning of 2020. During the 12th five-year plan period (2011-2015), the state implemented the policy of energy conservation and emission reduction, reducing the number of high-polluting and energy-intensive enterprises and controlling their pollution emissions. As a result, the output growth of coal-consuming industries showed negative growth, leading to the overall decline of the coal market. Adjusting the structure of the coal industry and encouraging the use of clean energy have an impact on the price of coal. In figure 1, it can be concluded that the sample sequence has a tendency rather than a stationary time series, which requires first-order difference processing.

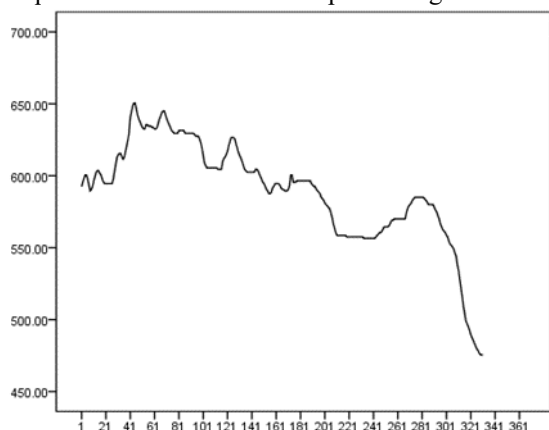


Figure1 Sample sequence diagram

Generally speaking, the autocorrelation function graph of time series with different properties is different from that of partial autocorrelation function graph. Therefore, the characteristics of the sample sequence can be observed by using the

autocorrelation function graph (ACF) and partial autocorrelation function graph (PACF), so that the parameters of ARIMA model can be determined by combining the characteristics of the graph. Using SPSS software to make a sequence correlation diagram of daily thermal coal price in Qinhuangdao, as shown in the following figure 2:

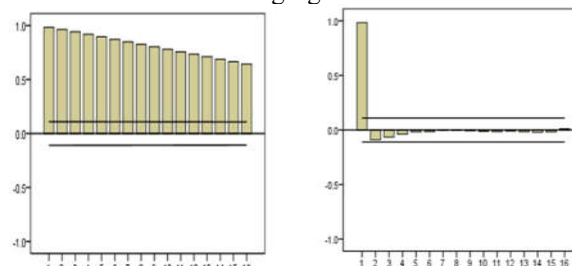


Figure2 ACF and PACF diagrams

From the above figure, it can be seen from the ACF diagram that the function values in the auto-correlation function diagram all exceed the random interval obviously and show a slow trend of fluctuation decline. From the PACF diagram, the partial correlation function value of order 1 is significantly not 0. In order to eliminate the strong tendency in the sequence, first-order phase-by-phase difference processing and first-order seasonal difference processing are carried out on the sequence. The identification of parameters d and D in the model is based on the fact that difference is a process of sequence stabilization. After the first-order difference processing, the sequence is stable, as shown in the figure 3 below:

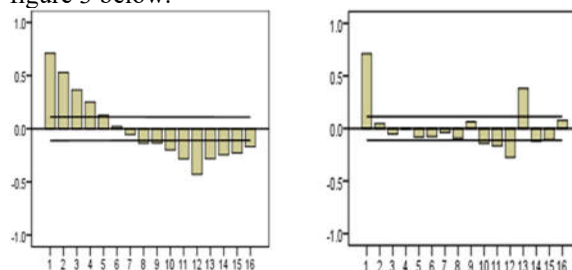


Figure 3 ACF and PACF diagram after difference

3.2. Parameter selection

As can be seen from figure 3, after the first-order difference, the sequence is stable. Therefore, in the model, d and D are taken as 1 at the same time. According to the auto-correlation function graph, the value of the function is trailing after order 4, while the value of the function of order 12 is significantly not 0, so Q is 1. The partial auto-correlation graph is analyzed again. The value of the first-order function is significantly not 0, and then it tends to 0 in a towing way. Therefore, p is 1. The 12th order is significantly not zero, so P is one, Therefore, the model form of daily forecast of thermal coal price is ARIAM (4,1,1) (1,1,1)^s.

4. FORECAST RESULTS AND ANALYSIS

Using SPSS software, ARIMA (4, 1, 1) (1,1,1)¹² model was established to predict the steam coal price on April 30, 2019 and April 30, 2020, and the

predicted value and the real value were plotted in the same figure. As can be seen from the following figure 4, the predicted value and the real value almost coincide, indicating a high degree of fitting and a high prediction accuracy of ARIMA model.

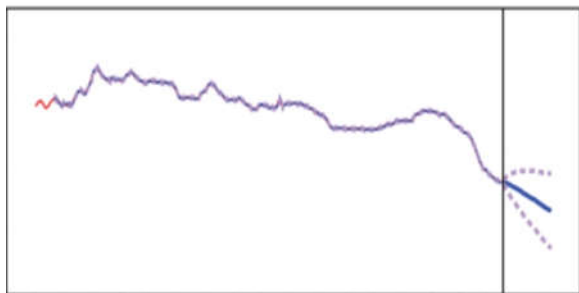


Figure 4 Model prediction results

In order to further observe the fitting effect of ARIMA model, Using SPSS software to make residual diagram. It can be seen from the diagram that the goodness of model fitting is good, the fitting effect is high, the overall fluctuation range of error is small, only a few special values exceed the range, and most of the residual error fluctuates around 0. It can also be seen from the residual diagram that the daily coal price predicted by the ARIMA model has some credibility (as in figure 5).

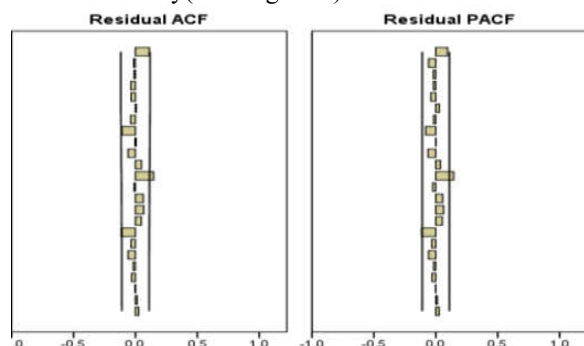


Figure 5 residual diagram

After the reliability of the model is determined, the coal price in the next 20 days can be predicted with this model. The predicted results are shown in the following table 2. It can be seen that the coal price still shows a downward trend.

Table 2 Daily steam coal price forecast

Date	5/1	5/2	5/3	5/4	5/5
Price	475.0	474.7	473.6	472.4	471.2
Date	5/6	5/7	5/8	5/9	5/10

Price	470.0	468.7	467.3	466.3	465.4
Date	5/11	5/12	5/13	5/14	5/15
Price	464.2	462.8	461.1	460.0	458.2
Date	5/16	5/17	5/18	5/19	5/20
Price	456.7	455.1	453.9	452.4	450.9

5. CONCLUSIONS AND SUGGESTIONS

In this paper, the ARIMA model is used to predict the steam coal price of Qinhuangdao in the next 20 days. According to the comparison between the predicted result and the actual result, it is found that the forecast result of the model is good and the predicted value has some credibility. The results of the model show that the steam coal price will still show a downward trend in the future, so it can be seen that the development of the coal market industry is slower and slower. The following Suggestions are made for the results:

- (1) Adjusting the structure of the coal industry, prioritizing the clean use of coal, keeping in line with national policies, and supporting efforts to achieve ultra-low emissions.
- (2) Stabilizing coal supply and demand, controlling coal imports, and preventing a serious imbalance between supply and demand that could affect coal prices
- (3) The state can support the development of coal enterprises, prevent the large-scale loss of coal enterprises, and promote the stability of coal prices by reducing the tax revenue of coal enterprises.

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Why China' Smaller Businesses Are Struggling To Survive?--Explanation Based On Financing Constraints

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Abstract:With the steady progress of China's market-oriented reforms, private enterprises, as the main body of the non-public economy, will gradually shoulder the important task of ensuring the steady growth of China's economy. However, the downward pressure on the domestic and international economic environment make SMEs face severe pressures and challenges. Solving the financing difficulty currently seems to be the most urgent problem faced by SMEs. Furthermore, what SMEs need to consider is the financing channel, financing cost, and the optimal financing structure. This paper will deeply analyze the difficulty of SMEs in China based on explanation of financing constraints.

Keywords: private enterprise; capital; financing constraints

1.INTRODUCTION

With the spread of the coronavirus epidemic in 2020, many SMEs in China have to face the risk of production suspension and bankruptcy. And the primary issue of whether SMEs can survive the difficult development dilemma is financing.

Solving the financing problems will not only allow SMEs to invest more in production to effectively develop their own advantageous projects, but can further have more market share. In addition, due to the release of the company's technical, market and management risk have been reduced, SMEs' financing level can be greatly improved and can achieve a virtuous circle and considerable development^[1].

2.ANALYSIS OF THE STATUS OF FINANCING CHANNELS OF SMES

In China, many banks are not willing to pay enough attention to private enterprise loans, and have long adopted discriminatory policies to exclude private enterprises from loan targets^[2].

In recent years, although the government has adopted a series of preferential tax policies to encourage banks and other financial institutions to lend to SMEs, due to the harsh economic environment, especially this year, SMEs are still in a difficult financing situation. Otherwise, even if financing is obtained,

because of the small scale of private economic loans and the short term of capital, such loan scale cannot meet the long-term capital needs of enterprises, such as expanded reproduction and high-tech research and development. In addition, banks are worried about the risks of long-term loans. So far, only a few banks have opened to SMEs. Therefore, it is difficult for SMEs to obtain long-term financial support from banks. But for their own development, SMEs have to use short-term loans and multiple revolving financing methods, which increase the financing cost and have a certain negative impact on the development of enterprises^[3].

3.ANALYSIS OF THE FINANCING PROBLEMS OF CHINA'S PRIVATE ENTERPRISES

3.1State-owned banks' prejudice against SMEs loans

Although the status of private enterprises in the national economy continues to improve, the phenomenon of ownership discrimination still exists. This directly caused its credit rationing to state-owned enterprises, not private enterprises. At the same time, the strengthening of credit risk management of state-owned commercial banks has restricted private enterprise loans. Due to the needs of reform and listing, state-owned commercial banks have shifted their management objectives from loan quota management to asset-liability management^[4].

Therefore, the interest rate of private enterprises in China is significantly higher than that of state-owned enterprises. But if the financing problem can't be solved, SMEs will always find it difficult to break the development bottleneck. However, with the support of a series of tax policies issued by the government, the situation of unfair interest rates on bank loans have been gradually improved^[5]

3.2.Local financial institutions are hard to meet the financing needs of SMEs

With the continuous diversification of the economic structure, China's urban and rural credit cooperatives, joint-stock commercial banks, urban commercial banks and other small and medium-sized financial institutions have gradually developed. Their loans of private enterprises have also increased, but they have not fundamentally solved SMEs' problems of the

shortage of funds. The main reason is that the number of loans to SMEs by state-owned commercial banks, which account for 2/3 of the total amount of credit funds, has declined. At present, joint-stock commercial banks and local financial institutions are constrained by their overall strength, visibility, and operating scale. Therefore, their financial support for the development of private enterprises is limited^[6].

3.3.Lack of risk-sharing mechanism, making credit risk concentration on guarantee agencies

Due to the late development and weak strength, China's guarantee institutions lack a strong bargaining position. Therefore, most banks pass on the loan risk of SMEs to guarantee institutions, and even many guarantee institutions are forced to take on 100% of the credit risk. It caused not only unequal risks and benefits, but unequal responsibilities and capabilities. Therefore, it weakens the evaluation and supervision of enterprises by banks and increases the risks of the entire financial system^[7].

4.FINANCING CONSTRAINTS OF SMES

4.1.Analysis of SMEs' own problems

4.1.1 The foundation of SMEs are not reliable

The development of private enterprises has always been relatively arduous. Their small scale of assets, unreliable economic foundation, simple management method, and not advanced management mode, have led to the backwardness of their operating strength. Therefore, it is difficult for SMEs to gain the trust of lenders.

4.1.2 SMEs have insufficient credit

In order to obtain enough financing, SMEs now tend to provide a large number of false financial audit reports to banks, but private enterprises often have some operating problems, which has caused various risk accidents of private enterprises to occur frequently. Therefore some bond defaults have greatly affected financial institutions' confidence in private enterprise. Corporate integrity guarantees the possibility of debt servicing. If the integrity is insufficient, it will cause moral hazard. But moral hazard is the fundamental reason that affects the bank's credit allocation. For example, five years ago, a spirit of experimentation led to the formation of thousands of peer-to-peer lenders and other businesses that extended credit to smaller companies. And in killing the frauds, the get-rich-quick, and other Ponzi schemes, regulators have dealt a severe blow to all small business lenders.

4.2 Analysis of the problems of financing system

4.2.1 Single financing model

For enterprises, the best financing should be multi-level. However, China's current private enterprise financing model is still too singular and narrow. It is difficult to obtain the funds from the capital market. Private enterprises are hard to list on the market, because the cost of listing will make the company's cost Accountancy unbearable. Furthermore, because of the government-led

monopoly policy, most of China's securities are concentrated on asset-intensive projects, but most private enterprises fail to meet the access standards.

What is even more difficult for financing is that, the targets of foreign source financing are generally traditional financial institutions, which have very strict limits on private enterprise financing loans. Although bank credit may give private enterprises some financing hopes in external financing, they also have many restrictions, such as the limited amount of borrowing. Therefore, the single financing model has deepened the plight of private enterprise financing.

4.2.2 Incomplete bank risk assessment system and insufficient financial products

The internal risk assessment system of Chinese banks is not perfect, which leads to the bank's own financial situation is not optimistic. Therefore, it dare not arbitrarily lend to small-scale, poor-credit private enterprises. China's financial products are inadequate and innovative and it cannot meet the requirements of diversification. There are few financial products for small and medium-sized private enterprises, which makes the financing direction of private enterprises narrower and financing more difficult.

5.COUNTERMEASURE OF RAISING PRIVATE ENTERPRISE FINANCING DEVELOPMENT LEVEL

5.1 Strengthen enterprise financial management system and credit construction

In order to win the support and trust of the banks, private enterprises have to continue to promote the upgrading of their internal management models, improve the level of business management and financial management to ensure that the Accountancy information provided legitimacy, so it can fully turn the disadvantages at present into advantages. Therefore, improving the credit awareness of SMEs as soon as possible, and strengthening credit construction are innovative attempts we must carry out. Following the principle of good faith can add points for earning the trust of the enterprise. Private enterprises effectively fulfill the rights and obligations stipulated in the loan contract, build a good loan relationship with the bank, and strive to create conditions for financing.

5.2. Broaden financing channels and innovate financing methods

At present, the financing channels of private enterprises include self-raising, direct financing channels and indirect financing channels. But in fact, most companies rely solely on banks to obtain funds, which is actually a financing misunderstanding. Enterprises should jump out of this misunderstanding and play a role in bank financing while effectively combining direct financing and indirect financing to return funds from multiple sources.

Enterprises can also adopt joint ventures, cooperation, joint ventures with large enterprise groups to save money, reduce operating costs, and break the main

financing methods mentioned before. In addition, innovative financing models are very necessary. Establish a modern financing exchange platform for private enterprises that is coordinated by private company guarantee companies, private enterprise mutual aid foundations, financial institutions, intermediaries and relevant government departments, and strive to improve the creditworthiness of private enterprises, provide intermediary service support and other measures to promote corporate credit financing.

5.3 Increase support for financial institutions and lower the financing threshold

Changing the different service concepts of state-owned commercial banks to treat private enterprises and large enterprises, the problems existing in financial institutions, and changing the status quo of state-owned commercial banks specifically serving large enterprises are the key points. Many small-scale private enterprises can hardly meet the loan conditions that banks provide to private enterprises. Loan requirements should be considered from the perspective of the repayment ability of private enterprises, rather than considering the size of private enterprises as the primary condition for lending for those private enterprises with low asset-liability ratio, relatively high product technology content, and strict management mechanism within the enterprise, commercial banks should lower their loan requirements.

5.4 Encourage independent innovation financing

At present, China's stock market framework for supporting innovation private enterprise financing has basically been formed, which provides a direct financing platform for high-risk, high-return innovation private enterprises. At the same time, it should actively create conditions for private enterprises to list and finance abroad. Accelerate the development of equity investment funds, attract social capital, and promote the optimization and upgrading of private enterprises' independent innovation financing systems; promote private enterprises to issue medium and long-term bonds and practical short-term bonds, such as corporate bonds, medium-term notes, and short-term financing bonds. Continue to expand financing channels; promote the

development of technology property rights trading market, provide a place for property rights transactions, mergers and acquisitions, equity repurchase and venture capital withdrawal for most private enterprises that cannot be listed on the main board, and also provide services for the transformation of innovation achievements.

6. CONCLUSIONS

As an important component of the basic economic system in China, the private economy has become a force that cannot be ignored in the development of the national economy. Therefore, as long as a certain amount of capital is injected to solve the financing problems, the enterprise will have greater development.

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The Impact of Government Regulation on Enterprise's Emission Reduction Behavior under EPT--Analysis Based On The Perspective Of Game

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Abstract: The rapid development of China's economy depends on the secondary industry to a large extent, but it is also accompanied by excessive use of resources and gradual deterioration of the environment. In recent years, environmental protection has received more and more attention from individuals. Therefore, the levy of environmental protection tax has also begun to have an important impact on the structural adjustment and green transformation of enterprise industries. This paper will use mathematical models to derive the mechanism of environmental protection tax, and build a game model to analyze the relevant principles of environmental protection tax. In addition, this paper will also put forward specific suggestions to help enterprises overcome the externalities of resource development and achieve the harmonious development of human and nature.

Keywords: environmental protection tax; game theory; green transformation

1. INTRODUCTION

Since the opening of 19th CPC National Congress, environmental issues have been a hot topic of public. Therefore, the environmental protection tax came into being in 2018. The implementation of the environmental protection tax system is an important ecological civilization system innovation. As we all know, taxation is an important source of finance and can provide financial support for the country's capital construction and government basic public services^[1]. Traditional taxation is taxed on the value-creating activities of labor and investment; nowadays, taxation is also imposed on emissions of pollutants and damage to the ecological environment. Essentially, it is to reflect the value of the ecological environment's assets and allow protectors and builders to get the corresponding remuneration and income. Two years pasted, whether the levy of environmental protection tax can achieve its expected effect and achieve energy saving and emission reduction, this paper will further analyze the specific analysis of the effect of the levy of environmental protection tax on energy

conservation and emission reduction of enterprises from the perspective of game theory^[2].

2. ANALYSIS OF ENTERPRISES' GAME BEHAVIOR IN POLLUTION BASED ON "NASH EQUILIBRIUM"

With the development of economy, environmental pollution has gradually become a big problem. In order to reduce production costs, some polluting enterprises have not installed pollution treatment equipment. From the perspective of polluting enterprises, if other enterprises do not increase pollution treatment equipment, then they will not increase. At this time, there is a balance between them. We assume that there are two polluting enterprises A and B in a city. If no pollution treatment equipment is installed, the profit is 10, and the cost of pollution treatment equipment is 3, so we can get the results of the game between the two sides on whether or not to install the pollution treatment equipment:

Table 1. Two Polluting Enterprises A And B

		B	
		Install	Not install
A	Install	(7,7)	(7,10)
	Not install	(10,7)	(10,10)

It can be found that, from the perspective of the enterprises, the best situation is that neither party installs pollution treatment equipment, but from the perspective of environmental protection, this is the worst case. That is to say, the result of (10, 10) is a good "Nash equilibrium" for corporate interests and a bad "Nash equilibrium" for environmental protection. Similarly, if both sides have installed pollution treatment equipment, the result (7, 7) is a bad balance for corporate interests and a good balance for environmental protection^[3].

Therefore, if there is no government supervision mechanism, the result of (7, 7) is difficult to achieve, and so does the result of (7, 10). The most likely result is the result of (10, 10).

We can learn from the "Nash Equilibrium" that: if economic development is the priority, (10, 10) is the best; if the environment is the first choice, (7, 7) is

the best^[4].

In the past, developed countries polluted before the treatment. Nowadays, many developing countries are also following this way, and China is one of them. In China, public awareness of environmental protection has been greatly improved. Therefore, the government has strengthened the pollution supervision and management mechanism and used coercive means to achieve a balance between environment and economy^[5].

From the perspective of "Public product theory", the best government supervision method is to levy environmental protection tax on polluting enterprises, which can not only restrict the output of polluting enterprises to a certain extent, but raise income to control environmental pollution.

3. ANALYSIS OF GAME SUBJECT RELATIONSHIP IN ENVIRONMENTAL PROTECTION TAX

In the case of the government collecting environmental taxes, there are two game relationships existed. The first one is the decision-making game between the government and polluting enterprises about the optimal tax rate and optimal output, and the second one is the choice of pollution treatment between polluting enterprises. In the first case, the government needs to determine environmental protection tax rate based on the output and pollution status of the enterprise. Enterprises also need to determine the optimal production volume of their products based on the specific environmental protection tax rate established by the government in order to obtain the maximum benefit. In the second case, the game exists between polluting enterprises, that is, after the government levies an EPT, whether the EPT promotes competing enterprises to adopt new processes and implement pollution treatment to reduce environmental pollution emissions. When enterprises find that competitors in the same industry using pollution treatment to reduce pollution emissions can affect corporate profits, enterprises will consider whether to compete with other enterprises for technological transformation. At this time, under the constraints of the government's collection of EPT, a competitive game has formed between polluting enterprises.

Suppose there are two highly polluting enterprises M and N on the market. The two enterprises produce homogeneous products. Enterprises M and N fully understand and face the same market demand. At the same time, both enterprises M and N determine the maximum profit and output when the output of each other is known. Let the total demand function of the product be $Q = C(p, \delta)$, p is the price, and δ is the amount of environmental pollution, then the function of price on demand under linear conditions is:

$$P(Q) = a - \delta - \beta Q = a - \delta - \sum_{i=1}^2 (\beta + r_i) q_i \quad (1)$$

Supposed that α is a constant, β is the preference coefficient of the product $Q = q_1 + q_2$.

Let M and N both have variable production costs of V_i , V_i includes C (general variable cost) and T_i (EPT). Here, T_i is related to t (EPT rate determined by unit pollution) and δ_i (discharge volume of a single company). We can get this formation: $C = c * q_i$, $T_i = t * \delta_i$, and δ_i is related to q_i (contaminated product volume of a single company) and r_i (unit discharge), then $\delta_i = r_i q_i$. So the variable cost of the enterprise is:

$$V_i = C + T_i = (c + tr_i) q_i \quad (2)$$

The total amount of pollutants in the market is $\delta = \sum_{i=1}^2 \delta_i = \sum_{i=1}^2 r_i q_i$.

The government imposes an EPT of t per unit of pollution. The total government revenue T is:

$$T = t \sum_{i=1}^2 r_i q_i \quad (3)$$

Suppose that the environmental losses caused by polluting enterprises M and N in the production process are D , then D is related to the enterprise's pollution emission δ and the unit environmental pollution loss we supposed is λ , then D is:

$$D = \lambda \sum_{i=1}^2 r_i q_i \quad (4)$$

In the market of two oligopolistic manufacturers, the total emissions in the market are all generated by the two enterprises M and N. Based on the EPT rate $t \geq 0$ given by the government, the pollution production company I chooses the emission rate r_i and product production q_i . The simplified production profit w_i is expressed as:

$$w_i = P(Q) q_i - V_i = [a - \sum_{i=1}^2 (b + r_i) q_i] q_i - (c + tr_i) q_i \quad (5)$$

Find the first derivative of this formula and make it equal to 0, we can get

$$\frac{\partial w_i}{\partial q_i} = [a - \sum_{i=1}^2 (b + r_i) q_i] - \sum_{i=1}^2 (b + r_i) q_i - (c + tr_i) = 0 \quad (6)$$

Find the second derivative of formula from the profit function

$$\frac{\partial^2 w_i}{\partial q_i^2} = -2 \sum_{i=1}^2 (b + r_i) < 0 \quad (7)$$

Enterprise I can maximize profit under the optimal output of formula (7). That is, the optimal output of enterprise I is:

$$q_i^* = \frac{[a - (c + tr_i)]}{2 \sum_{i=1}^2 (b + r_i)} \quad (8)$$

In the same way, based on the conditions of $q_i \neq q_j$, $r_i \neq r_j$, the above formula is also established for other enterprises. Assuming that there are only two oligarch polluting enterprises in the market, the output of enterprises M and N are q_1 and q_2 , and the pollution emission rates of enterprises M and N are r_1 and r_2 respectively. The excellent output is:

$$q_1^* = \frac{a - (c + tr_1)}{4b + 2r_1 + 2r_2} \quad (9)$$

$$q_2^* = \frac{a - (c + tr_2)}{4b + 2r_1 + 2r_2} \quad (10)$$

Substituting formula (9) and formula (10) into formula (5), the maximum profit of enterprises M and N can be obtained as:

$$w_1^* = \frac{[a-(c+tr_1)]^2}{4\sum_{i=1}^2(b+r_i)} \quad (11)$$

$$w_2^* = \frac{[a-(c+tr_2)]^2}{4\sum_{i=1}^2(b+r_i)} \quad (12)$$

It can be derived from the above formula that when the tax rate $t > 0$, the equilibrium output of the enterprise will decrease with the increase of the enterprise's own pollution efficiency, but will increase with the increase of the competitor's pollution efficiency. The amount of pollution discharged by an enterprise itself and the amount of pollution discharged by competitors will affect the production output of the enterprise. This influence path is realized by the rate of pollution affecting the marginal cost of the enterprise. Therefore, when the environmental protection tax rate is fixed, the company's balanced output is not only affected by its own pollution technology, but also by competitors' pollution technology.

The EPT rate t affects the enterprises' marginal profit by affecting the company's marginal cost, and ultimately affects the company's product output. That is, the rise of EPT t leads to an increase in the company's marginal cost and a decline in its marginal profit. In order to maximize profit, enterprises can only reduce the production output of polluted products.

The government will levy EPT to enable enterprises using pollution treatment to gain a greater market share, that is, enterprises using advanced technology to reduce environmental pollution emissions, thereby reducing marginal costs and expanding the market demand for homogeneous products. Therefore, by levying an environmental tax and determining a reasonable tax rate, the government can promoted enterprises to improve production processes, actively manage environmental pollution caused by the production process, and achieve the purpose of protecting the environment.

4. SPECIFIC RECOMMENDATIONS FOR CORPORATE GREEN TRANSFORMATION

4.1 Make full use of the encouragement and support policies given by the government

All enterprises should closely follow the government's policies. The government will implement tax reduction and exemption policies for enterprises, and will provide enterprises with professional teams to help enterprises carry out green transformation.

In recent years, China has also increased the protection of corporate intellectual property rights, which gives enterprises the incentive to green transformation. Because the direction of enterprises' green transformation is always moving towards more scientific and technological fields, the protection of their own intellectual property rights is particularly important, which is the core competitiveness of each enterprise. Therefore, every enterprise should seize the opportunity, make full use of the convenience

provided by the government, and realize the green transformation of the enterprise as soon as possible.

4.2 Formulate a detailed green transformation and upgrading plan

First of all, enterprises must clarify their goals, such as wishing to become an R & D enterprise, manufacturing enterprise, or a combination of both. Considering the difficulty of transforming directly from a manufacturing company to an R & D company, the plan can be implemented step by step. For OEM enterprises, it is best to invest in the construction of flexible chemical plants, that is, to provide production and processing services for different enterprises and different products, and try to actively avoid the risks of specific investment.

In addition, enterprises must have a longer-term vision and make predictions about the future market conditions and development trends. The green transformation and upgrading of OEM enterprises should also be more abundant and diversified, not just a "makeover" transformation. OEM enterprises can no longer just manufacture, but enter the industrial chain with high added value, such as participating in upstream research and development, design and downstream sales and brand creation through shareholding and cooperation.

At present, the development of the Internet of Things is in its infancy, and there are no industry monopolies. This provides all enterprises with the same opportunity for green transformation and upgrading. Every enterprise can strive to find its own opportunities to make breakthroughs.

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Theoretical Analysis and Prospective Study of Cognitive Linguistics

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Abstract: With the development of society, researches on linguistics have made great progress. Until now, cognitive linguistics has been divided into the first generation of cognitive linguistics (formal school) and the second generation of cognitive linguistics (meaning school). Both of them advocate the study of human language, and exploration of human thinking and cognitive process. Researches on cognitive linguistics have made the greatest progress in theoretical deduction and descriptive analysis, but its theoretical and methodological research has not become a unified theoretical system. Only by conducting more in-depth research can we sort out the complete theoretical system of cognitive linguistics.

Keywords: Cognitive linguistics; Cognition; Semantics

1. INTRODUCE

Cognitive linguistics initially focused on the study of formal linguistics, but with the development of the times, it believes that the scope of formal linguistics research cannot fully reflect the cognition of cognitive linguistics to separate linguistics research with social and communicative functions of language. The main research content of cognitive linguistics is language organization, language processing, and information transmission. In recent years, scholars have studied language category through conceptualization and experimental analysis, and the form of language structure is no longer studied as independent content. With the tremendous progress made in theoretical deduction and descriptive analysis in the study of cognitive linguistics, the advancement of linguistic analysis and research in natural linguistics is being promoted. This paper conducts a theoretical analysis of cognitive linguistics and propose its future development.

2. DEFINITION OF COGNITIVE LINGUISTICS

Cognitive linguistics originated in the United States in the 1980s, which is an interdisciplinary research theory. It is of great help to the study of natural linguistics, and has been widely studied and developed in the world. The language types of cognitive linguistics research include English and Chinese, which have developed rapidly this year. And main results of the research have been successfully applied to the second language acquisition and teaching, and constantly promoted the progress of the second language acquisition and teaching. At present,

cognitive linguistics is highly summarized into two schools, namely the first generation of cognitive linguistics (formal school) and the second generation of cognitive linguistics (meaning school). And the combination of two schools is usually called generalized cognitive linguistics.

The scope of cognitive linguistics is wide, and the main issues it focuses on include the structural characteristics of language, the experience of language use and the combination of language structures. In the study of cognitive linguistics, language is an important way of human cognition and is indispensable ^[1]. At present, the main content of cognitive linguistics research can not be summarized according to any single theory. Because it is a dynamic theoretical framework that has been changing all the time, rather than a simple and unchanging linguistic theory for cognitive linguistics. On the other hand, cognitive linguistics studies a kind of thinking and vision, which is a category of linguistics and a unique cross language research method. Since the development of cognitive language, it has not formed a complete language theory, but it can still carry out various forms of language theory research in its scope, and further explore the thinking and general characteristics of human language.

3. PHILOSOPHICAL BASIS AND RESEARCH METHODS OF COGNITIVE LINGUISTICS

3.1 Philosophical basis

The theoretical analysis of cognitive linguistics is complex and diverse. Only by understanding the philosophical basis of cognitive theory, can we correctly analyze the theory of cognitive linguistics. Empirical realism is the theoretical basis of cognitive linguistics, and the experience comes from human experience, and it is a kind of mutual restriction, such as human and objective world, social organization, etc. From the perspective of empirical realism, human perception of the external world is the formation process of thinking, which is subject to the external environment and is fundamentally closely related to our human body. When human beings cognize the external world, they classify or categorize the cognitive things to shape the thinking. It is a key part to study the theoretical basis of linguistics from the philosophical basis of cognitive linguistics to theoretical basis of linguistics. It can help to better understand the "ideal cognitive model" and master the basic way of building knowledge of linguistics.

3.2 Research methods

The main research methods of cognitive linguistics are divided into three kinds, that is experiential view, prominent view and attentional view. Among them, experiential view and prominent view are the focus of cognitive linguistics research, and attentional view is the main content of cognitive linguistics research [2]. Experiential view believes that the cognition and learning of language should follow the way of reality and experience. The focus of empirical view is the main problem of cognitive linguistics, which is the problem of category. The best name for these things is to classify them, and the process of classification is category. The cognitive category includes the following four characteristics: based on the cognitive ability of human brain, it is typical, fuzzy and the decreasing of category members. There are obvious differences between the scientific category and cognitive category. The former is to divide all the knowledge that human beings have, while the latter is to divide the external environment more naturally by human brain; the former is a complex classification, and the latter is a clear classification including simple upper, lower and basic levels.

This paper studies cognitive linguistics with the perspective of salience, which mainly discusses the application of figures or backgrounds in linguistics. The main contents are the analysis of the meaning of the intermediary words in cognitive linguistics, and the analysis of the syntactic structure in cognitive linguistics. The figure and background separation are different. The former has shape, structure and continuity; the latter has no shape, but the figure is in front of the background. Compared with the background, the figure is more prominent, which is the convex dominance of the figure. The choice of figure in cognitive linguistics mainly depends on the subject of perception. The relationship between figure and background can be chosen by linguistic analysis, which can be established as the orientation relationship. The concept of attention is an attempt to study the syntactic structure of linguistic description. Its main object is the cognitive subject, and its main content is the distribution of organizational information attention in cognitive linguistics. Generally, the concept of attention is regarded as the "direction of attention" in cognitive linguistics, and the framework theory is used to solve the related problems in cognitive linguistics. The special term is "pattern", which is mainly designed for time series. Cognitive linguistics is a new school of linguistics, and the above three research methods are consistent.

4. PROSPECT OF COGNITIVE LINGUISTICS

Since the development of cognitive linguistics, there has been a new trend. More and more attention has been paid to the study of grammar, which has reached "contextualization". It is mainly the expansion of context category and the attribution of basic communication language to language, which is the embodiment of the change of linguistic species

thought. In the future, linguistics will study vocabulary again, which is a result of the full expression of the functional construction grammar of cognitive linguistics. In cognitive linguistics, there is a continuum between syntax and vocabulary, including the structure of syntax and lexical materials. The description of vocabulary can also be used to describe the rules of grammar. With the deepening of researches on cognitive linguistics, the central position of theoretical system of linguistics will be closer to the meaning, and the "meaning" of cognitive linguistics will go beyond the true value meaning in linguistic philosophy. Language structure tends to be conceptualized, and can reflect the structure of language, the intention of words and the combination of meanings.

The development of cognitive linguistics theory is not smooth, it is a process of continuous cognitive errors and continuous improvement. Cognitive linguistics has been developing in China for more than 40 years. The future of cognitive linguistics will surely become more and more socialized and diversified. We must pay more attention to culture on the basis of society. The future development of cognitive linguistics must first pay attention to its theoretical reflection and critical correction. Only by constantly carrying out theoretical reflections can we continue to deepen the theoretical content, and continuous reflections can continue to broaden the field. Cognitive theory has a huge theoretical system, and it is necessary to unify some concepts of cognitive language terminology, so that cognitive linguistic theory is more applicable to the language of various countries. Second, we must focus on the social dimension and cultural factors of cognitive linguistics. Cognitive linguistics theory is constantly socializing, showing the importance of social environment to cognitive linguistics, which requires further exploration of the internal changes of cognitive linguistics and cross-cultural differences. Non-verbal communication materials. This is an important direction for the future development of cognitive linguistics. Adding gestures and body language to cognitive linguistics to meet the needs of more groups can provide more inspiration for the development of cognitive linguistics[2].

5. CONCLUSION

All in all, the deepening of cognitive theory makes it possible for linguistics to become a unified theoretical knowledge system. Nowadays, the research in the field of linguistics is not unified. It only stays in the dynamic framework for theoretical research, and stay in the idea for many theoretical attempts and is not really realized. The three research methods of cognitive linguistics are conducive to a better understanding of basic theories and principles of cognitive linguistics, a prospect of cognitive theory, and a greater practical application value of cognitive linguistics.

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Environmental Cost Accounting and Evaluation Based on MFCA

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Abstract:Through the calculation of the resource loss of each volume center in the production link, the production link with low resource utilization rate and the direction of improvement need to be determined, and the accounting and management control structure of the specific environmental costs in the production process of the enterprise are optimized. Data analysis before and after the improvement of the company's use of MFCA accounting and management of environmental costs, calculation of economic benefits to verify the purpose of implementing MFCA's environmental cost management effectiveness.

Keywords:environmental cost; material flow cost accounting; resource loss; benefit evaluation

1 INTRODUCTION

In the current social development process that is very urgent for resource conservation and economic development, the coexistence of environmental protection and rapid economic development is the main research direction of Chinese and Western scholars. Choosing to use material flow cost accounting for environmental cost accounting to help identify the key points to improve production processes and thus achieve a win-win situation for the enterprise's economic benefits and environmental protection can stand out in today's highly competitive market^[1].

2 MFCA BASIC THEORY

Material Flow Cost Accounting each divided into volume production center, in turn, integrate, all inputs in the production process of Material circulation, tracking and analysis respectively from two aspects: physical and amount of expression of Material Flow, make the production process of the Material consumption quantity and Cost value calculation easier and to help managers identify the production process of the low efficiency, help enterprises to improve production process of resource utilization. While ensuring the output, reduce the waste discharge in the production process^[2].

3 MFCA ACCOUNTING PROCESS

3.1 Preparation stage

- (1) Define the accounting objects
- (2) Preliminarily set the quantity center
- (3) Define the collection period of accounting data
- (4) Define the way to collect accounting data

3.2 Accounting Procedures

When the material flow cost accounting method is

applied, the input cost of each material quantity center in the preparation process is divided into four parts: material, energy, system and disposal^[3-5].

MFCA accounting is based on the material balance theory. The input substance is the sum of positive and negative products.

$$Z = \sum_{i=1}^n X_i - \sum_{j=1}^m Y_j \quad (1)$$

In the formula, X_i -the mass of the i -th input substance; Y_j -the quality of the j th original product; Z -the amount of negative products;

According to the amount of negative products, calculate the proportion of negative products in each volume center:

$$S = \left(Z \div \sum_{i=1}^n X_i \right) \times 100\% \quad (2)$$

In the formula, S represents the proportion of negative products in the center of this volume, that is, the negative product rate, which can also be called the resource loss rate. According to the negative product rate of each volume center, each cost of the negative products of each volume center can be calculated separately.

$$C = \sum_{i=1}^n C_i S \quad (3)$$

In the formula, C_i represents the cost of the i -th material, and C represents the material cost allocated to the negative product in the volume center; the energy cost and system cost are calculated in the same way as the material cost. Finally, the cost losses allocated by each volume center to account for negative products and the related waste disposal cost M are added up to obtain the negative product cost O generated by the entire production process:

$$O = C + N + P + M \quad (4)$$

4 ACCOUNTING OF ENVIRONMENTAL COSTS

In this article, environmental costs are identified as two components. In order to more intuitively represent the resource loss generated by each production link and its relationship with the overall loss of the production process, the waste disposal cost is recorded in the external environmental management cost for accounting. The composition of environmental costs is shown in the table below.

Table 4.1 Environmental cost components

Environmental cost	Component project
Internal resource loss cost	Material cost loss
	Energy cost loss
	System cost loss
External environmental management costs	Environmental asset depreciation expense
	Environmental monitoring costs
	Environmental protection equipment maintenance expenses
	Sewage charges
	Waste disposal costs

According to the composition of environmental costs, environmental costs are calculated. After determining the specific conditions of environmental costs and resource losses, we will improve the process of the production links where the capital losses are found to be severe, and adopt appropriate management and control measures for the relevant environment. According to the new production cycle data, MFCA is used to recalculate the improved internal resource loss costs. Furthermore, the improved environmental cost is compared with the environmental cost before improvement.

5 ASSESSMENT OF ENVIRONMENTAL COST AND BENEFIT BASED ON MFCA

5.1 Evaluation principles

- (1) The principle of operability.
- (2) Scientific principles.
- (3) Embody the principle of environmental benefits.
- (4) Embody the principle of economic benefits.

5.2 Evaluation Method

This article mainly evaluates the economic benefits

$$\Delta \sum (C3 + C6 + C7 + C8) = (C3 + C6 + C7 + C8)(t_1) - (C3 + C6 + C7 + C8)(t_0) \quad (7)$$

Among them: C3-System cost ; C6-Environmental asset depreciation expense ; C7-Maintenance expenses for environmental protection equipment ; C8-Environmental monitoring fee

5.2.3 Calculation evaluation index

Analyze the cost--effectiveness through the environmental cost curve.

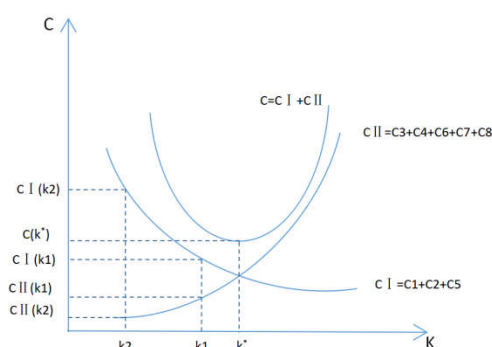


Figure 5.1 MFCA--based environmental cost curve

of improved environmental costs

In the evaluation of economic benefits, based on the effect of management control implemented after the accounting of environmental costs with MFCA, various cost changes before and after the improvement are calculated, and the positive and negative impacts of economic benefits of enterprises are used to evaluate economic benefits.

5.2.1 Calculate positive economic benefits

(1) Internal resource loss reduced

The internal resource loss of an enterprise includes material loss cost and energy loss cost. After the production process is reformed and the environmental cost management is strengthened, the economic benefit of the enterprise flows in.

$$\Delta \sum (C1 + C2) = (C1 + C2)(t_1) - (C1 + C2)(t_0) \quad (5)$$

Among them: C1-material cost; C2-Energy cost; t_0 -During the test period before improvement; t_1 --test period after improvement

(2) External environmental damage is reduced

When a company discharges more waste to the external environment, it means that the environmental load borne by the company will reduce waste disposal costs and sewage charges.

$$\Delta \sum (C4 + C5) = (C4 + C5)(t_1) - (C4 + C5)(t_0) \quad (6)$$

Among them: C4-Waste disposal cost; C5-Sewage charges;

5.2.2 Calculate negative economic benefits

Calculate the difference between the costs before and after the improvement of the above types of costs, and the sum of them represents the actual amount of environmental management cost changes that the enterprise has incurred, which is the outflow of economic benefits that the enterprise has in order to carry out environmental management.

In the figure, k represents the resource utilization rate of the enterprise, and C represents the environmental cost. When C is 0, it means that the enterprise has not implemented any measures related to environmental protection, energy saving, and emission reduction, and the waste generated in the production process has not undergone any treatment. Secondary utilization, the waste generated in the production process of the enterprise at this time will cause a huge cost of internal resource loss.

The CI curve in the figure represents the change in the cost of the environment. If the resource utilization rate is improved, the waste generation is reduced to a certain extent, and the expenditure on sewage charges is reduced

The CII curve in the figure represents the change in environmental management costs. Enterprises carrying out environmental management based on the goal of sustainable development will gradually increase the expenditures related to environmental protection. The greater the investment, the smaller

the resource loss that may result.

This article selects the index of incremental benefit--to--cost ratio as the index of economic benefit evaluation of the achievements of environmental cost management of enterprises.

$$N_c = \frac{\Delta C II}{\Delta C I} = \frac{C II(k_2) - C II(k_1)}{C I(k_2) - C I(k_1)} \quad (8)$$

When $NC > 1$, it means that the positive economic benefit generated is less than the negative economic benefit, the total economic benefit generated is negative, and the profit flows out of the enterprise; when $NC = 1$, it means that the economic benefit has no change; when $NC < 1$, the economic benefit is It is true that the economic benefits of enterprise environmental cost management are better.

6.CONCLUSION

By introducing material flow cost accounting, it is possible to accurately calculate the quantity and value of resource losses generated by each volume center of the enterprise. It enables managers to analyze and improve the production links with severe resource loss in the production process and improve resource utilization. After the evaluation and calculation of the

improved economic benefit index, we can see the improvement of the economic status of the company's related improvement measures.

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Species composition and quantity distribution of fishes in Yueqing Bay in spring

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Abstract:Based on the catch data of the trawling fishery resources survey conducted in May 2016 (spring) in Yueqing Bay, 43 fish species were obtained and identified, belonging to 10 orders and 24 families. Among them, Perciformes is the most species, followed by Clupeiformes. Taking the catch data as an important index to analyze the quantity distribution of fish resources, the results were analyzed from the composition, seasonal change, quantity change and spatial distribution of fish dominant species in the surveyed waters of Yueqing Bay, we can see that the dominant species in spring were *Pseudosciaena polyactis*, *Coilia nasus*, *Lateolabrax japonicus* and *Harpadon neareus*. According to the distribution trend of catch rate in different regions divided by longitude and latitude, the catch rate in spring is higher in the south central part of Yueqing Bay, but lower in the north. Comprehensive study shows that Yueqing Bay still has great economic development value.

Key words:Yueqing Bay;Spring;Fish;Species composition;Quantity distribution

Yueqing Bay lies at the north of the Oujiang Estuary in the south of Zhejiang Province. Its geographical location is 27°59'09" ~ 28°24'16"N 、 120°57'55" ~ 121°17'09"E. It is 47km long in the south-north direction, 15km wide in the east-west direction, more than 220km long in the land bank line, and 469km² in the sea area. It is a semi closed Bay deep into the mainland [1]. Yueqing Bay has deep and wide water, staggered islands, it is not only a natural bay in Zhejiang Province, but also an important part of Zhejiang fishing area [2]. However, with consistent deterioration of the environment, overfishing and the influence of other factors, the fishery resources in Yueqing Bay have been seriously depleted [3]. It is not only the quantity of fishery resources continues to decline, but also the community structure of fish has undergone a series of changes [4]. In order to understand the current situation of resources and environment in Yueqing Bay, our country has carried out a series of investigations in Yueqing Bay. Among them, Gao Shengquan, Chen Lei and Yao Weimin respectively analyzed the distribution and variation characteristics of hydrochemical elements in different seasons, spatial characteristics of eutrophication and its causes in Yueqing Bay[5]; Longhua and Peng Xin respectively

studied the application of pollution index of Macroenthos in environmental quality assessment of intertidal zone in Yueqing Bay and ecological system in Yueqing Bay [6]; Ji Xiaomei and others studied the recent coastal evolution of Yueqing Bay [7]. In order to study the current situation of fishery resources in Yueqing Bay, we conducted a large-scale single trawling survey in May 2016. According to the data obtained from the investigation and research, this paper uses the catch rate as the index of resource distribution to study and analyze the fish species composition, seasonal change and spatial distribution in the investigation area of Yueqing Bay [8-9], and discusses the current fish community distribution structure in Yueqing Bay with reference to the changes of water temperature, salinity, chlorophyll content and other environmental factors. Hope to better protect the fishery resources of Yueqing Bay and repair the damaged ecological environment [10].

1 MATERIALS AND METHODS

1.1 Survey voyage and station distribution

The investigation of fishery resources in Yueqing Bay carried out a bottom trawling survey in May 2016. The longitude and latitude of the surveyed sea area are 120.9 ° - 121.4 ° E, 27.9°-28.4°N , 120.9°-121.4°E. This time, 20 stations have been set up, and the survey stations are shown in Figure. In this trawl survey, according to latitude, the survey station of Yueqing Bay is divided into three parts: Bay bottom area (Y01-Y05), bay inner area (Y06-Y12) and bay mouth area (Y13-Y20).

1.2 Sampling method and sample treatment

The ship used in this trawl survey is "Zhele fishing moratorium 121", which main engine power is 184kW. The survey nets are single trawls with width of 8m and height of 2M and mesh range of 2-3cm. The trawling time of each station is about half an hour, and the average trawling speed is 3.3 knots. After removing the sundries, all the catches obtained at each station shall be put into the numbered sample bag and recorded. At the same time, the fishing records shall be made. After preservation by ice, all catches shall be taken back to the laboratory for morphological identification. They were identified to species and weighed with an electronic balance with an accuracy of 0.1g.

The environmental factors such as water depth (m), water temperature (°C), salinity, pH, chlorophyll-a content (mg / L), dissolved oxygen content (mg / L)

and so on were investigated simultaneously at each station.

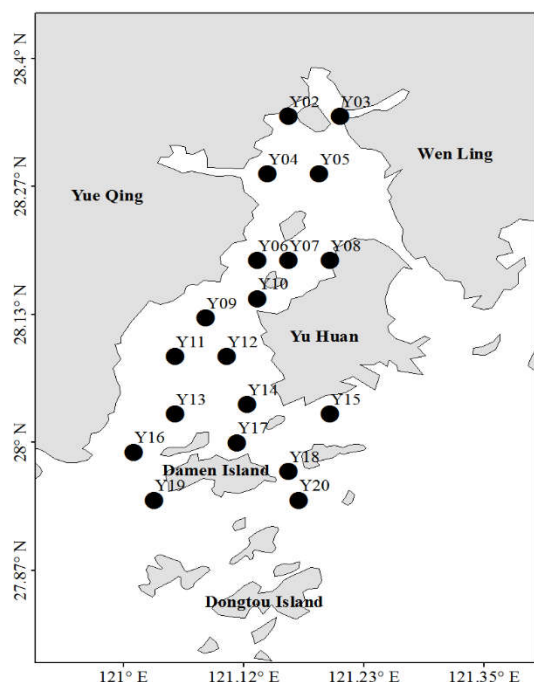


Figure 1 Location distribution of Yueqing Bay

1.3 Data analysis

(1) Resource analysis: Analyzing fish abundance (tail density) and biomass (weight density) at each station with the method of sweeping sea area, which formula is $\rho_i = C_i / s_i q$. The meanings of elements in the formula are as follows:

ρ_i — The resource density of station i (abundance: ind./km², biomass: g/km²);

C_i — Actual trawling catch at station i (tail: ind., weight: g);

s_i — Actual sweeping area of station i (km²);

q — Net capture rate (capture rate = 1-escape rate), the default escape rate is 0.5.

The calculation basis of sea area resource density is the resource density of each station in spring and summer in Yueqing Bay. The average resource density of the sea area is calculated with the method of arithmetic average^[11].

(2) Dominance analysis: Using IRI(index of relative importance) to calculate the dominant species and important species of fish in spring and summer in Yueqing Bay^[2]: $IRI = (N_i + W_i) \times F_i$. The meanings of elements in the formula are as follows:

N_i -The percentage of the total number of a fish to the total number of fish caught

W_i -The percentage of the total weight of a fish to the total weight of the fish caught

F_i - The percentage of the total number of occurrence of a certain fish in the total number of stations survey, equal to frequency of occurrence.

In this paper, species with IRI more than 1000 are defined as dominant species, and species with IRI

between 100 and 1000 are defined as important species.

(3) Community diversity analysis: Using Primer 5.0 to calculate the *Margalef*^[11] species richness index(D), *ShannonWiener*^[12] diversity index(H') and *Pielou*^[13] evenness index(J') of fish in each season in Yueqing Bay:

$$D = (S - 1) / \ln N \quad (1)$$

$$H' = - \sum_{i=1}^s (n_i / N) \ln(n_i / N) \quad (2)$$

$$J' = H' / \ln S \quad (3)$$

The meanings of elements in the formula are as follows:

S is the number of species; N is the total number of individuals; N_i is the proportion of the number of the type i .

(4) Abundance biomass comparison curve(ABC) analysis: abundance biomass comparison curve, which has two curves in the same system can be used to compare biomass dominance curve and quantitative dominance curve. People can analyze the characteristics of the community under different disturbance conditions through the distribution of two curves^[14].

2 RESULTS

2.1 Species composition

In May 2016, we collected 17381 fish in Yueqing Bay, with a total weight of 35469.7g. After analysis, 43 species of fish were identified, belonging to 10 orders and 24 families. The largest species are Perciformes, which have 11 families, 16 genera and 20 species; Next is Clupeiformes, which has 2 families, 5 genera and 8 species. In spring, the average abundance of fish in Yueqing Bay is 102.10×10^3 g/km², and the average biomass is 213.25×10^3 g/km²; Among them, the species with abundance ratio of more than 1% are *Pseudosciaena crocea* (70.4%), *Engraulis* (11.1%), *Lateolabrax japonicus* (4.2%), *chaetoliths* (3.9%), *Coilia nasus* (2.4%), *Stromateoides argenies* (1.9%), *Harpadon nehereus* (1.3%), *Ctenotrypauchen chinensis* (1.3%), accounting for 96% of the total fish species in spring.

2.2 Dominant species and important species composition

According to IRI, the dominant species of fish in Yueqing Bay in spring are *Pseudosciaena polyactis*, *Coilia nasus*, *Lateolabrax japonicas* and *Harpadon nehereus*. Among them, *Pseudosciaena polyactis* is an absolutely dominant species with IRI value of 9726.2, occurrence rate of 100%, average abundance of 72.06×10^3 ind./km² and average biomass of 58.47×10^3 g/km²; The IRI value of *Coilia nasus* is 1537.4, the occurrence rate is 85%, the average abundance is 2.59×10^3 ind./km², and the average biomass is 34.09×10^3 g/km²; The IRI value of *Lateolabrax japonicus* is 1188.2, the occurrence rate is 95%, the average abundance is

$4.26 \times 10^3 \text{ ind./km}^2$, and the average biomass is $18.27 \times 10^3 \text{ g/km}^2$; The IRI value of *Harpadon nehereus* is 1097.8, the occurrence rate is 85%, the average abundance is $1.44 \times 10^3 \text{ ind./km}^2$, and the average biomass is $25.22 \times 10^3 \text{ g/km}^2$. The important species found in this survey are *Chaeturichthys stigmatias*, *Engraulis*, *Stromateoides argenueus*, *Ctenotrypauchen chinensis*, *Cynoglossus lighti*, *Muraenesox cinereus* and *Dasyatis navarrae*. Their IRI values are 400.2, 427.8, 236.2, 215.3, 108.9, 206.7 and 120.6.

2.3 Change of resources

In the Yueqing Bay, the average abundance of fish in spring is $102.09 \times 10^3 \text{ g/km}^2$, and the average biomass is $219.12 \times 10^3 \text{ g/km}^2$. After the analysis of fish biodiversity in Yueqing Bay, we found that the species richness index (D) of *Margalef* is 4.61, *Shannon-Wiener* (H') is 1.22, *Pielou* (J') is 0.32. In this survey, we found that south and middle of each station have high similarity. The distribution of species is uniform and similar. The community structure of Y7 and Y8 sites is the closest, with 70% similarity. Y1 site is located in the inner part of Yueqing Bay, so it is independent of other sites. Except the similarity with Y2 and Y3 sites is more than 40%, the similarity with other sites is less than 30%.

The ABC curve of fish biomass and quantity in spring is shown in Figure 2. The biomass dominance curve of Yueqing Bay is above the biomass dominance curve, with a negative W value. According to Li Shengfa's research, this indicates that the fish community structure in Yueqing Bay is unstable and seriously disturbed in spring.

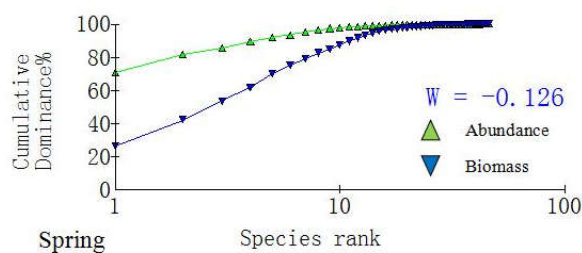


Figure 2 Biomass and quantity dominance curve of fish in spring and summer in Yueqing Bay

2.4 Community structure analysis

The sea area of Yueqing Bay is divided into three regions according to latitude, which are North region (28.28-28.4N), station Y1-Y5; middle region (28.14-28.22N), station Y6-Y12; South region (27.9-28.05N), station Y13-Y20. The average tail density and weight density are used as the basis for judging the distribution of fish population^[15]. We can see that in the same season, the distribution of fish population in different areas is different. The distribution of fish population in spring and summer in Yueqing Bay is shown in Table 1.

Table 1 Fish density distribution in the north and south of Yueqing Bay in spring

Regions	Abundance ($\times 10^3 \text{ ind./km}^2$)	Biomass ($\times 10^3 \text{ g/km}^2$)
North	65.35	173.48
Middle	39.84	127.22
South	179.54	313.39

The average depth of water in the northern part of Yueqing Bay in spring is 5.8m, and the average surface salinity is 19.5. The average fish tail density in this sea area is $65.35 \times 10^3 \text{ ind./km}^2$, the average weight density of the sea area is $173.48 \times 10^3 \text{ g/km}^2$. The tail density of Y1-Y5 station is $11.64 \sim 117.50 \times 10^3 \text{ ind./km}^2$, with a height difference of 10.1 times; the weight density is $32.91 \sim 494.54 \times 10^3 \text{ g/km}^2$, with a height difference of 15 times. Y4 station has the highest tail density, the largest catch was *Pseudosciaena polyactis*, which accounted for 90.8% of the catch weight, and the proportion of young *Pseudosciaena polyactis* reached 100%. The highest weight density is Y2 station, which is far higher than the average weight density. But, if the weight of two heavier *Lateolabrax japonicas* caught in Y2 station is not included, it is close to the average value.

The average depth of water in the middle part of Yueqing Bay in spring is 7.9m, and the average surface salinity is 22.9. The average fish tail density in this sea area is $39.83 \times 10^3 \text{ ind./km}^2$, the average weight density of the sea area is $127.22 \times 10^3 \text{ g/km}^2$. The tail density of Y6-Y12 station is $23.54 \sim 73.40 \times 10^3 \text{ ind./km}^2$, with a height difference of 3.1 times; the weight density is $38.11 \sim 270.35 \times 10^3 \text{ g/km}^2$, with a height difference of 7.1 times. Among them, the station with the highest tail density is Y12, which is also the station with the highest tail density. The largest catch was *Pseudosciaena polyactis*, followed by *Chaeturichthys stigmatias*, accounting for 86.5% of the total catch. The catch of Y7, Y9 and Y11 stations were also higher than the average.

The average depth of water in the south part of Yueqing Bay in spring is 9.6m, and the average surface salinity is 23.1. The average fish tail density in this sea area is $179.54 \times 10^3 \text{ ind./km}^2$, the average weight density of the sea area is $313.39 \times 10^3 \text{ g/km}^2$. The tail density of Y13-Y20 station is $20.20 \sim 559.47 \times 10^3 \text{ ind./km}^2$, with a height difference of 27.7 times; the weight density is $69.57 \sim 667.02 \times 10^3 \text{ g/km}^2$, with a height difference of 9.59 times. Among them, the station with the highest tail density is Y20, which is also the station with the highest tail density. The largest catch was *Pseudosciaena polyactis*, accounting for 95.8% of the total catch. At the same time, the catch of Y14, Y16 and Y17 stations were also higher than the average.

3 CONCLUSION AND DISCUSSION

3.1 species composition

According to this survey, there are 43 fish species

distributed in the Yueqing Bay in spring, and all of them belong to warm water species. It is found that Yueqing Bay is located in the temperate sea in the south central part of Zhejiang Province. Its climate and environmental conditions are affected by the coastal current of Zhejiang Province and part of Taiwan warm current. Therefore, fishes in the Yueqing Bay belongs to warm water species^[16].

Through the investigation and analysis of the fish in spring, it can be found that most of the fish in Yueqing Bay are small and medium-sized, which are non economic species. The dominant species in this area are small and individual. There are only four dominant species in the sea area in spring, which are *Pseudosciaena polyactis*, *Coilia nasus*, *Lateolabrax japonicus*, *Harpodon nehereus*. By the way, In spring, *Pseudosciaena polyactis* are all juveniles, and the proportion of juveniles is 100%.

Compared with the previous data, the dominant species of fish is just the bait fish of some large economic fish. Due to large-scale human activities and overfishing, the once extremely rich large economic fish gradually declined, which led to the rapid development of small economic species. However, the total number of fish also began to decline and was gradually replaced by crustaceans. During the investigation, it is found that there are still a certain number of large fish in the sea area, such as *Muraenesox cinereus*, *Trichiurus haumela*. Therefore, Yueqing Bay is still of economic development value.

3.3 Spatial and temporal distribution characteristics of quantity

Through investigation and research, it is found that there are regional differences in fish abundance and biomass changes in Yueqing Bay in spring, mainly in the north and south, The reasons are as follows^[17-20]:

(1) Topography: There are complex submarine topography between islands, shoals, reefs and trenches are all over the islands, which are suitable for the survival of many kinds of fish such as reef fish^[21];

(2) Geology: The geology between the islands is complex and diverse, mostly are Sandy and muddy. There are abundant nutrients here;;

(3) Flow environment: There are eddy current, turbulence, upwelling and other current environments in the sea area, which can meet the feeding needs of fish;

(4) Water temperature conditions: At first, the water temperature rises from spring to summer, and the number of organisms grows faster; Secondly, some migratory fish spawn and fatten in the sea area in spring, but the number that can grow smoothly in summer is not as good as that in spring.

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Research on the Reform of College Students' Learning Mode in E-learning Environment

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Abstract: Under the influence of the Internet, the learning activities of college students have undergone major changes. As a training ground for talents, colleges and universities need to face up to the current status of the Internet development in society today, use Internet technology to upgrade education through understanding and researching Internet knowledge, and strive to develop an Internet learning model that can be accepted by the majority of college students. It will help college students grow and become talented.

Keywords: Internet; college students; learning

1. INTRODUCTION

The development of network technology has had a huge impact on people's daily lives. Specific to college students, Internet technology has had an impact on college students' traditional learning methods, which has changed the way that college students learn. College students have created new learning methods in the new learning environment of the Internet. At the same time, under the influence of the malpractices of the Internet, undergraduates' learning effects are uneven, and colleges and universities need to provide scientific guidance for undergraduates to use online learning to gain advantages and avoid disadvantages^[1].

2. UNDERGRADUATE LEARNING UNDER THE ENVIRONMENT OF E-LEARNING

Learning is a systematic work with students as the mainstay. In learning activities, learning style is an important factor, and scientific and reasonable learning style can help students improve their learning level. The learning method is a macro guiding ideology, which plays a guiding role in the specific work of learning. The learning mode under the environment of E-learning refers to the learning strategies and skills adopted by college students in the network environment. Learning under the E-learning environment has the characteristics of traditional learning and the uniqueness of network learning. Online learners are autonomous and can choose different learning content. Online learning resources can meet the learners' learning needs. E-learning has transformed the position of teachers and students in traditional learning. Teachers have become servers and guides. The impact of E-learning environment on college students' learning is mainly reflected in the transformation of learning models^[2].

2.1 Change of learning autonomy

In the development of the E-learning environment, Internet technology makes the network have a lot of learning resources. With the continuous updating of hardware such as smartphones and tablets, students can acquire knowledge by themselves through the Internet. Both the access to knowledge and the ways students learn have changed. These changes have led to the transformation of the roles of students and teachers. Teachers have changed the traditional way of education and guidance. Students' autonomy has become stronger. They have truly become the protagonists of study methods. Students with strong self-awareness and high learning ability have good learning effect. While, students with poor self-consciousness and low learning ability have poor learning effect, which further widens the learning gap^[3].

2.2 Diversity of learning methods

Two new types of learning methods have emerged in the E-learning environment, namely systematic learning and fragmented learning. Systematic learning refers to the precise division of learning content, learning the details of knowledge in the entire framework, and finally connecting the details into a whole. Fragmented learning is that the learner divides the whole knowledge point into small knowledge points, and then uses fragmented time to learn, obtain fragmented knowledge, and finally integrate it. These two methods are widely used by college students in their daily study. College students have more ways to acquire knowledge. Social education and training institutions focus on the training of college students for further education and employment. Students can learn through online schools. Many training institutions have gradually relied on the Internet to impart knowledge to students. Many work during the students' homework submission, academic defense, or academic paper creation, all need to be completed on the Internet.

2.3 Instrumental purpose of learning

Under the E-learning environment, the purpose of college students' learning is more clear. The choice of the content of the vast majority of college students depends on their future career plans. Students are busy increasing employment chips, making themselves more scarce, learning and obtaining relevant certificates, making learning activities very utilitarian. This change in learning thinking has advantages and disadvantages. On the one hand, it will ignore the improvement of student quality and

the improvement of ideological realm. On the other hand, it will be more scientific, rational, and reasonable. It will help college students to better connect with work and integrate into society.

3. THE PROBLEMS OF COLLEGE STUDENTS' LEARNING UNDER E-LEARNING MODE

With the development of the E-learning model, it has a huge impact on the college student population. E-learning helps college students acquire knowledge more conveniently, and it facilitates college students' learning and life. However, it also brings a lot of problems, which will restrict the development of students.

3.1 Strong utilitarian learning motivation

At present, college students are affected by the E-learning learning model, and their learning objectives are mainly focused on pursuing the practical value of knowledge. College students are facing huge employment pressure. So, college students want to reduce employment pressure, enhance vocational skills, and obtain high income as the main motivation for learning. College education is mainly to improve the scientific and technological level of students and provide talent support for social and economic development. The utilitarianization of society has led to the individual's pursuit of rapid development and progress. Affected by the social ethos and values, college students do not have sufficient depth of professional research in their studies, and they have little knowledge of knowledge and pursue a "fast culture"(which is relative to "slow culture"). College students unilaterally pursue achievements, ignoring the impact on the cultivation of students' quality and ideological values^[4].

3.2 Widening gap in learning level

In ordinary colleges and universities, students in different colleges have different levels of learning, their own learning habits are poor, and their ability to accept knowledge is weak. Through the E-learning model, the autonomy of college students is enhanced, and students have enough time to dominate. However, there are many temptations on the Internet, such as online games and website videos. Students with weak self-control ability are easy to indulge in the virtual world of the network and distract them, thus affecting their own learning effect. The students of key colleges have good learning habits from the beginning, and they have strong learning autonomy. By using the convenience provided by the E-learning model, they can systematically master what they need and integrate their own learning with the network, further enhancing the learning level of students. This will gradually widen the gap between students, which is not conducive to the balanced development of education.

3.3 Irregular learning methods

The E-learning model has caused students to break the previously formed rules and learn knowledge systematically, resulting in a bad learning atmosphere

in the university. In the four years of university study, freshmen and sophomores are relatively easy to learn, for freshmen have just been freed from the heavy learning in high school, and the emergence of this model of E-learning has caused students to be more slack in the school classroom. They think that a lot of knowledge can be obtained through the Internet, and valuable opportunities for classroom learning are lost. College students push all the heavy learning tasks to the junior and junior high school and prepare for it. E-learning learning mode reduces the fear and tension of college students. Some college students begin to treat learning passively, which is not conducive to the long-term development of college students.

4. THE LEARNING IMPROVEMENT DIRECTION OF COLLEGE STUDENTS UNDER THE E-LEARNING MODEL

4.1 College students establish correct learning thinking

Under the development of the E-learning model, college students should become masters, and clarify their own learning thinking, so that the E-learning learning model can be used by themselves. For online learning form, students need to develop a high degree of autonomy, distinguish clearly from good to bad, and focus on learning, to eliminate and reduce the impact of network abuse. Firstly, college students must master the method of online learning. Online learning is more flexible. College students need to understand its essence. The spread of network knowledge is a leap and can be flexibly spread. College students need to dig into the knowledge they have learned in this process. Secondly, college students can use the characteristics of Internet learning resources to expand their learning areas, more exposure to knowledge and culture in different disciplines and fields, and learn to make a difference in the learning process of different knowledge. Thirdly, students need to have their own learning system to develop their own learning methods, so that they will not be disturbed by external things, thereby improving themselves.

4.2 To give full play to teachers' advantages

Teachers occupy an important position in traditional teaching. Facing the impact of new technology, the teacher's functional status should not be replaced, but should be updated. Teachers need to change the way of education to cultivate students' learning ability.^[4] In the context of E-learning development, teachers should tap the learning interest of learners. When students are unable to adapt to the new changes in learning, teachers should carry out exploration and research, teach new skills and methods of learning, give full play to their offline advantages, help students develop good learning habits, and enhance the independent exploration ability of students.

4.3 To create a good E-learning learning environment

The learning atmosphere is an indispensable part of

various universities and institutions. A good atmosphere can have a subtle influence on students. In the process of online learning, college students can infect and motivate students to learn by increasing the form of learning, for example, group cooperation. Colleges and universities need to constantly improve their own hardware systems and infrastructure to develop their education, establish corresponding mechanisms, build relevant venues to satisfy the curiosity of college students, and help students continue to progress through their own continuous progress.

5.CONCLUSION

College and college students need to face up to the current development status of the network technology, through learning its essence, combined with their own conditions, to explore a model that helps students to learn, to better serve the education development. Both students and schools are constantly changing and innovating their own ways and methods to improve their efficiency and promote their own better development.

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Research on the Spread and Popularization of Aesthetic Education Construction Concept in General Undergraduate University

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Abstract: The construction of aesthetic education in General Undergraduate University is an important task for the development of contemporary Chinese colleges and universities, and it is very important for the cultivation of future construction talents in China. At present, there are many problems and deficiencies in the construction of aesthetic education in colleges and universities. It is necessary to absorb and learn from the excellent construction experience of other countries, improve the understanding of the General Undergraduate University and universities on the concept of aesthetic education, better follow the guidance of national education, carry out the construction of college aesthetic education, and propose a construction method suitable for one's own university. Thus, the aesthetic abilities of college students can be improved, and the overall development of college students can be promoted.

Keywords: General Undergraduate University; aesthetic education construction; college students

1. INTRODUCTION

The development of aesthetic education for college students is at the stage of preliminary exploration and construction. The development level of aesthetic education in General Undergraduate University is low. There are a series of problems in the construction of aesthetic education, such as being short of aesthetic ability and deviation of aesthetic values in college students' aesthetic education.

As an important base for student education, General Undergraduate University have huge talent training advantages and play an important role in improving the level of college students' aesthetic education. The current status of the development of aesthetic education in Chinese colleges and universities is that the development of aesthetic education in universities with strong comprehensive strength is relatively rapid, and its perfect aesthetic education curriculum system will be established. However, local ordinary colleges and universities do not pay much attention to the construction of aesthetic education. So, the construction is in the initial stage. Through the investigation of the specific situation of colleges and universities, it points out the development level and current development status of the spread and popularization of the concept of aesthetic education construction in General Undergraduate University,

studies the problems encountered in the construction of aesthetic education in General Undergraduate University, and proposes corresponding countermeasures.

2. NECESSITY OF CONSTRUCTION OF AESTHETIC EDUCATION IN GENERAL UNDERGRADUATE UNIVERSITY

Aesthetic education for college students is a course dedicated to improving the aesthetic level of college students, promoting the improvement of college students' ability of aesthetic education, and the comprehensive development of college students. Aesthetic education in General Undergraduate University refers to that ordinary colleges and universities provide aesthetic education to college students through the curriculum system and school activities, and pass on the aesthetic education knowledge to college students, thereby improving the aesthetic abilities of college students such as aesthetic sensibility, appreciation, and creativity, and establishing aesthetic values for college students. By this, it can help students develop comprehensively.

2.1 Aesthetic ability

Aesthetic ability is a vital ability for everyone. As a successor to China's future construction, college students need to have aesthetic ability to better guide social work. The construction of college students' aesthetic education helps to cultivate students' sentiment, cultivate aesthetic concepts, form aesthetic taste, and improve students' comprehensive quality. The current rapid development of Chinese society requires that people have the eyes to discover beauty, to discover the beauty of China, and even to create beauty in China. Cai Yuanpei once said, "Aesthetic educators, who apply aesthetic theories to education, aim at cultivating feelings."^[1] From that, Chinese educational scholars realized the importance of aesthetic education as early as the Republic of China.

2.2 Perfect personality

At present, Chinese education advocates the comprehensive development of virtue, intelligence, physical fitness, and labor. It requires General Undergraduate University to cultivate all-round development talents. College students must not only learn professional skills, but also develop a perfect personality. To some extent, the development of aesthetic education will help college students improve their ethics. Both ability and integrity have

always been an important standard for talent selection in various industries. Universities use aesthetic education courses to improve the personality of college students, cultivate the spirit of people with aesthetic education, and enrich their feelings. Aesthetic education and moral education complement each other and progress together to promote the overall development of students.

2.3 Ideological and political education

Ideological and political education has always been the focus of education. The cultivation of talents is for social construction. If it is not clear who works and learns for, it will have a great negative impact. China's ideological and political education trains socialist successors and builders to improve students' ideological consciousness. Aesthetic education promotes the positive development of students' thoughts through a flexible means. Aesthetic education can play a subtle role and is different from legal and other mandatory means, which are easy to be accepted by students. It is of great significance to the ideological and political construction of college students.

3. DIFFICULTIES IN POPULARIZING THE AESTHETIC EDUCATION IN GENERAL UNIVERSITIES

The construction of aesthetic education in General Undergraduate University is in its infancy, and many colleges and universities have even stagnated. With the development of time, the gap in the development of aesthetic education between colleges and universities has widened, which will have a certain impact on students' future work. Judging from the current development status of college aesthetic education, some colleges and universities with lower aesthetic education have the following common problems.

3.1 Weak aesthetic ability of college students

The college students lack aesthetic abilities. Firstly, college students have little awareness of aesthetics, due to the lack of relevant training. Many students are in the primary stage and have not formed aesthetic emotions. The specific manifestation is that they do not know how to conduct aesthetic activities. The philosopher Rodin once said that "there is no shortage of beauty in the world, but a lack of aesthetic eyes."^[2] At present, college students stay at the initial stage of beauty knowledge and simply define beauty as the appearance of good looks or not. Secondly, college students have insufficient ability to appreciate beauty and are influenced by external social factors. There is no difference between the appreciation of beauty and the general public. The ability of aesthetic discrimination is weak, and no aesthetic standards and orientations have been formed. Finally, the influence of these factors restricts the students' ability to create beauty. The role of college students determines the responsibility they will shoulder in the future. College students need to create more new

things for society to reflect beauty, but most college students do not have such abilities. The general status of college students determines that General Undergraduate University need to spend more effort to solve the aesthetic education construction, which directly restricts the development of General Undergraduate University.

3.2 The defects of the aesthetic education courses in general universities

As a student education base, General Undergraduate University undertake the task of cultivating students' abilities and providing talents for the society. At present, most of China's general comprehensive colleges and universities are in the primary stage of aesthetic education construction, there are many problems. Firstly, General Undergraduate University have not established an aesthetic education curriculum system. The vast majority of college knowledge has set up related subjects in elective courses. The number of aesthetic education elective courses is small, and the teaching time is short. Secondly, the aesthetic education courses are unattractive. Most of the courses of aesthetic education in Colleges and universities carry out the study of basic theories. The content of teaching is much book knowledge, which can not be used flexibly. The content of students' reflection is boring. Universities invest less in the construction of aesthetic education and do not have a fixed teaching system and textbooks. Thirdly, the faculty of the aesthetic education curriculum is weak. The vast majority of general colleges and universities attribute aesthetic education to irrelevant elective courses. Teachers lack the motivation for curriculum innovation and the lack of freshness in teaching. This traditional method of education is prone to aversion.

3.3 General comprehensive colleges and universities lack aesthetic education activities

General Undergraduate University have flexible and diverse ways of student education. The development of aesthetic education not only depends on the dissemination of classroom knowledge, but also can enhance students' aesthetic ability through social practice activities. Campus cultural activities and social practice activities are two important means of college aesthetic education. At present, most of the general colleges and universities have deficiencies in these two aspects. Universities distinguish arts from non-arts, and do not consider the function of aesthetic education in the construction of campus cultural activities. The campus lacks practical activities of aesthetic education.^[3] General Undergraduate University ignore the educational effect of aesthetic education activities, and ignore the cultivation of students' aesthetic education awareness and literacy in the design of campus activities and social practice activities. The serious utilitarianization of campus activities in some colleges and universities also has a certain impact on the development of aesthetic

education activities.

4. IMPROVEMENT MEASURES FOR THE SPREAD OF AESTHETIC EDUCATION IN GENERAL UNIVERSITIES

Under the guidance of the new guiding ideology in the new era, General Undergraduate University need to improve the level of education, update and upgrade the education methods, and train students with comprehensive development of moral, physical, mental, and physical skills. The role of aesthetic education needs to be further exerted, for the construction of college aesthetic education courses, the construction of college aesthetic education atmosphere and the construction of related systems.

4.1 Construction of aesthetic education curriculum system

General Undergraduate University need to carry out thorough reform and innovation in terms of aesthetic education courses, expand the number of aesthetic education courses, and provide universal education. Firstly, universities should upgrade the aesthetic education courses from elective courses to general courses, so that every student can receive the influence of the aesthetic education courses, popularize the aesthetic education knowledge, shape the aesthetic awareness, and enhance the aesthetic ability. Secondly, universities should strengthen the faculty of the aesthetic education curriculum, equip excellent teachers, collectively study and design the curriculum teaching plan, compile special textbooks, and establish a general aesthetic education curriculum system.

4.2 Carrying out aesthetic education campus activities

One of the ways in which art is spread is nurturing. The improvement of college students' aesthetic ability requires that ordinary comprehensive universities create a strong aesthetic education atmosphere. Excellent universities at home and abroad attach importance to the construction of campus culture, and some foreign universities carry out campus art festivals and cultural tours to enhance students' aesthetic ability. Domestic general universities should create a good campus cultural environment, including the construction of campus infrastructure to reflect the beauty and the cultural

characteristics of the university, and organize campus cultural activities to enhance the cultural taste of students. Various forms and diversifications are needed to help students make up for the lack of aesthetic education.

4.3 General comprehensive colleges and universities set up an aesthetic education management mechanism. Colleges and universities can recruit specialized talents, build specialized institutions, and introduce specialized systems to carry out aesthetic education. All institutions cooperate with each other to coordinate the deployment of resources for aesthetic education, and work together to conduct aesthetic education in a reasonable manner, to make the school become an experimental base for the construction of social spiritual civilization. They can use aesthetic education activities to help other departments of the university reduce the work load and strive, to let students become the successor of developing socialism after getting out of the school.

5. CONCLUSION

The construction of aesthetic education in General Undergraduate University is an important link in the cultivation of talents in colleges and universities. It is necessary to follow the implementation guidelines and policies of college aesthetic education work proposed by the Ministry of Education, actively combine local arts and culture with the actual situation of colleges and universities, and carry out the construction of aesthetic education and popularization of education in general comprehensive colleges and universities.

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Research on Teaching Status and Innovation Strategies of the Curriculum of Harmonology for Music Majors in Colleges

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Abstract: With the development and progress of the times, the modern education system is becoming more and more mature, and the development of music majors in colleges and universities must also be innovative over time. The course of Harmonology is one of basic courses for music majors, and it is also a required course for music majors. Harmonology is one of manifestations of music, and it has functions of color function and structure, which can play a good role in the modification of music. This paper makes an in-depth analysis of teaching status of the course of Harmonology for music majors in universities and colleges, and explore strategies that can effectively promote the development of course teaching.

Keywords: College music; Harmonology; Curriculum status; Innovation strategy

1. INTRODUCTION

The goal of talents cultivation in colleges and universities is to train students to be developed in all-round way. Music teaching can not only cultivate students' sentiment, but also effectively relieve the pressure on the body and mind in life. The teaching method of music major is particularly important. In the context of quality-oriented education, majority of universities are expanding their enrollment year by year, and the employment pressure of students is also increasing. And students must strengthen the learning and absorption of basic courses to improve their competitiveness. Students of music majors should learn the course of Harmonology well and improve their ability, which is beneficial to the healthy development of music.

2. NECESSITY OF DEVELOPING THE COURSE OF HARMONOLOGY FOR MUSIC MAJORS IN COLLEGES AND UNIVERSITIES

Music has a long history of development. In ancient times, some people invented music with the role of foil to perform songs and dances. And its content is infectious, and gives a great shock to people's senses. From a certain point of view, music is an art of hearing. Harmonology means a group of sound combinations that two or more different sounds occur at the same time in a specific way. It can adjust the voice production and layout of each part of the chorus and construct the melody of the song through the change of Harmonology to increase the charm of

the chorus. It plays an indispensable role in accompaniment, and has both structural function and color function. Structural function refers to that teachers can choose a harmony to render music in class. Color function refers to that music melody can be changed regularly. These functions can add soul to music works, effectively improve audience's sense of hearing, and make the works more enjoyable^[1].

2. BRIEF INTRODUCTION TO HARMONOLOGY

Harmonology is a theoretical discipline that studies the structure of harmony and how it connects. It studies the composition and production principles of harmony, including the connection and interrelationship of chords, the formation, development and evolution of harmony style, as well as the theory of application, analysis and writing methods. For musicians and students engaged in conducting and composing musical activities, Harmonology is a necessary theoretical knowledge and basic skills of music composition.

3. TEACHING STATUS OF HARMONOLOGY FOR MUSIC MAJORS IN COLLEGES AND UNIVERSITIES

With the deepening of reform and opening-up, it is more convenient to learn from the experience of predecessors. Many colleges and universities carry out music teaching based on the course of Harmonology made by Spersobin. Music teachers generally assign homework to help students consolidate their knowledge in class. They teach by effectively explaining in class and combining the methods of checking and filling in the missing after class. They demonstrate harmony teaching in class and correct the mistakes. Such teaching method is more traditional, and is insufficient.

3.1 Ignoring the practicality of harmony

In order to achieve the teaching objectives, many teachers turn their teaching focus to the completion of teaching plan, focusing on the basic theory of chords. The purpose of harmony teaching is to apply it to practice, otherwise it will have no practical significance. The after-school exercises of harmony teaching basically require students to practice the connection between sounds and strings, and ignore the influence of external sounds of strings, resulting in students not knowing how to live learn and use the harmonies flexibly when matching harmony for a complete musical composition.

3.2 Simple application of harmony

At present, harmony teaching in our country has not reached a high level of accomplishment. Colleges and universities carry out Harmonology teaching based on the course of Harmonology made by Spersobin. From the classical to the romantic period of music creation, Harmonology has been gradually changed from rigorous effect to the pursuit of sound effect. The harmony part of impressionist music school is mainly for sound effect, while the harmony part of jazz school is different from the traditional harmony in the past ^[2]. It can be seen that Harmonology changes with the development of the times, instead of staying in the traditional single form. At present, Harmonology is only the most basic thing for music majors in schools. There are many characteristics and acoustics that we haven't been exposed to, which affects the efficiency of learning Harmonology.

3.3 Lack of practice and feedback

Many colleges and universities do not pay attention to the development of the course of Harmonology, and the support for the course is relatively small, which leads to the lack of complete teaching equipment and affects the quality of teaching. In order to enable students to master Harmonology as soon as possible, many teachers have arranged homework after class to check whether students can completely master the key points of classroom knowledge in written form. But such teaching method can not effectively understand whether students really know how to use. The purpose of the course of Harmonology is to cultivate students' ability of harmonizing music works, which can not be achieved only by written assessment.

3.4 Lack of creativity

Harmonology is an important part in the creation of musical works. Since the development of classical period, Harmonology has always been governed by its own characteristics. For example, the non-transcendence and anti-function of part of the voice are not good in the traditional creation. However, with the diversified development of culture, some musicians apply the bad to the works reasonably in order to add freshness to music works. When learning traditional Harmonology, teachers often guide students to follow the rules to avoid mistakes.

4. STRATEGIES FOR IMPROVING THE TEACHING EFFECT OF THE COURSE OF HARMONOLOGY FOR MUSIC MAJORS IN COLLEGES

The reason why music can bring people extremely shocking hearing enjoyment is that music works have high sound effect and stimulate the auditory nerve. And the part of music works that can play the sound effect is harmony, so the education of Harmonology is crucial for students specializing in music. Therefore, we must start with Harmonology

and carry out reform and innovation on the basis of traditional education to develop music education better.

4.1 To lay a good foundation for traditional Harmonology

Anything that wants to innovate must change and innovate on the basis of the existing. Only by knowing enough about something can we get inspiration and thinking, and get inspiration for innovation. The first step in learning Harmonology is to lay a solid foundation and systematically learn and master traditional harmony teaching. Music teachers should pay attention to the ability of students to match harmony, not just the theoretical basis of "Harmonology"^[3]. Harmonology has a strong applicability. Teachers are required to arrange some practical operations for students. For example, let students play the harmony part with piano. Students can also listen to it repeatedly through recordings, compare the difference between their own harmony and the harmony of the topic, and think carefully and correct from teacher's comments. Now that the Internet is well developed, students can also learn from the Internet and expand their horizons. And students' ability to harmonize will naturally be improved.

4.2 To innovate from thinking

After laying the foundation of harmony, the teacher recommends some music works with good sound effects to students for reference. First of all, the teacher should teach students how to distinguish the sound effects. Although students cannot distinguish the difference of the sound effects at one and a half, they will know how to distinguish the sound effect after accumulated playing and learning thinking. After knowing how to distinguish the advantages and disadvantages of the effect, students can create innovative harmony works after thinking and summing up, giving people a fresh feeling.

5. CONCLUSION

All in all, the course of Harmonology in colleges and universities require teachers to conduct guided education for students. They cannot just stay in the traditional paper assessment. They should observe students' mastery of Harmonology through practice and let students use the online platform to see excellent works by famous writers, which in turn enhances the ability to match harmony.

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Different construction of China's image in Silk Road documentaries from the perspective of cross-culture--Taking the documentaries of China, Japan and Britain as the example

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Abstract: The national image which constructed by self and others is usually presented complexly. This paper takes the documentaries of China, Japan and Britain as an example and analyses different construction of China's images from three perspectives, including narration, themes and historical facts. It is the difference between China's self-expression and Japan and Britain's description that jointly construct China's complex image through the Silk Road documentaries.

Key words: Silk Road documentaries; construction of national image; cross-culture

1. INTRODUCE

The national image is usually "miscellaneous" in that it is the product of both "self" and "others". K.E. Boulding, an American political scientist, once put forward a definition of national image, "The images which are important in international systems are those which a nation has of itself and of those other bodies in the system which constitute its international environment. Besides, it is a highly structured piece of information-capital, developed partly by its inputs and outputs of information and partly by internal messages and its own laws of growth and stability."^[1] Nowadays, this kind of information capital spreads between countries in the form of "aesthetic capital"^[2], by which the national image can be transmitted to the audience in a more impressive way. CCTV (China Central Television), NHK (Nippon Hoso Kyokai) and BBC (British Broadcasting Corporation) have all filmed documentaries related to the Silk Road, but the presentation and description of China's image are different. It is these differences that make the audience have different interpretations of Chinese image, and thus promote the complex construction of China's image both by itself and others.

2. THE COMPARISON OF NARRATION ARTS

In terms of overall narrative arts, *The New Silk Road* made by CCTV focuses on objective and

grand narration, supplemented by micro description of characters and events. It basically adopts the third person narrative mode to objectively introduce China to the audience. One of the major characteristics of the documentary is that the frequent using of full shots and long shots that unfold the historical sites and landscape of the Chinese section of the silk road. In *Stone Tombs in Grassland*-the third episode of *The New Silk Road*, for instance, except for a few close shots and medium shots for several herdsmen and archeologists, a large number of full shots and long shots are adopted to reveal the panorama of the stone city, vast grassland, complex of tombs, clouds and so on, which can give the audience a magnificent picture.

The New Silk Road made by NHK is good at starting with micro elements like individual figures and events, and showing the historical development from the perspective of personnel changes. Taking the third episode as an example, NHK not only gives a large number of close-up shots to herdsmen on horseback in the grassland, but also takes detailed pictures of herdsmen driving sheep across the river, children selling glasses in the grassland and people of different nationalities selling things in the city.

The Silk Road made by BBC is a first-person tour of the scenic spots along the Silk Road, which is more about the exploration of China's culture. The host runs through the documentary, taking the audience to visit various important urban attractions on the silk road. For example, at the beginning of the first episode, a large number of scenes are focused on the host, who explores the small artifacts in marketplace in Xi'an (Shaanxi Province in western China). The host picked up a ceramic cup in the market and introduced, "the market and trade remind me that consumer society is nothing new. Even something as simple as this-white china with blue decoration. Well, China's porcelain is incredibly fine... In this single object, you can

begin to see the power of the Silk Road.”^[3] The documentary uses many close-up shots to introduce the impact of the Silk Road on the East-West trade from some details. Besides, the way brought in by the host can also attract the audience’s attention and satisfy their curiosity.

2. THE COMPARISON OF THEMES

The New Silk Road made by CCTV puts emphasis on the recollection of glorious history the proof of historical events by ancient tomb remains and archaeological discoveries from the perspective of self-inspection.

Compared with CCTV, themes of the Silk Road documentaries made by NHK and BBC are more diverse. Some of them review the history, but more of them are about the current situation of local residents’ life, trade and environment. According to Raymond Williams, culture is “a life style including material, intellectual and spirit, etc.”^[4] To tell the stories about the Chinese culture on the Silk Road, one way is to express it from the aspects of history and heritage like CCTV, and it’s also a way to express it from the perspectives of ordinary people, economy, trade and social environment like NHK and BBC^[5].

3. THE COMPARISON OF HISTORICAL FACTS

In terms of historical facts, the differences between them can be analyzed more clearly, because documentaries about the Silk Road made by CCTV and NHK are co-produced. However, the documentary made by BBC focuses on China only in the first episode, so there are a few differences. *Stone Tombs in Grassland* (CCTV) shows the contribution of Chinese nomads to the world. The greatest contribution of nomadic migration is to train wild horses into domestic horses and invent horse-drawn carts. Besides, the Turkic people’s techniques of improving stirrup (absorbing the stirrup techniques in the farming areas of northern China) was brought to the west by the nomadic people in the north, which promoted the integration of cavalry and horse, and objectively stimulated the emergence of European feudalism and made the knight class appear in the West. What’s more, the migration of Huns brought bronze wares and bronze axes of the Shang Dynasty to the West. Although no ruins of the Turkic palace have been found on the grassland, the characters engraved on these stone figures record the historical facts that Turks first had their own characters in the nomadic world. It also became the first one in the Altaic language family with clear characters handed down. So far, the grassland nomads have made a substantial step on the road of world civilization. The Mongols who inherited the Turkic characters moved in through the way of

war, brought four great inventions of China to Europe, and rewritten the map of Eurasia. As some experts pointed out, it was the eastern civilization that accumulated the necessary papers and materials for the Renaissance in the history of European civilization. Even the artillery that finally defeated the nomadic people was developed in the western world after the Mongols introduced the Chinese firearms technology into the Arab world during the western expedition. The development of world civilization cannot be separated from the migration of nomadic people in Asia and Europe. The western spread of Eastern civilization has played a great role in promoting the emergence of a new era in Europe. However, NHK only briefly mentioned the connection between pedal techniques and Turks and the contribution of it to the war at that time. Similarly, NHK did not mention the influence of Tang Dynasty culture on Japanese culture, for instance, the role of Chinese characters on Japanese characters.

Moreover, NHK also beautifies its self-image in the documentary. For example, *Memory of Turpan* and *Life of Dunhuang* made by CCTV recorded the theft of Chinese murals by Japanese, British and German expeditions as well as the facts that Landon Warner from America came to China and took 12 murals and two Buddha statues by only a small amount of money. Nevertheless, *Turpan: a great Gallery* made by NHK beautifies the above behaviors of Japanese, British and German expeditions as “visiting”, “investigating the way of Buddhism inheritance”, “protecting world cultural heritage”, etc.

The different descriptions of historical events by CCTV, NHK and BBC come from their different standpoints. As one of the important countries on the Silk Road, China has made great contributions to the development of the Silk Road. Therefore, in describing these events, China undoubtedly tries to highlight its position on the Silk Road to show its glorious history. However, the connection between Japan and Britain and the Silk Road is relatively weak. It is more like a state of curiosity when they describe Chinese culture. Consequently, more current styles and features are displayed while its historical influences are simplified and even hid. Whether it is the expression of China itself or the expression of Japan and Britain to China, they have jointly constructed a composite image of China.

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Types of Governance and Autonomy of Community in the Process of Urbanization in China

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Abstract: China is about to enter a well-off society, and it is paying more and more attention to the development of grassroots democracy. In the new period, grassroots democracy of China has gradually become autonomous, and it is of practical and significant to strengthen the research on governance of urban and rural community in the process of urbanization. This paper analyzes the current status of governance of urban and rural community in the process of urbanization, and explores the relationship between autonomous economy and democratic development of community. Regional governments should moderate their rights and guide people to govern community, and constantly change their functions to promote the urban and rural communities in the process of urbanization to self-govern. Therefore, strengthening governance of urban and rural community in the process of urbanization requires the community government to change its functions to meet the practical needs of community autonomy.

Keywords: Community governance; Autonomous type; Government-led

With the development of society, democratic autonomy is becoming more and more important. In addition to villagers' self-government and congresses of workers and staff of enterprise, community autonomy is one of the main cornerstones of grassroots democracy in China in the new period. Only by continuously deepening the research on the types of governance and autonomy of urban and rural communities in the process of urbanization, can the construction of democratic politics in urban and rural communities be improved and the autonomy of urban and rural communities in the process of urbanization be promoted. With the advent of a well-off society, the extent to which economic development and democracy develop of urban and rural community in the process of urbanization is the concern of the whole society and the country^[1].

1. THEORETICAL RESEARCH ON GENERAL CONCEPTS OF COMMUNITY GOVERNANCE

Since the concept of community was introduced and developed, the economic development of the community has been relatively stable, and various systems have been gradually enriched, which is in line with the development of the community.

Community is a social carrier in which multiple people participate. It not only meets the needs of social and economic development, but also is an important part of political and cultural development. Community autonomy is approved by the local government. Under the leadership of the party, it is a measure of self-management through corresponding organizations. It is also the legitimate rights and interests enjoyed by community residents in China, and it is an important form of residents' participation in community affairs^[1]. Community autonomy can satisfy residents' self-management, self-restraint, and self-education. It is a form of grassroots democracy that is conducive to social development and national stability. Community residents are the main body of the community. Community autonomy meets the requirements of social management. The members of residents' autonomy are composed of residents voluntarily. Without prejudice to national laws and regulations, the Autonomous Committee has the right to formulate corresponding cultural and ethical standards to conduct behaviors and moral constraints on residents in the community. To strengthen the autonomy of community residents is a manifestation of citizen rights and self-management of community residents. Pursuing democracy is both a responsibility and a virtue, and it is a policy implemented by community citizens to protect their rights and interests. On the other hand, to strengthen the autonomy of community residents can ensure that democracy plays a real role and promote trust and cooperation between society and nations^[2].

2. CURRENT SITUATION OF GOVERNANCE OF URBAN AND RURAL COMMUNITY IN THE PROCESS OF URBANIZATION

The development of urban and rural communities can be roughly divided into three stages, that is market town community, original town community and the community in the process of urbanization. At the beginning, the construction of market town community is to meet the needs of small town planning and the inevitable requirement of building a new socialist countryside. In terms of organizational structure, it still maintains the unique organizational form in rural areas, and the market town community still adopts the leadership of director and deputy director. In some minority communities, the community has strong cultural characteristics and

rich customs, driving the economic development of the community. But in most communities, residents have still strong traditional consciousness. Villagers' management is influenced by the clan, and director of the community is usually the leader of a certain clan, and director of the village represents the clan to a large extent, so that the management of the market community is only superficial, there is no good organization, and the interests are seriously disputed. The function of market town community needs to be changed to make the community function more perfect and better serve the community. The original urban community began to develop, which effectively changes the shortcomings of market town community, changes functions of the community, and constantly improves the organization, so that the community organizations play a corresponding role, and protect the actual interests of community citizens. In addition, the original urban community is strongly supported by the local government and recognized by law, which can not only ensure the normal development of community life, but also obtain the financial support of the government, and can carry out activities on their own. However, compared with communities in developed areas, there are some deficiencies such as information lag and inadequate management. For the long-term development of communities, further improvement is needed^[3-4].

In the process of urbanization, communities come into being, which is to meet the needs of better development of urbanization. The development of urbanization is progressing towards the direction of urban community, so we must constantly improve the function of community to make it conform to the development of the times. In the process of urbanization, the community has more perfect organizations. Its people-oriented management concept is an important embodiment of the deepening of community service institutions. The management mode of the community is diverse and the content is increased, which can fully meet the needs of the citizens, and is deeply loved by them. In the process of urbanization, citizens have a stronger sense of community and participate in community activities voluntarily. But there are also some deficiencies, for instance, the increase of management content leads to more and more prominent class contradictions, and community management is more and more difficult. Thus it is necessary for the local government to strengthen the management and control, and do a good job in the management and guidance of the community. It not only allows the community to be autonomous, but also plays a certain role in promoting it. Decentralization does not mean that the rights disappear, but it promotes the normal operation of the community, and protects the legitimate rights and interests of citizens^[5-6].

3. AN ANALYSIS OF TYPES OF COMMUNITY AUTONOMY IN THE PROCESS OF

URBANIZATION

The economic basis of community is closely related to democracy. To some extent, economic development of the community is determined by the participation of citizens. Therefore, it is crucial for community autonomy. The local government should decentralize power, grasp the direction of community development, and ensure the quality of people's participation. Based on the analysis of political and economic situation of Chinese communities, the autonomy of urban and rural community in the process of urbanization can be divided into three types, which are described in detail below.

(1) Symbolic community autonomy. It is government-controlled and is generally only found in underdeveloped communities. These communities are economically lagging and the overall standard of living is not high; most of citizens lack democratic awareness, have low comprehensive quality and no strong laws and collective concepts. It is precisely the shortcomings of the above community citizens that the community is mainly controlled by the government, which is conducive to economic construction and effectively guarantees that citizens' legal rights are not infringed, and guarantees the safety of citizens' lives and property.

(2) Progressive community autonomy. It is government-led and generally appears in more economically developed communities. The citizens of these communities have relatively stable economic incomes, high overall qualities, a certain sense of democracy, and are willing to participate in the public management of the community. But in this type of community, a small number of citizens like to be clever and only value their immediate interests. They are afraid of changes in their functions. They are unwilling to manage the community as long as they do not touch their own interests. The government needs to maintain a good community atmosphere, implement gradual management of community management, guide residents to autonomy, maximize the sense of participation of citizens, and promote the stable growth of community economy.

(3) Transitional community autonomy. It is government laissez-faire. In these communities, the community has specified some content that exceeds the law, and does not increase the obligations of citizens without complying with the law. It is mainly because the local government is short of funds and cannot manage the community well. Many citizens treat it negatively, and the government has to give up the management of such communities.

4. CONCLUSION

In a word, the governance and autonomy of urban and rural communities in the process of urbanization are reforms guided by the government. The autonomy of the communities meets the requirements of local government laws and can be beneficial to the economic development of communities. With the

development of the community, governance and autonomy of urban and rural community in the process of urbanization have become the mainstream of development. It is a manifestation of a high degree of politics and civilization. It requires the government to decentralize power in the process of urbanization, continuously transform functions, and correctly change the leadership of the government in the community, so as to promote the development of the community and improve the economy of the community.

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A Study on the Application of DMT Online Counseling on Decompression for College Students under "Interpersonal communication" Pressure

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Abstract: In the current era, the Internet is rapidly developing. So, to follow the development, using network counseling to safely and effectively help groups reduce psychological pressure is another important counseling model for DMT. College students are the main force of today's online applications. DMT online counseling can help these groups who need support, promotes the development of DMT, and improves the leadership model. At present, "dancing therapy" is rarely used in the field of psychotherapy in China, and the model of online counseling doesn't exist in many countries. In Europe and the United States, online counseling on DMT is rarely carried out. This article provides a comprehensive reference suggestion for the online tutoring of college students' groups due to the pressure of "interpersonal communication" from the work of DMT, and provides another safe and effective way for college students who need psychological support today.

Keywords: DMT; interpersonal communication; network counseling; decompression

1. INTRODUCTION

By Analysis on the causes of interpersonal communication pressure of college students, it can be seen that the pressure is a kind of psychological pressure for college students. For college students, the factors of interpersonal communication pressure mainly come from the interaction with peers, the relationship with parents and families, and the ways of dealing with the relationship of love. With the rapid development of the Internet, today's college students rely more on social networking software such as online virtual society, QQ, WeChat, during the growth process before entering school. Due to the requirements for further education before entering university, more interpersonal communication is circumvented for parents or school management. Therefore, there is short of the ability to deal with interpersonal relationships.

After entering the university, the experiences of a group is so similar, giving them more opportunities to meet like-minded friends and gain more friendships when interacting with peer groups. But in

real life, college students come from different families. So, there may be differences in life habits, values and other aspects of the growth background.^[1] If there is a lack of effective communication, some students will appear introverted, or inferiority complex. The psychological pressure may even cause depression in a long term.

College students are in a period of emotional richness. While, college students who are far away from relatives often have a sense of loneliness. Most of them want to be in a relationship of love. Emotions exist based on real life. They often cannot be evaluated and analyzed. When judging self-affective problems, conflicts are inevitable. Contradictions and conflicts can lead to quarrels, blame each other, cold wars, or breakups. The appearance of these states can cause psychological stress.^[2] Because they are far away from their families, parents' expectations and concerns about their children are also one of the reasons for the psychological pressure of college students. If parents' expectations are too high and they do not understand the status of university life and learning, the lack of effective communication will lead to various conflicts that lead to anxiety and other bad emotions.

2. THE IMPORTANCE OF DMT ONLINE COUNSELING FOR COLLEGE STUDENTS' PSYCHOLOGICAL DECOMPRESSION

DMT (Dance Movement Therapy), as a method of psychotherapy, is a special form of creative art healing. It takes body movements as a guide to creatively invest in a journey through imagery to promote the integration of individual emotions, society, cognition and physiology.^[3] Due to the rapid development of the Internet and the emergence of social and public crises, DMT online counseling plays a supporting role in the psychological decompression of college students from the following three aspects:

Firstly, DMT helps college students pay attention to their self-demand from the physical level and get out of anxiety and confusion. The rapid development of the Internet has made college students more dependent on the Internet, disconnected from social reality, or be in a state of confusion due to various pressures. Starting from the physical level, DMT

pulls them out of the network through the perception of their physical body, connects with themselves through online live tutoring, and connects with group members and the real society.

Secondly, DMT online group counseling helps college students get out of the predicament from the cognitive level. DMT allows students to explore and understand more about themselves through the internal driving elements of Laban movements, to understand their own movement preferences, and to be more aware of different behaviors to deal with different problems.

Thirdly, the DMT network group helps release pressure and stabilize emotion. Research at home and abroad has proved that sports can release stress and reduce anxiety. First of all, by dance therapy, physical work, the relationship between shaping, breathing and emotion in KMP, college students can feel the breathing and return to themselves. Then, they will slowly return to a stable state, and use the internal driving force of the action through "embodied" KMP rhythm to release the pressure. Secondly, through the training of gravity and rooting, DMT allows college students to learn to manage their emotions better and still be able to settle in the present at a special time.

3. DESIGN OF DMT ONLINE LEADERSHIP SCHEME

DMT has important psychological significance for the decompression of college students' network groups, but the premise is that the design of the network course program is scientific, reasonable and operable. How to design a plan for decompression groups in each link of treatment is worthy of in-depth research and discussion. This plan is designed for the pressure caused by the "human interaction" of the network group of college students. But at the same time, the program also supports "learning pressure" and "employment pressure" groups.

3.1 Determination of the theme

We have designed 6 consecutive courses for the online employment pressure group of college students, with 8 to 10 members, and 90 minutes each time. The theme of the 6 courses are: to relax and focus on yourself, to explore the spatial relationship of internal driving force, the mobility of internal driving force, the power of internal driving force, to release pressure, and so on.

3.1.1 Purpose of warming up

According to the working structure of DMT, warming-up is the first step after the theme is designed. The purpose of warming-up is twofold: the first is to establish a group, increase the interaction of group members and allow members to adapt to the group; the second is to prepare the body, familiarize the members with the body, enhance breathing and muscle exercises, and expand body language.^[4]

3.1.2 Design of warm-up activities

The warm-up activities of group network counseling need to pay special attention to the connection

between group members and the connection with self. The warm-up design includes the following four points:

First, the first activity of the group is necessary for members to introduce themselves by words. Combined with body movements (such as using arm movements or upper body movements to express the current state, other members can mirror the actions of the self-introducer).

Second, the connection with the body is a must. It can help relax and awaken our consciousness of the whole body by sensing body parts, such as gently shaking the body parts; gently rubbing or tapping various parts of our body to enhance awareness of the boundaries of the body; deepening the contact of the feet with the ground, gentle spine twists, bends, and stretches, adding a sense of alignment and connectivity through the center of our body; using breath to sense changes in the body, deepen the understanding of breathing, and achieve effective harmony between breathing and action. The visitor feels his own body and feels the boundaries of his own body, which helps the visitor to pay attention to some of the needs of his body. For mental patients, they often forget where they are and are unconscious of their bodies. How important it is to be aware of your body and to work with it.

Third, the choice of virtual tools and the design of activities should be linked to the next intervention theme. For the network decompression group of college students, if it is a short course, it is recommended to take 4-6 times. The design of the warm-up in the first two courses is mainly to establish and integrate into the group, with the therapist giving more structured activities. The activity only designs a specific (no change) virtual connection tool. In the following lessons, the virtual connection tool Take the activity method given by the therapist. In the warm-up activity can change the weight, characteristics, etc. after the member catches it. The delivery route is also freely chosen by the members. There is no need to use virtual tools anymore. We are only aiming at the body of the self in a certain situation and connecting with the self. For example, if we embody a pianist's actions when playing a piece of music, we combine the internal driving elements to warm up and connect with our own body.

Fourth, the choice of music. The music for the warm-up phase is usually light music, piano music or light-tempo music, so that the group members will not feel nervous when entering the classroom.

3.2 Theoretical support of scheme design

3.2.1 Act on mirror neurons.

The "mirror image" technology involved in the session can activate the mirror neurons of the visitor, thereby helping to generate kinesthetic empathy between the therapist and the visitor, and helping the therapist to perceive the emotional state of the visitor

in the early stage of treatment.^[5]

3.2.2 Group process theory.

The mirror image between the group members has a kind of "seen" to the action sender, which is helpful for the group members to integrate into the group. The use of various "connections" makes the connection between group members easier to be integrated into.^[6]

3.3 Intervention

3.3.1 The purpose of the intervention

The purpose of the intervention link is directly connected with the needs of the visitor, which is to allow the visitor to express with actions under the guidance of the therapist, and to connect those parts

that are not perceivable by the action. The intervention link is closely linked to the curriculum theme design, but the specific leadership process will still be adjusted according to the status of the group members.

3.3.2 Intervention theme program design and theoretical support

According to the causes of college students' pressure, we made the following short-term intervention design for the pressure caused by "interpersonal communication". The music selection of each class corresponds to the internal driving element. The first class chooses light-tempo music and the last chooses meditation music.

Lesson	Intervention content
1.To relax; To focus on yourself	A. To breathe and feel your body (supine position);to lift your left leg when you inhale;to exchange your legs when you exhale-unfold your body when you inhale;to curl to the side when you exhale (take turns to the left and right)--transition to a sitting position , standing B. Painting and sharing
Theoretical support	Bartenieff: The basic mode of breathing andconnecting the body. In the early mode, the core and the distal connection make the body part and the core connect, and bring a sense of security and comfort ^[7]
2.To explore the spatial relationship of internal drive	A.To take the ball to the destination through a straight road B.To take the ball to the destination through a curved road, when there are various flowering trees on both sides of the road C.To find the path of your preference, by making two people in a group pass the ball to each other in two ways (by hand) D.To share
Theoretical support	1. At the social level, the driving spatial relationship in Laban is straightforward and can maintain close contact with people, let the other party know their own ideas.But, they are straightforward and have no scruples, and lack good communication skills. Indirectness will have a holistic view, but the conversation with people is not deep enough, and extreme indirection will become an escape. Moderate indirection helps to open up the overall situation, and it is not easy to hurt the other party at the social level 2. Embodied and action metaphors
3.To explore the mobility of the internal driving force	A.To promote robot (Steel Robot) ball B. Being a (high-tech robot) dancing the waves (freedom) C. Painting and sharing
Theoretical support	1. Excessive restraint in internal driving forces excessively suppresses oneself. Being careful in interpersonal communication is not easy to produce empathy, which will bring a lot of tension and anxiety to yourself and others. Free-flowing people will be more sloppy ^[8] , and do not view obligations as important. It is inevitable that excessive restraint conflicts with very free-flowing people. 2. Embodied
4.To explore the powerof internal drive (Turkish ball)	A. To explore the dance of scarves (the therapist takes the scarves to lead the group members to dance softly) B. Group members use spare scarves (no hands can replace them) to gently brush the body, arms, and face to feel the power of the scarves,using a scarf-like movement to pass among team members (my scarf wipes your arm, etc.) C. Powerful dance.To come to the farming dance together, step on the mud, push the haystacks apart, the team members take turns to push each other in turn. d Share

Theoretical support	1. The internal driving force is gentle. The internal driving force is decent, tactful, and thoughtful at the level of social communication. It can be happy with people, and people with obvious gentle characteristics at the emotional level are sensitive and easy to be injured. Powerful people are easy to gain power, can withstand pressure, and are not afraid of opponents, but people with significant power characteristics are reckless, stubborn, and manipulative. On the emotional level, strong human emotions can be fully expressed. 2. The metaphor of embodiment and action
5.To explore the sense of time	A. To play progressive piano music, and play slow piano music B. In groups of two, one person sees the other person to complete the goal (complete the design and production of the newspaper in a fixed time), then they exchange roles. C.To share
Theoretical support	1. People who are quick in the driving force in the level of social interaction are often the promoters of the team. They are too optimistic about the plan and do not like to think left and right. Slow people are easily integrated into their environment, which makes the other person feel valued. 2. The metaphor of embodiment and action
6.To request and give	A.To breath, feel absorbed energy, and pay carbon dioxide and negative energy B. Coordination of breathing and movement; what to take back; what to throw away (what to give) C. Painting and sharing D. Farewell to the group; what to take away; what to leave
Theoretical support	1. Bartenieff's internal and external impulses: The internal impulses are expressed in an external form, and the participation of the external world in turn affects the inner experience. 2. To open process of group process. 3. Action metaphor

Remarks: 1. "Embodied" refers to the physical state, movements and facial expressions generated when playing a role. "Embodied" will perceive the physical state and emotional state.

2. Action metaphor: symbolic meaning in actions and postures.^[8]

3.4The link of ending

3.4.1 End of the session

The purpose of the closing session is to allow visitors to feel connected and supported, and to leave the classroom in a comfortable and pleasant state.^[9] At the end of each lesson in the online group, we still need to pay attention to the connection. The connection allows the group to continue to open up, allowing visitors to enter the stage of responsibility and openness and individual integration more easily, and allows the visitor to reduce loneliness.

3.4.2 Event design

The activity design of the closing session mainly ends with shared movements, common rhythm, circled activities, and movement sequences created by group members, etc. At the end of the last class, we have to design a farewell to the team. We can say goodbye to group members in sequence with actions, allowing group members to end a relationship with a happy mood.

4. THE SUGGESTIONS FOR DANCE THERAPY ONLINE LEADING

In the current situation, it is obvious that the dance therapist and the client have face-to-face work in the

treatment room, such as increasing the risk of disease infection, and the client is more likely to increase the degree of anxiety and terror. Therefore, DMT adopts the method of network counseling as the current main way, and it is also an important leading model for DMT to adapt to the development of the times.

From March 28 to April 5, 2020, the author and her team organized and launched the first phase of online dance therapy, for providing psychological assistance to Chinese students and overseas students. For the online counseling of college students' decompression groups, the following suggestions are summarized for reference:

The first is group interview: To understand more about the purposes and needs of the visitors to participate in the course, and to make a matching course plan and content.

The second is group organization: The group leader tells group members not to leave the range that the camera can shoot, emphasizing that they must tell the leader if they want to leave, because the therapist or leader needs to determine the safety of the group members. The leader should ensure that he can see every member of the group from the screen, and the group members should also see everyone else from the screen.

The third is keeping structured and connected. Because it is led online, the curriculum structure needs more structure, more mirror images, and more attention to the connection between group members,

as well as individuals with space and self, if it is a non-powered group or a few cases of solo exploration in the case.

The fourth is the better integration. The better integration of online groups can be when group members are in mood. The members can feel the group's tolerance, acceptance, support and bearing. At the same time, it also stimulates the sense of responsibility of members. If the member is not alone, it will affect the entire group if he leaves. At the stage of integration, or at the stage of accommodating individuals, the Waltz's music and the rhythm of "shaking" can be used, to better reflect the function of the group's "container".

The fifth is regarding equipment and auxiliary tools, etc. To choose a suitable online meeting platform (Zoom, Tencent Meeting, Nail, etc.), and be proficient in the use of online meeting platforms. Currently, the better experience is Zoom, and computers (mobile phones are not suitable for groups). As with offline courses, a quiet, relatively private space is required.

5. CONCLUSION

DMT online counseling can effectively reduce the psychological pressure of college students. The urgent task is to strengthen the design ability of DMT online counseling scheme. From the theme determination, intervention to the last link, it is necessary to design with "decompression group" as the core, in order to ensure the emotional pleasure of group members. It will promote the DMT to adapt to

the development of the Times

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Research on the Artistic Characteristics of National Opera Music

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Abstract: The development of Chinese national opera started relatively late, and the development process is tortuous, with distinctive Chinese characteristics. By exploring China's excellent national opera works, it summarizes the artistic characteristics of the national opera music, such as the unique material of national opera music, the content of opera elements, and the special expression. National opera needs constant innovation and development on the basis of these characteristics to promote the prosperity of my country's cultural undertakings.

Keywords: national opera; music; artistic characteristics

1. INTRODUCTION

As an art form, opera has its distinctive characteristics. Opera integrates poetry, drama, music, dance and other art forms, and transmits its thoughts and feelings to the audience through comprehensive art forms. On the basis of drawing on the achievements of Western opera art, Chinese national opera has gradually developed into an art form that is popular among the masses, combining the national conditions of the nation. In the past, the development of national opera produced many excellent works, such as *Xiao Erhei's Marriage*, *Qu Yuan*, *Camel Xiangzi*, *Shen Nong*, *A Lendendary Ruler*, etc. These works are the epitome of different periods and the essence of national opera, which have a far-reaching impact on the cause of Chinese music and art, and are important spiritual food for our people.

The music of Chinese national opera has distinct and unique characteristics of Chinese music. It is created and developed based on the actual conditions of the Chinese people's life. It absorbs many national music, such as song and dance, minor, opera and other art forms. Music has made our national operas have distinct national characteristics and styles. At the same time, in the creation of Chinese national operas, I also conducted in-depth study and good reference to the music of western operas. In general, the musical art of Chinese national opera mainly has the following characteristics.^[1]

2. ABSORBING LOCAL CULTURE AND HAVING LOCAL CHARACTERISTICS

Chinese folk opera is rooted in the soil of Chinese cultural creation, and is created with the artistic appreciation habits and perspectives of Chinese people. It has a strong local color. It has strong local characteristics not only in the setting of story, the

creation of character image, but also in the display of character character. The display of character has strong local characteristics. The music in the national opera also absorbs a lot of local culture and has a strong vitality. For example, *The White-haired Girl* is a representative work of China's national opera. This work uses the life and background of Shanxi and Hebei Provinces and other places as its creation background and prototype. Many local elements have been added to the music of the opera, such as the Hebei folk song *Little Cabbage*, Shanxi Yangge *Picking the Wheat Roots*, etc. These local folk songs have a good effect on expressing the emotions and emotions of opera characters.^[2] Xi'er, the protagonist of the *White-haired Girl* opera, relied on these local minorities to drive the audience's emotions during the climax of the story's development, allowing the audience to enter the atmosphere created by the opera and share the feelings of the protagonist, such as the resentment when being bullied by Huang Shiren, and the joy when celebrating the new year together with her father, etc. Another piece of opera, *Sister Jiang*, draws on a lot of local musical elements in Sichuan Province, such as Sichuan opera and Sichuan folk songs. Through this local music, Jiang's heroism and revolutionism are well expressed in front of the audience. In addition to Sichuan Opera and folk songs, the opera also blends with Sichuan Qingyin (unvoiced sound), Chuanjiang trumpet (a work song sung to synchronize movements, with one person leading), Gaoqiang (a kind of rhyme scheme of Chinese opera) and other tones, with strong local characteristics.

3. LEARNING FROM THE FORM OF OPERA AND INCORPORATING ELEMENTS OF OPERA

Opera music is different from a single music form in expression form. It is a fusion of multiple music songs. So is the music in our national opera. It integrates many musical elements under the main body of the national opera. With the development of the storyline, different background music is selected. This music feature is based on the music and expression ways of ancient Chinese opera. Thus, our national opera has many elements of traditional Chinese traditional opera. Chinese opera also displays a variety of musical elements under the background of a big story, with rich roles including Sheng (male role), Dan (female role), Jing (painted face), Mo (which has been clarified with Sheng), Chou (clown) and various performance skills. Chinese folk operas draw on the

advantages of traditional dramas to help operas show the emotions of characters through music, and their innermost thoughts can impress people and infect and drive the emotions of the audience. The national opera *Sister Jiang* used the elements of the drama *Revolution is Like Steel* in its climax plot to promote the rhythm of the opera performance through this drama and show the change of characters' emotions. The author uses solo, accompaniment, transposition and other different performance methods and expression techniques to describe the inner emotional changes and spiritual qualities of the communists.^[3]

4. COMBINING SINGING WITH VARIOUS EXPRESSIONS

Chinese folk operas are displayed in a unique way. On the one hand, Chinese folk operas absorb the excellent singing methods of western operas. On the other hand, Chinese operas specifically divide the vocal segments of different structures and add shapes, focusing on singing and performance. In terms of singing, Chinese folk operas focus on coloring, language, tone, and sound. The performance of Chinese national operas has high demands on the singers, and requires the singers to have excellent singing skills. They can take the audience into the cultural atmosphere created by the operas, and show the inner emotions of the opera characters through the songs. The rhythm of the rhythm is distinct in different situations. The singers have different feelings.^[4] The singer in the *Liu Hulan* opera, the famous Chinese singer Guo Lanying has already used her own tone to show the character image and express the character's feelings. The tone is sometimes gentle, sometimes high-pitched, sometimes sad, sometimes joyful. Her playing skills also get exactly the results desired, which makes the stage effect touching and tearful, bringing a visual feast to the audience. Many Chinese folk opera music also incorporates elements of Chinese dance to help set off the atmosphere and promote the development of the storyline.^[5]

5. THE STRUCTURE OF SONG AND SONG BORROWS FROM FOLK MUSIC

The folk opera music in China draws on the characteristics of folk music in terms of its lyric structure. The writing style of traditional Chinese folk music emphasizes realism and harmony of rhyme, which is similar to the creation of Chinese poetry. In terms of syntax, it is mainly composed of seven or eight character sentences, with strong regularity. The creation of Chinese folk operas has absorbed the essence of traditional Chinese folk music. Opera music also has the characteristics of folk music creation. For example, the classic song *Ode of Plum Blossom* in the Chinese folk opera has a lyrics written like this: "Red plum blossoms bloom on the red rock; Stepping on a vast expanse of ice and frost; They are afraid of nothing in the coldest weather; The heart of pure loyalty is open to the sun; The red plum

blossoms are blooming; And all of the flowers are in splendor."The words in this opera pay attention to rhyme, and the sentence patterns are finely composed. The music of Chinese national opera is composed by simple musical structure, which emphasizes the overall balance of music structure and smooth connection of music segments. Different types of national opera use different background music, such as *Sister Jiang* music shows the heroism, and its music theme is resounding; the music selected in *Liu Sanjie* is more about the moving love between men and women.

6. CONCLUSION:

The development time of Chinese national opera is relatively short, and the development process is more tortuous. Compared with the world's high-level opera, there is still a long way to go. The music of Chinese national opera needs to be innovated constantly, and the creative level of Chinese national opera music needs to be improved by absorbing the advanced experience of opera music creation. China's national opera music needs to adhere to its own music development path, dig and absorb the essence of our traditional music culture, carry on the inheritance and innovation to our traditional music, maintain the characteristics of national music, and constantly achieve new development. At the same time, the musical tools and techniques used in the performance of national opera music should also be constantly innovated, learning from the music structure and band experience of western advanced countries, so as to combine Chinese and western music, absorb the advantages of hundreds of schools, and constantly promote the innovation and development of Chinese national opera music.

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Development Trend of Digital Design of Chinese Character Font

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Abstract: This article focuses on the development and trend of digital design of Chinese fonts from the aspects of multicultural integration, interest, nationalization, emotion, personalization, digitization and other aspects of fonts. With the popularization of information technology and digital technology, the integration of Chinese font design and global integration will be an inevitable result of historical development. Modern font design is using a world-wide visual language to make positive contributions to the development of economy and culture.

Keywords: Chinese character font; digitization; development trend

The development of science and technology and the refinement of the division of labor in society have made it impossible to meet the gradual improvement of people's aesthetic concepts and the individual needs of social groups and commodities. In the digital age, emerging font designs have been widely developed and become an important means of communication. At present, the emerging Chinese character font design has gradually become one of the artistic expression forms of digital media and one of important commercial means. The humanistic demands of the digital era put forward higher requirements for the level of font design, and thus established the soul of font design, that is: the combination of emotion and function, and carrying rationality and intuition, the inheritance of national culture and the general audience in the digital era. Emotional appeal as the most important factor. The most important thing in the new typeface design is to keep pace with the times and to embrace all kinds of rivers, so that the design of Chinese characters is no longer closed, and emphasis is placed on open integration. Future font design will play the same important role as graphics and images^[1].

1. MULTICULTURALISM

The development of Western font design has been for hundreds of years, producing tens of thousands of fonts. The design of Chinese fonts has only been for decades, and only hundreds of fonts have been produced. With the popularization of information technology and digital technology, the trend of Chinese character font design integration into global integration will be an inevitable historical development. This kind of integration will be the penetration and combination of all aspects. It is no

longer limited to the Western characters that match the design of Chinese fonts. This combination of inside to outside, appearance to god will be a major subject worth studying. Although the design of Chinese fonts lags behind Western and Japanese scripts, it is inseparable, and the design method has many similarities. We can take its essence and remove its dross. There are basically two methods for the fusion of Chinese, Western, and Chinese. The first is to take the shape, extract the essence elements and integrate them into a pen shape corresponding to Chinese and apply it. In other words, only the form and charm of Western and Japanese are used for reference. The details may not correspond to each other one by one, but the style of the Chinese font created is consistent with it, and the effect of different songs with the same effect is difficult. In addition, the online language allows Chinese characters to be combined with various elements to form symbols with different meanings. As a difficult language to master in international communication, Chinese characters have many barriers to communication, but in the Internet age, graphical and pictographic characters can alleviate this difficulty. On the Internet, various abbreviations and characters are becoming popular. Some people believe that the language of the Internet is polluting the purity of Chinese characters. However, in the historical evolution of the text, it was originally a process with many qualities. Multicultural integration is a major feature of the development trend of the digital design of Chinese fonts^[2].

2. INTERESTING

Modern life makes people more and more stressed. In the process of daily memory, everyone's mental activity has obvious memory. Fun elements will have a positive effect on people's memory activities. Interesting is a characteristic, a feature that makes people happy and makes them very interesting. Interest is one of the important means of attracting attention, and it is also an important factor in the long-term memory and circulation of works of art. With the continuous development of human society and the acceleration of life rhythm, and at the same time being influenced by TV and the Internet, more designers no longer pay attention to the interest of font design, but simply express it directly and effect for effect. The font design should be concise, vivid and vivid in the process of conveying information, and the information carried should be released

immediately. If there is no strong interest, it is difficult to attract people's attention. In the fast-paced contemporary life, if the font design wants to attract people's attention for the first time to achieve further publicity, it must have a strong visual impact, make people unforgettable, and achieve a surprising victory. Through the longing for interesting life and the attention to the variable elements, font design injects vitality into people's lives. Font design gamified fonts through deconstruction and reconstruction, grabbed people's sight and psychology in form and color, and conveyed information while satisfying people's visual aspirations has become a new trend in font design^[3].

3. NATIONALIZATION

Western and Japanese and Korean fonts focus on injecting ethnic elements into the application design. The main purpose is to promote the national culture while promoting the economy. For example, the typeface used in the Obama campaign, the Gotham font, was inspired by the architectural and commercial advertising signs of the US Economic Center after the Second World War. These texts hand-painted by American grassroots people at that time represent the national spirit of the United States at that time, making the general election texts combine the sense of national mission of the United States and the modern civilization of the 21st century. Starting from history, Japan's Xinxitang focuses on the Chinese Song and Ming engravings, based on the Qing Dynasty Wuyingdian Juzhen movable type, or based on the fonts of Meihua and Mohai Library, in-depth study of font styles and characteristics of different periods, and exploring cultural charm. A large number of excellent fonts have been designed, and the printed version of Song is even accurate to the "Fujian System" and "Sichuan System" (that is, Minben and Shuben fonts). Chinese computer fonts are currently exploring this aspect of work, including the calligraphy fonts of the past dynasties, and digging out the essence of reproducing traditional culture and art, which are the expression of the nationalization of fonts. For example, Wenyue Technology's "Kangxi Dictionary Style", "Wenyue Ancient Style Imitation Song", Founder's "Qing Kebe Yueyong Style", etc. are all good fonts.

4. EMOTIONAL

As a language symbol, Chinese character fonts also have the function of carrying emotional color expression in the basic function of information transmission. It has a long history of expressing feelings through font modeling in the visual communication profession. Through the study of history, in the evolution of Chinese culture, the emotional expression of Chinese fonts mainly benefited from the writing tool of brushes, such as the evolution of various fonts such as Lishu, Kaishu, Cursive, Xingshu, etc., all based on the brush. Under the premise of a tool. Through the characteristics of flexibility, easy bending and easy change of the brush,

through the change of strength, rigidity, straightness, and thickness, the creator's changing emotions are fully expressed, and the font magically implies the information that needs to be conveyed. Cursive and running scripts are representative of the emotionalization of Chinese brush calligraphy. Through the writing of brushes, the Chinese characters as a whole show momentum, form, ink color and point painting, conveying the rhythm, charm and artistic conception of calligraphy. The emotional communication of ancient brush calligraphy is mainly determined by the personality characteristics of the creator and the psychological and emotional aspects at that time, and has a certain subjectivity. However, in the design of modern fonts today, the emotional expression of the font serves the emotional theme to be communicated. Mostly determined by the atmosphere that needs to be set off. With the development of science and technology, modern font design is no longer constrained by traditional writing tools. Digital tools have great creative space, which makes font design reach an era of creative explosion. Font design is no longer just a carrier of information, it also carries more functions of information transmission and emotional expression, becoming a graphic symbol.

5. PERSONALIZATION

Traditional font design concepts can no longer keep up with the rapid development of today's era. Modern font design requires creators to use a variety of personalized elements to win the affirmation of the font audience. The font design must not only satisfy the audience's aesthetics, but also be able to make the font conform to the characteristics of accuracy, simplicity, and fun in transmitting information and emotions. The font design has the following characteristics in terms of personalization: First, the breakthrough of the "normal" of the font, mainly from the perspective of the font style of the text, using comparison, simplification, exaggeration and other means to produce a variety of font shape changes, thus expanding the expression space of the font, forming a new font form and new font concept. Second, the most basic design language of font design is point, line, and surface. How to properly use these three elements to redesign the "normal" composition of the font is also one of the personalized means of font design. The third is that designers often use the "figure relationship" as a word game. A form, in a two-dimensional plane space, often produces a positive shape (text) and a negative shape (white background). The two are complementary to each other, forming a complementary and coexisting relationship, resulting in a conservative Space, which is an important element that can be used for personalized expression of font design. The fourth is to incorporate freehand artistic techniques in font design. These freehand, accidental, and inadvertent personalized forms have

brought some new elements to the font design, strengthened the personalized characteristics of the font, and at the same time surprised us. Fifth, in addition to the tools that can be bought in the traditional sense, we can also create more new tools. Different materials and tools make the expression of font design diversified and the ideas broad. Sixth, with the development of science and technology, font design can no longer just meet the needs of paper media, but must be applied to a wider media field. How to adapt font design to the development of technology is a major challenge in font design modeling and readability. The sense of time and the visual impact of digitization will still be more and more accepted by the times and widely used.

6. DIGITIZATION

The digital revolution has brought the development of font design to a new era. The development of typefaces around the world is exceptionally vigorous and prosperous. The number of typefaces has grown at an alarming rate. The promotion of digital technology has made it easy for anyone with certain computer use technology to design fonts, draw their own fonts, and typeface design. The threshold is gradually lowered. At present, even the simplest personal notebooks have software that can perform routine transformations and other operations on the fonts provided, such as some office software. Font design is no longer a profession or craft at this time, anyone can do it, just to a different degree. New technologies, new equipment, and new software are very popular, and some people who have a certain design foundation can easily design fonts. These were unreachable before the digital revolution. At the same time, there are drawbacks in the development of digitalization. The emergence of the Internet greatly facilitates the transmission of information. Now, the promotion and sale of Chinese fonts does not need to pass the traditional sales model. The Chinese fonts on many websites can be downloaded for free, without physical packaging, and without dealers. This has helped the operation of font development companies to a certain extent, and promoted the development of the Internet field, but on the other hand, the intellectual property rights of font design were not guaranteed. The font name can be changed at will through some professional font making software. Many illegal websites can even download the complete font and various fonts. The relevant laws are also not perfect, lagging behind the development of the Internet. Therefore, the digitization process of Chinese character design not only refers to the technical level, but also puts forward new requirements for the relevant legal systems. With the improvement of management, the intellectual

property rights for fonts will be further strengthened. As the market matures, crude fonts will be automatically filtered. With the growth of e-commerce, a healthy and vibrant digital font market is about to be established. On the one hand, it promotes the development of the font design industry, on the other hand, it will play a positive role in promoting the popularization of fonts.

7. CONCLUSION

In the digital era, we have deeply felt the rapid pace of technological development. Digitization has given the industry huge space for design. In the digital world, fonts have deviated from the actual font carrier and transformed into an abstract concept. Paper is a necessary carrier. In the face of new technologies, we are both passive and active. Digital technology is changing the way people get information in their lives. The popularity and development of Internet technology has made people frequently interact with virtual information. The font design in this virtual environment has not been encountered since the birth of the font. However, the reading requirements for font design are unchanged guidelines, and the most recognized fonts are still from traditional excellent fonts. Modern font design is using a world-wide visual language to make positive contributions to the development of economy and culture. The form of font design in the future will be of interest to everyone. What is certain is that no matter how quickly the technology is updated, the service object of the text will not change, and it will always serve the visual requirements of people for information. Regardless of the ever-changing form of font design, readability and legibility are the fundamental starting points of its design. Therefore, the core factor that influences the design of Chinese characters is people. Only by satisfying the basic conditions of serving people can we create excellent Chinese characters that meet the requirements of the times. The answer lies in our hands.

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

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

Key words: Home visits; impoverished College students; Qualitative research; Educational narrative

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

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

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

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

their universities to "measure" the growing environment and current situations of the impoverished students.

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

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

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

2. PRINCIPLES OF HOME VISITS TO THE IMPOVERISHED COLLEGE STUDENTS

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

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

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

that the visited students are faced with.

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

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

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

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

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

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

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

3.1. Shift of emphasis on how to help the impoverished college students

The impoverished college students, as a group of students of great concern in universities, are

accustomed to regarding the school aid as financial. In the past, the home visits were focused on material assistance, but the financial aid shouldn't be the core way to solve the growth problems of the students in poverty.

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

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

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

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

3.2. Significance of home visits to the aiding project in university

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

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

On the one hand, according to the different causes of poverty, the universities are able to divide the impoverished students into different types and guide

them in different ways. They can establish and improve the personal growth files of the impoverished students, make personalized training programs on the principle of "scientific guidance", conduct personalized psychological guiding, academic tutoring and material aiding according to their specific situation, so as to help the students achieve both mental health and academic progress.

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

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

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

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

Above all, the universities can establish a long-term relationship with the impoverished students' families, and pay attention to the situation of their families as well as the growth of the students. Then, the universities can establish a long-term relationship with the class to see that the impoverished students

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

4. CONCLUSION

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

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Research on the Narrative Space Creation of Current Chinese Animation Movies

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Abstract: At present, Chinese animation films are characterized by rich fantasy space imagination, beautiful image spectacle, diverse lens connection and scene conversion methods, and the integration of ethnic elements in the creation of narrative space. Compared with the past, there is indeed a lot of progress in the creation of the narrative space in the current Chinese animated films, but there are still many areas that need to be improved in terms of the narrative function of the space. How to create a perfect image space and better serve the narrative is an issue that animation filmmakers should continue to think about.

Keywords: current Chinese animated film; narrative space; shaping; narrative function

For an animated film, the creation of a narrative space is very important. It is not only an important stage for character activities, but also a necessary factor to promote the development of the plot. The real emphasis on the creation of narrative space in Chinese animated films began with the "Chinese School" that emerged in the late 1950s. The "Chinese School" animators are committed to the exploration of the nationalization of Chinese animation. They have widely absorbed various traditional national artistic elements and used them in space shaping, creating an animated film with distinctive national characteristics, which has won widespread praise at home and abroad. Since then, with the decline of the "Chinese School", the creation of Chinese animation films has fallen into a downturn. The advent of the 1999 animated film blockbuster "The Lotus Lamp" seems to mark the revival of Chinese animated films, but its tendency to imitate too much of American animation has been criticized by people, and the shaping of space is also extremely rough. Moreover, it is from this film that Chinese animation films gradually entered a situation where they are less influenced by national traditions and more influenced by American and Japanese animations. In recent years, with the continuous efforts of the Chinese animation industry, Chinese animation film production technology has advanced by leaps and bounds, and the narrative space has been greatly improved, and has some of its own characteristics,

but the shortcomings are also obvious. This article mainly analyzes the characteristics of current Chinese animation films in narrative space shaping and some shortcomings, and puts forward development suggestions.

1. THE CHARACTERISTICS OF THE CURRENT CHINESE ANIMATION FILM NARRATIVE SPACE

1.1 Rich fantasy space imagination

At present, the creation of narrative spaces in Chinese animated films is first manifested as imaginative and rich fantasy. There are erratic oceans, dangerous deserts, unpredictable islands, vast and charming spaces, and various mysterious and mysterious spaces. Unreal world of colors, etc. For example, "Gui Bao's Laughing into the Universe" tells about the super genius Gui Bao who has been whimpering all day and taking his friends to take the "laurel" spacecraft to venture into outer space and participate in the "top of the universe". The story of "Robot Invitational Tournament", the scene here includes the magical city of Blue Whale on Earth, Guibao's science fiction laboratory, the mysterious universe in outer space and the outer planet Kimi Star. The story of "Quinta Box Story" takes place on the arid Peanut Planet, telling the naughty child "spinach" to follow the call of Kunta, to explore the desert with the good friend milk bubble, and save the desert town "Baraboo". Stories, here are the magnificent desert, the strange Black Magnetic Valley, the strange Benbang Mountain and the horrible mechanical monsters. "Submarine Story" tells the story of two small submarines, Babe and Ali, overcoming difficulties in the sea and successfully completing a series of tasks under the guidance of trainer Dao. The film shows the beautiful harbour and the wonderful underwater world. The imagination system of "Queb" is extremely large and complicated. The place where the whole story takes place is established by setting a world view different from reality: in the "Yuanjing realm" composed of "veins", there are wood, water and fire. The four realms of Tu and Tujia plus a celestial realm, each faculty has its main god; there are divided into the tree country, the beast country, the merchant country, the snow country, the night

country, the sea country, the wind country, the sand country, and the dragon country. , Wing country, insect country, etc.

The boundaries of the eleven countries live in many races with different forms, habits, and customs, and in the Lingshan Stonehenge of the boundaries, there will be an extremely powerful life--Quibal every 333 years. In addition, "Dream Back to Sands City" combines the real scene with the illusory space through a traversing style, telling the story of the little protagonist Xiaolong crossing the time and space from the real world and returning to the ancient country of Jinsha. ^[1]; "The Pleasant Goat and the Big Big Wolf" will arrange the space in the animal body, telling that the old snail of the slow sheep goat village leader has fallen ill, and the lambs sneaked into the snail to destroy the germs and fight with the gray big wolf who entered simultaneously. s story. In short, the current creation of the narrative space of Chinese animated films can be described as unstoppable and full of imagination: there are science fiction, fairy tales, legends, dreams, traversal ... and the universe is large, and the flies are small. Show. Many colorful scenes compete on the screen and attract the attention of the audience.

1.2 Beautiful image wonders

The rapid development of animation technology allows current animators to flexibly use various technological means to create exquisite pictures, presenting audiences with beautiful image wonders. For example, "Dream Back to Sands City" depicts various buildings, interior furnishings, and external landscapes in reality very delicately, and depicts the ancient country of Sands very beautifully, even the famous Japanese animation company-Miyazaki leads The Ghibli studio staff praised them after watching. ^[2] "Quinta Box Story" is a miniature model created from doors and windows, chairs, hanging tables, treasure chests, and bottles and cans on the shelves, which is reduced by 60 times the normal thing. Its picture Realistic rendering, the overall 3D effect is comparable to the top Hollywood blockbuster. "Gui Bao's Laughing into the Universe" has also made great efforts in the setting of the scene. The blue whale city of the earth city is designed to be beautiful and realistic, and the "laurel" spacecraft rushing into the sky from the roof and the magnificent space The landscape, the vast digital ocean on Jimmy Star and gorgeous multi-dimensional images, the cool robot contest and the high-tech ring are all embodying the extraordinary imagination of the creator. The first few installments of the "Sail" series have been very dazzling in the design of universe, space, underwater world, desert, forest

and other scenes. In the fifth "Rise of Thor", the narrative space was transferred to the city, and the whole film was also adopted. More than 300 special effects shots render intense battle scenes; at the same time, the more realistic muscles and hairs given to the characters make them appear more real and imposing when interacting with large scenes. "Qin Shi Mingyue's Dragon Miles" is also very meticulous in its portrayal of the majestic desert and Loulan Kingdom, and the scene of a large number of dry fish rumbling in the desert is spectacular. The special effects of "The Return of the Holy Journey to the West" is the best in the domestic 3D animation. Its scenes are beautiful and beautiful. The market towns, rivers, forests, mountains, etc. are all extremely realistic, and the picture level is very rich, which makes people personally present. The sense of its environment. In addition, the exquisitely produced pictures such as "The Rise of the Warriors of Quebec", "Bear Infested Snow Ridge Bear Wind", and "Time Box for Submarine Story" are also praised by the audience. The current extensive use of advanced technology in Chinese animated films has greatly improved the aesthetic quality of their pictures, making them both stunningly large scenes and breathtaking detail settings, which can bring a strong visual impact to the audience^[3-5].

2. THE DEFICIENCIES AND IMPROVEMENT STRATEGIES OF THE CURRENT CHINESE ANIMATION FILM NARRATIVE SPACE

2.1 The shortcomings of the current Chinese animation film narrative space

First of all, this shows that most films pay more attention to technology than the narrative in shaping the narrative space. Adapting to the current mainstream of world animation film production, Chinese animation films are competing for large-scale 3D production. The use of new technologies will undoubtedly bring extraordinary visual enjoyment to the audience, but the ultimate purpose of the use of technology is to serve narrative and shape the space. It is also to provide a better display stage for character activities and plot development. John Lasseter, chief creative officer of Pixar Studios, once said: "Technology changes every moment, but it is not the technology itself that can entertain the audience. The key is how you use technology to entertain the audience." Current China Animated movies are based on Hollywood animation blockbuster in space shaping, but they have not grasped its essence. The dazzling picture can not cover the short board of narrative. For example, it is also about the theme of Chinese martial arts. "Legend of the Rabbit" is obviously not as good as "Kung Fu Panda" in integrating

space into the narrative; the same is the performance of the seabed adventure. "Submarine Story" is obviously not as good as "seabed" in using space to promote the plot general mobilization". Secondly, some animated movies still lack the necessary detail support in space shaping. Details, especially life details, are important means to improve the presence of characters and increase the authenticity of the scene art. American and Japanese animated films are particularly good at setting a lot of vivid details around characters. They can often catch the tiny things that are common in people's daily lives, such as a ray of light breeze, a leaf, a white cloud, a river and a passerby. The shop signs, etc., are portrayed inadvertently, but the audience can feel the connotation contained in it. At present, Chinese animation movies are far from enough in this respect. Animation creators do not seem to pay attention or are not good at using some spatial details to help narrative, often portraying only thick lines, and some people still feel it even if the picture is finely made. It's stiff and lacks a sufficient sense of life, as is the case with the "Pig Pig" series and the "Xi Yang Yang and Big Big Wolf" series. Third, the lack of deep space modeling, deep space here includes psychological or emotional space, symbolic space, and artistically rich space, and so on. Shaping the deep space can give the picture "outside the image, outside the scene", which is an important means to improve the connotation of the picture. Whether it is a classic animated film from the United States and Japan, or an excellent animated film from the "Chinese School", it focuses on the creation of deep spaces. American and Japanese animated films are good at using space modeling to reflect the character and psychology of characters, and rendering a certain atmosphere. The "Chinese School" animated films are good at using space to create a poetic mood. Although the current Chinese animation film has greatly improved the technology of space modeling, the picture is more dazzling and more realistic, but its connotation and artistic conception have disappeared. The space shaping of most animated movies is only satisfied with providing a background for character activities, lack of emotional infiltration, and lack of artistic conception. On the whole, in terms of shaping the narrative space, the current Chinese animated films not only lack the American atmosphere and Japanese finesse, they are not as good as the excellent animated films among them. They are closely linked, and they also lose the uniqueness of the exquisite display of national characteristics in traditional Chinese animation

films.

2.2 The improvement strategy of the current Chinese animation film narrative space

At present, to enhance the space narrative function of Chinese animation films, at least the following aspects should be taken into account: first, animation films are narrative through the picture, creators express their narrative intentions by creating image spaces, and audiences reconstruct the images Space to understand the meaning conveyed by the picture. The animation image space is the medium through which the creator influences the recipient and communicates with it. Therefore, current Chinese animation creators should focus on narrative and strive to improve their ability to tell stories through pictures. With the development of the audience's appreciation level, animators use a lot of advanced technology to improve the aesthetic quality of the picture, but the application of technology should first be to strengthen the expressive ability of the image space, so that the audience can better understand their narrative intentions. Pixar Studio, which has the world's top animation production technology, always insists on putting the narrative first, and their classic animation videos such as "Toy Story", "Undersea Story", "Robot Force", "Flying House Travel" and so on. It is to create a perfect space to convey its wonderful storyline. The purpose of Pixar's continuous development of new technologies and new software is also to make the space better integrate into the narrative and become an important means to promote the development of the plot. The "22 narrative secrets" released by his director and director Emma Coats has important implications for Chinese animators. Secondly, the creation of narrative space must have inherent rational logic. Reasonable logic here includes both logic of affairs and emotion, as well as logic of imaginary world development. For those animated films that are adapted from historical stories, they must have certain logic in space shaping. From the background of the times, architectural homes to character costumes, props, etc., we must pay attention to accuracy, try to be as accurate as possible, and not take it for granted or deviate from history Reality; and for those animated films that gallop in the kingdom of imagination, the space shaping should also conform to the logic of emotion or the logic of fantasy world development. Logic is the foundation of the animation film space. Only logic can bring the audience a sense of inspiration and let them feel the same while enjoying the movie. Thirdly, the current lack of vitality in the creation of narrative space in Chinese animation films is

often due to the fact that the animation creators do not pay attention to the creation of the space, or focus on the composition, and ignore the relationship between the scenes, and The interactive relationship with the actions of the characters, resulting in carefully constructed scenes that exist outside the narrative. Therefore, animators should consider the visual meaning of each macro scene and micro details when shaping the space, and combine it with the plot to interact with the character's behavior and jointly promote the narrative. It can be said that the creation of the narrative space is a systematic project. It is necessary to deal with the relationship between the overall characteristics and the style of each part, as well as the relationship between the space setting and the activities of the characters and the development of the plot.

3. CONCLUSION

In the animation movie narrative, character activities and plot development are inseparable from a certain spatial environment, each object maintains a certain form of spatial relationship, and the transformation of its scene is also the transformation of space. Therefore, the narrative of an animated film is inseparable from the shaping of space. On the other hand, the shaping of the animated film space can not leave the narrative. The shaping of the space can only be supported by the narrative, serving the space for the narrative, and it will not make people feel empty. A successful animated film must have fresh story ideas and exquisite video presentations, and fresh story ideas can only be expressed in full swing with the superb space shaping skills in the images, so as to more effectively communicate to the

audience and enable them to obtain Good aesthetic enjoyment. At present, China's animation film production technology is becoming more and more mature, and the methods of narrative space shaping are becoming more and more diverse, but how to shape a perfect image space and better serve the narrative is an animation film maker should continue to think problem.

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New Thoughts on Ideological and Political Education of College Students in the New Media Environment

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Abstract: Under the new media environment, society has a higher demand for the comprehensive ability of ideological and moral talents, so colleges and universities should pay attention to the effective cultivation of college students' ideology and politics. Ideological and political education workers should give full play to the role of the new media platform, create a better learning environment for students, improve the comprehensive level of ideological and political education in schools, and cultivate high-quality talents for the society.

Keywords: new media environment; college students; ideological and political education

1. INTRODUCTION

New media is an important driving force for social development. In the ideological and political education of college students, colleges and universities should make full use of the advantages of new media technology and innovate educational methods, so as to promote the effective improvement of ideological and political literacy of college students. Ideological and political education workers should take students as the main body of education, actively reform traditional education concepts, meet the more learning needs of contemporary students, and realize the comprehensive development of the ideological and political education of college students^[1].

2. THE STATUS OF IDEOLOGICAL AND POLITICAL EDUCATION OF COLLEGE STUDENTS IN THE NEW MEDIA ENVIRONMENT

The quality of ideological and political education of college students has always been the focus of national attention. With the advent of new media, it has brought new opportunities and challenges to ideological and political education. At present, there are still some problems in the ideological and political education of college students, which affects the improvement of teaching quality and needs to be paid attention to by colleges and universities^[2].

2.1 The formalism is obvious

College students generally pay more attention to employment issues, and schools also pay more attention to the improvement of students'

professional and technical capabilities, so they do not pay much attention to the study of ideological and political courses. At present, the school teaching focus is generally on professional courses, and the emphasis on ideology and politics course is not enough. It is gradually changing to a form. They are almost to deal with the inspection of leaders. There are many theories on the content of ideological and political courses. Teachers have insufficient cognition of ideological and political education, so the teaching content is relatively traditional, and the overall teaching efficiency is not high, which is not conducive to the improvement of students' quality. In the view of some ideological and political education workers, education in this area has little effect on the future development of students, so I think that ideological and political education is just a form, and will not spend more time and energy on ideological and political education. This kind of cognition affects the level of students' future development. Especially in the new media environment, society needs not only technical talents, but also talents with high ideological and moral qualities, in order to promote the effective development of society.

2.2 Teaching methods cannot stimulate students' interest in learning

At present, in the ideological and political education of college students in China, the educational philosophy of educators is still relatively old-fashioned. The teaching mode of "teacher speaking, student listening" is adopted in the classroom, ignoring the student's dominant position.^[1] Because the ideological and political education methods and content are single and traditional, it is difficult to meet the learning needs of contemporary students. While, the classroom teaching atmosphere is relatively boring, which is not conducive to students' deep understanding of the ideological and political content. Although the teachers will use multimedia equipment in teaching, the content of teaching is still conservative, and the teaching model lacks innovation. The simple teaching of courseware shows that teaching tasks cannot be achieved, and more ideal teaching results cannot be achieved. In the ideological and political teaching classrooms, the teaching methods are not innovative. Students

often cannot concentrate on the content of learning. They whisper, and play mobile phones in class, which seriously affects the teaching effectiveness.

2.3 The content of education has not kept pace with the times

Under the new media environment, China's society has developed rapidly, but the content of China's ideological and political education is still lagging behind. It has not kept pace with the times obviously. College educators have more traditional education ideas, without timely innovation and transformation of teaching. It will make the teaching content inconsistent with the development needs of contemporary society, and thus limit the improvement of the overall quality of college students. Nowadays, information is updated rapidly. If ideological and political educators are unable to provide teaching guidance with the times, they will not be able to play a greater role in education, and students will not be able to learn new policies and concepts in the first time. The need of students can't be met.

3. THE NEW PATH OF IDEOLOGICAL AND POLITICAL EDUCATION OF COLLEGE STUDENTS IN THE NEW MEDIA ENVIRONMENT

Under the new media environment, all colleges and universities must innovate ideological and political education concepts, increase the emphasis on ideological and political education for college students, and improve the deficiencies in traditional education in order to cultivate a group of highly capable talents with comprehensive quality for the society.

3.1 To change education concepts and focus on student subjectivity

The ideological and political education workers of college students should firstly change their ideas ideologically, continuously optimize the form and content of education, implement effective education around students, and promote the smooth transformation of ideological and political education. Ideological and political teaching teachers should take students as the main body, improve the classroom teaching model, improve the cultivation of college students' independent learning ability, stimulate students' enthusiasm for learning the courses, and then reach the teaching goals. Ideological and political education should integrate the superior forces of the new media era, transform traditional and conservative educational ideas and forms, innovate ideological and political education methods, give full play to the greater and most useful technology education, and meet the learning needs of contemporary students to a greater extent. Ideological and political education should highlight the subjectivity of students, seize the individual characteristics of contemporary students, and provide more targeted education guidance to

students, which can help to mobilize students' subjective consciousness, and then continuously optimize their ideological and political abilities in life practice. Ideological and political education workers should actively communicate with college students, deepen their understanding of the needs of college students, help college students construct a correct outlook on life and world, and play an important role in promoting the more stable development of students in the future, so that students can truly participate in and cooperate with politics education career.

3.2 To optimize educational resources and broaden educational positions

The ideological and political education of college students should stand at the forefront of the times, pay attention to the effective integration of traditional education resources and network resources, and provide students with better education and teaching services. Schools need to create online courses around ideological and political education, give full play to the advantages of Internet, and mobilize students' enthusiasm for learning, which can improve the dullness of traditional classrooms and improve teaching efficiency to a certain extent. The school should create a healthy and safe online learning environment for students, and publish some excellent resources on the relevant learning website, such as excellent cultural works and classic works, to strengthen students' understanding of the core values on Marxism. In addition, the space limitation can meet the learning needs of students. In the new media environment, all colleges and universities must effectively integrate network resources, strengthen the information service function of ideological and political education, provide students with high-quality learning materials and teaching content, and effectively achieve resource sharing.^[2] At the same time, the content of ideological and political education can be fully integrated in the campus culture construction to create a better living environment for college students, so that students can be guided by ideological and political education in an invisible way, and then promote ideological and political education level effectively.

3.3 To improve teacher and student media literacy and innovate educational methods

If ideological and political education wants to fully integrate the new media environment, the media literacy ability of teachers and students should be improved to ensure that the modern methods in the education link are given greater play. College students should consider their own future development and actively update their own learning systems so that they can master modern technological capabilities, which can help improve students' ability to learn independently, make better

use of modern media platforms, and better realize ideological and political learning. Schools should also pay attention to the effectiveness of media literacy training. They can set up media literacy-related courses and integrate ideological and political education into it, so that students understand that media literacy is of great help to better study the content of ideology and politics, and help realize the thinking education. Ideological and political educators should innovate their ideas, continuously improve their educational capabilities, flexibly adopt educational methods to improve teaching quality, clarify the responsibilities of "political leaders", and provide students with better quality teaching services. Ideological educators must fully stand in the perspective of students, and can use the online language expressions of students' interest to attract their attention, gain a deeper understanding of students' learning situation and needs, and fundamentally innovate educational methods to win students' trust and support, and seize the initiative in the field of education.

4.CONCLUSION

In summary, under the new media environment,

ideological and political education workers need to keep pace with the times, seize new opportunities for innovation and development, improve the deficiencies in education, and effectively improve the comprehensive education level. All colleges and universities should fully integrate new media technology and ideological and political education to stimulate students' interest in learning, create a good learning environment for students, improve students' ideological and moral qualities, and achieve the ultimate goal of ideological and political education.

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Revitalizing Value of Humanities in the Twenty-Four Solar Terms: Through Visual Design, Liaoning Province, China

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Abstract: The system of “Twenty-Four Solar Terms” (TST) is an order of seasonal solar orbit being used in the Chinese traditional calendar to understand nature and regulate local festivals to their way of life. It is ancient intelligence for more than 2000 years of harmonious living with nature, which reflects value of humanities in philosophical art of living. However, its time-guide function in modern Chinese calendar has gradually lost its importance because modernization in the recent decades has changed people’s lifestyle. Several terms are still used for some popular festivals, e.g. Qingming (Pure Brightness) and Dongzhi (Winter Solstice), however other terms are ignored by modern Chinese society. Although UNESCO submitted it to be intangible cultural heritage of mankind in 2016, which could be a turning point and opportunity to promote it, many Chinese people are still unaware of its traditional importance. Investigation into its cultural loss and possibility of revitalization in the educational field has been carried out in Liaoning Province of China by using questionnaires to understand its familiarity and retained cultural inheritance practices. The target groups contain students, parents, teachers and general population. The results show that 84 % of sampled young individuals were willing to learn and inherit it, while 41% of sampled parents were willing to participate in parent-child activities. Furthermore, almost all of sampled target group supported incorporating it into education. The results also confirm that children are interested in the system of TST, which could be transformed into various lessons through visual communication design.

Keywords: Twenty-four solar terms, Intangible cultural heritage, cultural revitalization

1. INTRODUCTION

The Twenty-four solar terms (TST) are an ancient Chinese system of relational management between man and seasons for agricultural time and other daily lifestyles reflecting the crystallization of wisdom created by the ancient Chinese. For more than 2000 years, the system has been widely used in agricultural production and daily life in China. As a unique time knowledge system, the “TST” is a typical representative of Chinese culture which affects all aspects of people’s lives. In addition, several important festivals are closely related to the TST.

However, with the arrival of China's industrial and information technology era, modern Chinese lifestyles have been rapidly changed by globalization trends. People are getting farther from nature, and rather abandoning the TST. Some scholars believe that there are some problems in the survival and inheritance of the TST today^[1]. The TST have no survival crisis in traditional society, but now they have problems in modern society and has now become an intangible cultural heritage that need to be consciously protected^[2]. Due to the influence of Western civilization, the relationship between TST and people's lifestyles has gradually become alienated, and people's understanding of TST has become more and more superficial, even near zero. On November 30th, 2016, the TST were announced in UNESCO’s list of Intangible Cultural Heritage. This is a right time and important turning point in revitalizing the TST in public space^[3]. The announcing reflects that the TST still have certain cultural significance and social functions in modern society.



Figure 1. The name of twenty-four solar terms in Chinese

01. Feb 04	Li Chun	Spring begins
02. Feb 19	Yu Shui	The rains
03. Mar 06	Jing Zhe	Insects awaken
04. Mar 21	Chun Fen	Spring Equinox
05. Apr 05	Qing Ming	Pure Brightness
06. Apr 20	Gu Yu	Grain Rain
07. May 06	Li Xia	Beginning of Summer
08. May 21	Xiao Man	Lesser Fullness of Grain
09. Jun 06	Mang Zhong	Grain in Beard
10. Jun 21	Xia Zhi	Summer Solstice
11. Jul 07	Xiao Shu	Lesser Heat
12. Jul 23	Da Shu	Greater Heat
13. Aug 08	Li Qiu	Beginning of Autumn
14. Aug 23	Chu Shu	End of Heat
15. Sep 08	Bai Lu	White Dew
16. Sep 23	Qiu Fen	Autumn Equinox
17. Oct 08	Han Lu	Cold Dew
18. Oct 24	Shuang Jiang	Frost's Descent
19. Nov 08	Li Dong	Beginning of Winter
20. Nov 22	Xiao Xue	Lesser Snow
21. Dec 07	Da Xue	Greater Snow
22. Dec 22	Dong Zhi	Winter Solstice
23. Jan 05	Xiao Han	Lesser Cold
24. Jan 20	Da Han	Greater Cold

Figure 2. Twenty-four solar terms time-table in 2019. As they are practiced today, the TST system gradually lost its original functions in high-speed modernization process. This cultural situation has become a controversial topic, bringing us severe challenges in cultural heritage. Some people questioned and some people agreed that, as the TST is for farming time, there is no need to “protect” them as long as the countryside is still there to do agriculture, the solar terms will not die^[4]. We should consciously pass on the TST, respecting natural time and the rhythm of life^[5]. Although inheritance of the TST system has received more and more attention in academic fields, its popularity in Chinese cultural studies is still at a low level of perceptual knowledge because of the lack of government attention, and new forms of cultural exchanges making young people lost their interest in preserving and continuing practice the TST. In recent year, however, modern Chinese people begin to realize increasingly that “forgetting” is not always terrible, but “losing” thoughtful culture of the TST is a headache. Losing medium of time between man and nature for the righteously seasonal cultivation, such as the TST, is what to be worried in modern society. The successful promoting the TST to be intangible cultural heritage of UNESCO encourages many experts and scholars to pay attention in studying the TST. These experts and scholars are mostly sociologists, folklorists, but art educators are rarely dealing with this topic. It is clear that there are still more rooms for art educators creating their visual designs to educate the young

generation.

In today's society, is it necessary to educate the TST in school? If so, who will be the key target of inheriting this cultural heritage? In what way is it effectively passed on? As an art educator who pays attention to Chinese culture, the author hopes to understand the situation of Chinese people's knowledge about TST through questionnaire surveys, especially among young people. Based on the above reasons, the research team designed a questionnaire on “inheritance and cognitive levels of the Twenty-four solar terms in modern society”. The survey was conducted in Liaoning Province, China, and two questionnaires were designed for students and parents to select respondents by random sampling. The conclusions show that 72% of the sample population knows some names of the TST, but they do not understand their characteristics and customs; 33% of the sample population believes that most of the young people were growing up in the information age with lacking intimacy to land and nature. It was one of the factors that made the TST difficult to be inherited. 42% of the sample population believes that the task of inheriting the TST should focus on the school. 98% of the sample target groups support distributing the TST as a cultural event in the school. Schools are the educational base that bears the responsibility of cultural communication. It plays a cultural communication role in modern society. Offering the TST in school will encourage students to effectively practice Chinese cultural heritage.

The TST is a system of seasonal management for agriculture, folk activities, and festivals on the basis of the Taoist philosophy of “Unity of Heaven and Man”. Children are the sons of nature, and the TST is nature's time order and guidance of life. Children learn the TST from an early age, and when they grow up; they will consciously respect the time rhythm of nature and do something meaningful to humanity, the natural environment, and society. Children can perceive natural time order while learning the TST. Learning and mastering the TST can free children from mechanical time and enjoy the natural time. Researching on the TST in the educational field is not only a contribution to Chinese children but also worldwide children.

2. LITERATURE REVIEW

2.1 What is the TST?

The annual cycle is the basic characteristics of natural time^[6]. Ancient Chinese used Yin and Yang to summarize the seasonal changes from winter to summer in the year. This is an intricate system incorporating both solar and lunar patterns. The length of the month measured by the moon phases is the “Yin” calendar, while the length of the year measured by earth's orbit of the sun is the “Yang” calendar. Together they form the twenty-four solar periods.

As seen in Figure 2, the Chinese calendar is shown in 360 degrees. Each fifteen-degree section is one solar term. Two of these solar terms correspond to one international calendar month. The moon phases can also be shown in degrees, see figure 3.

Fundamentally speaking, the TST system is based on accurate observations and understanding the law of solar cycle changes. Ancient people invented this system to engage their life with nature because most of them were farmers who planted in the spring and harvested in the fall. As the change of seasons is very important in agriculture, they observed and investigated the relationship between seasonal change and astronomical movement to create the TST system which was used to manage their annual agricultural time, especially for sowing and harvesting. The TST are used to reflect changes in the four seasons, temperature, rainfall, phenology, etc. This is a summary of the experience of the ancient working people in China in the farming season and is an important part of the Chinese traditional calendar system and its related practical activities. Concept of the TST has affected the life of Chinese people for more than 2,000 years since its origin.



Figure 3 Phases of the moon orbiting around the earth.

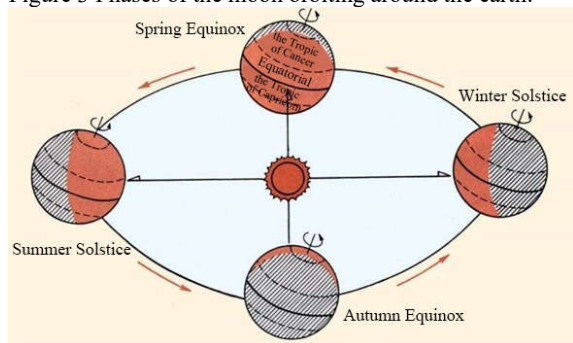


Figure 4 The earth rotates around the sun for a return year.

2.2 Cultural Situation of the TST

As the TST system is the knowledge of time management between solar movement and human activities in year-round, it played historically an important role in many cultural aspects, e.g. agricultural production, national affairs, and traditional lifestyle. Because of social changes in modernization, the TST are facing a survival crisis

and need to be seriously protected.

Modern Chinese social structure has a trend to change from agricultural to industrialized societies within the acceleration of urbanization process. People respond and accept precisely modern measurement of time, and almost neglects the relationship between seasons and the solar terms. After the founding of the Republic of China, the use of Chinese traditional calendar was replaced by the Western Gregorian calendar, the recent official calendar of the republic.

Although the TST system is still retained in the national almanac issued by the government, its cultural importance has significantly dropped in the field of modern agricultural production and lifestyle. This phenomenon makes the cultural role of the TST be nearly forgotten. Its function in daily life is no longer outstanding. It seems that every cultural aspect is being reduced or lost. For example, function as the time markers is greatly reduced; using the time node for national custom is completely lost; traditional activities have been greatly reduced; function as agricultural guidance is evidently decreased.

However, it was recently selected as the UNESCO Representative List of Human Intangible Cultural Heritage on November 30th, 2016 [7]. This is an important event in the history of its development, and it is also a turning point in revitalizing the TST system to the modern history of humanity. As soon as the good news came out, it immediately caused widespread concern. The Chinese Ministry of Culture said: "The success of project declaration is not the end of the mission, but it is just another milestone in the work of non-legacy protection"



Figure 5. China's TST guide agricultural production. The picture shows the Grain in Ear solar terms (It is the 9th of the 24 solar terms, June 5, 6, or 7, the end of the grain-growing season and the last chance for sowing)

2.3 Application of TST in other fields

Although the role of the TST in agricultural guidance has been reduced, their values are still preserved and inherited in other fields, e.g. traditional medicine and education. Chinese traditional medicine deals significantly with the relationship between man and nature. The earliest medical book "Huangdi Neijing"

records that People's health communicates with heaven and earth. Changings of seasons, day and night, as well as geographical environments, have an influence on one's body.

The most distinctive feature in this classic book is the "Solar Qi" which is considered as the echoes of the TST being used in clinical diagnosis and treatment. The human body can feel changes in nature in forms of solar and lunar movements, seasonal changes, cold and warm temperatures as well as the philosophical concept of the Ying and Yang. They, therefore, must understand these changes to adapt their lifestyle for suitable longevity as "NeiJing" emphasizes that people must adapt themselves to live in seasonal transition for their quality of health and longevity. On the other hand, if people neglect to understand and adapt themselves to live harmoniously with nature, their bodies will feel uncomfortable and prone to illness.

In the field of education, Tianyi Middle School in Wuwei City, Gansu Province, carried out cultural activities introducing the TST concepts through farming and harvesting experiences. The activities aim that students understand how the TST guide farming activities. Through the activities, students learned about the origins and legends of the solar terms as well as lessons of agricultural activities that are related to the solar terms. Through participation in the TST, the students really understood the function of the TST and recognized the importance of the Chinese traditional calendar.

3.METHODOLOGY

The discipline of this study is based on "cultural consciousness" proposed by Fei Xiaotong who is a famous sociologist and the first one to propose this concept in the second high-level seminar on sociocultural anthropology held in 1997. "The concept deals with phenomena of cultural self-awareness and self-creation occurring among different cultural groups which are facing cultural conflicts. Cultural consciousness is also a kind of cultural accumulation, which provides the potential for the development and creation of culture." With the discipline, the authors aim to test and analyse people's cultural consciousness about the TST in three steps: 1) situation of people's cognition, 2) situation of people's inheritance, and 3) people's expectation of revitalization.

The regional target of this study was Liaoning Province, north-eastern China, where agriculture has been the primary industry since ancient times. Historically, the TST has not only guided farming practices, but also cultural practices such as the origin for household names and the twenty-four festival songs. While it is true that elders can still sing the twenty-four festival songs, the new generation is no longer able. It is obvious that at present the loss of TST culture is great in Liaoning Province.



Figure 6. Map of Liaoning Province, China.

To obtain data on the cultural consciousness of modern society in Liaoning, this project uses a combined method of questionnaire sampling and in-depth interviews, and the target group is composed of students and their parents in the target area. Data collection has been carried out by surveying opinions of the target group about their cultural consciousness in the TST. The questionnaire survey was chosen as the tool for receiving the raw data. Five hundred questionnaires were randomly asked the target group, and two parents were chosen for in-depth interviews. As a result, the survey conducted questionnaires for different areas, different ages, different educational backgrounds, and different occupational groups. This questionnaire survey was completed by our team composing of six members: one university teacher and five undergraduates.

The questionnaire entitled, "Cognition and Inheritance Levels of the Twenty-Four Solar Terms in Modern Society" was completed in June 2018. The questions compose 1) the level of awareness and inheritance of the TST in contemporary society, 2) parents' attitudes towards family education and public education, and 3) what responsibility and expectations are assumed by the school as an educational base. All questionnaire data were checked and verified by the research team, and results were transferred into statistical display for analysing percentages of the target group's characteristics and cultural opinions dealing the TST.

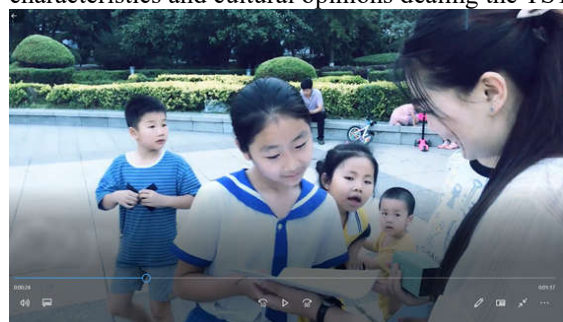


Figure 7. Questionnaire survey conducted among students in Liaoning Province, China

4. RESULTS AND ANALYSIS

According to the total questionnaire of five hundred, 438 were valid responses. The result of this questionnaire includes responses of 176 males and 242 females, both of which have an age range from 8 to 60 years old. Among these respondents, there are

4% from primary schools, 46% from junior high schools and high schools, 48% from junior colleges and undergraduates, and only 2% from masters and above. The regional distribution shows that 68% of the target group live in central urban areas, 22% live in urban and rural areas, and only 8% live in rural areas. Occupations of the parents in the target group included unit leaders, private business owners, Employees of Government Institutions, hired employees, self-employed persons, as well as unemployed, retirees, housewives, etc.

4.1 People's Cognition

4.1.1 Cognition level of elders is higher than that of the young generation: According to the perspective cognition, elders have a level of cognition about the TST higher than that of young people. China used to be an agricultural society, and Liaoning province was a big agricultural province. Most families had rural backgrounds. After China resumed the college entrance examination in 1977, many young people migrated to urban areas for work and study, leaving the countryside gradually and resettling in cities. Therefore, people born before 1970 were generally more aware of the TST. This group of people can clearly remember the time order of solar terms and understand their specific dates and characteristics. Most of them can still sing the TST song. On the other hand, young people know some names of the solar terms but do not understand their characteristics and customs. Moreover, most cannot remember the time order of the solar terms and cannot sing the solar terms song.

4.1.2 Cognition level of educated people is higher than that of comparatively lower ones: The difference in educational levels was found to relate to the cognition of the TST. People from higher education had a better capability in understanding the roles of the TST in cultural situations. The degree of education also determines that social roles are different from living educational concepts are different, and preference for traditional culture is different. Therefore, the proportion of education in the study population has a great influence on whether the TST can be transmitted and accepted in the population. Because the proportion of people with higher education levels is larger, the probability of traditional culture spreading and being accepted is relatively large.

4.1.3 Cognition level of the current situation of the TST in UNESCO is moderate: Most people do not know that the TST is now a world's intangible cultural heritage; only 40% of the target group knew the status. The result shows that people have little understanding of the historical and cultural values of the TST. In fact, being rated as intangible cultural heritage is an important turning point in its revitalization. Perhaps the government has not promoted the TST enough.

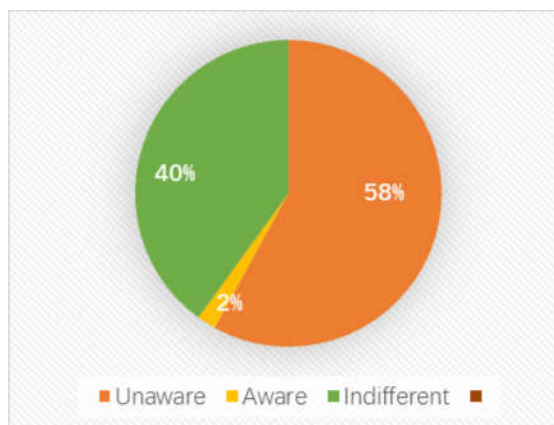


Figure 8. Percentage of respondents that aware of the acceptance of the UNESCO acceptance of the TST as an intangible world heritage.

4.1.4 Cognition level of perception of the TST is not high: According to the question, "Are the TST solar or lunar calendars?" only 22% of the respondents were correct, 6% of them were unclear, and 72% of them confused it with the lunar calendar.

In fact, the TST is the solar calendar in the traditional Chinese calendar. It is a knowledge system and social practice formed by the Chinese to observe the sun's yearly movement and to recognize the changes in the seasons, climate, and phenology of the year. The ancient Chinese divided the trajectory of the sun's movement into 24 equal parts. Each equal part is a "solar term," collectively referred to as "TST." The lunar calendar in astronomy mainly refers to the calendar arranged by the cycle of the moon around the earth.

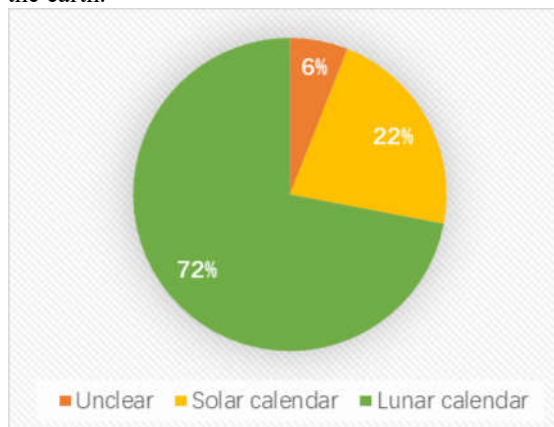


Figure 9. Percentage of respondents that believed the TST were based on solar or lunar calendars.

4.2 People's Inheritance

4.2.1 Strong sense of inheritance is moderately high: Strong sense of inheritance is moderately high: Although the TST have gradually moved away from people's daily life, the target group still has a strong sense of inheritance. According to the question, "Should the Twenty-four Solar Terms be inherited?" 66% of the target group believed that the TST has a huge impact on the lifestyle of Chinese people and the terms should be passed on to the next generation.

However, 30% of the target group believed that the TST has little impact on the modern lifestyle, yet they also believed it should continue to be passed on. Only 4% believed that the loss of the TST does not greatly impact the modern lifestyle, indicating the sense of cultural consciousness is quite weak. In the occurrence of a strong sense of inheritance among the target group is a huge contrast to the current situation. Although the TST is getting farther away from a modern lifestyle, the consciousness of inheritance is still very strong. Most have a high potential in recognizing and revitalizing the cultural value of the TST and are also expecting the TST to be applied to their lifestyle in a new format.

4.2.2 Inheritance of some TST are promoted as national festivals by government policies: Two national Chinese festivals still practiced today are the Qing Ming and Winter Solstice festivals. The Qing Ming Festival (or the stepping grass festival) is on the fifteenth day after the spring equinox. During this festival, people go to their ancestors' tombs to worship and pay respect. As it has been important to people's way of life since ancient times, therefore the government of China has officially promoted this festival as a three-day national holiday. The Winter Solstice Festival is held on December 21-23 of the Gregorian calendar each year. The winter solstice is the shortest day of the year, and from this day Yang Qi which is the warm air slowly begins to rise, the weather gradually warms up. The ancients regarded the winter solstice as a lucky day, for which a winter festival was performed to worship ancestors. Winter Solstice Festival is not a national festival, yet there is a Chinese folk saying that "winter is as big as the year." Winter Solstice is also known as "small year." As the winter solstice arrives the New Year is just around the corner, so the ancients believed that the importance of the winter solstice is no less than that of the New Year. The traditional custom of offering sacrifices to ancestors in the winter solstice still continues in some coastal areas of southern China. In some parts of northern China, it is customary to eat dumplings every winter solstice. The celebrations of the winter solstice are widely varied in the different regions of China. Unfortunately, many young people today know little about the specific dates and features of other solar terms.

4.2.3 Inheritance of the TST has been lacking, resulting in a low cultural consciousness influenced by modern society: Young people are growing up in the information age of modern society. This socio-cultural circumstance leaves the next generation lacking the sense of closeness to the earth and nature. Without such a sense, it would be difficult to inherit them. The sense of connectedness to nature is one of many factors that could educate and encourage people to understand the cultural importance of the TST in the future. Existing national promotion of cultural awareness does not seem to

have an effect on people's enthusiasm for inheriting endangered cultures. The lack of good inspiration in practicing traditional rituals and cultural festival is one of the important factors that make culture difficult to be sustained. The reduction of social practices and fewer opportunities for cultural learning is also a factor leading to the marginalization of the TST in the modern social context. Transformation of society and increasing modern urbanization have made people gradually move away from nature, which is the main reason for the low awareness of TST today.

4.2.4 The TST still has practical value for our life and culture: Most people consider that the TST is significant to the agricultural context in modern society. The TST reflects accurately the periods of seasonal changes, which are then incorporated into farming proverbs to be a guide for effective farming practices. Many people like the TST because of their important astronomical insight. For example, the spring equinox and the autumn equinox equally divide the year. The shortest night is the summer solstice and the longest night is the winter solstice. Many people enjoy the folk customs and traditional cuisine of the TST. For example, it is customary to eat spring cake for the beginning of spring, noodles for the summer solstice, dumplings for the winter solstice, as well as activities such as flying kites at the Qingming festival. Even Chinese traditional medicine's philosophical method of curing and healing follows period changes of the solar terms. It can be said that the TST is a guide for people to know the right times to merge their daily life to the nature of seasonal changes.

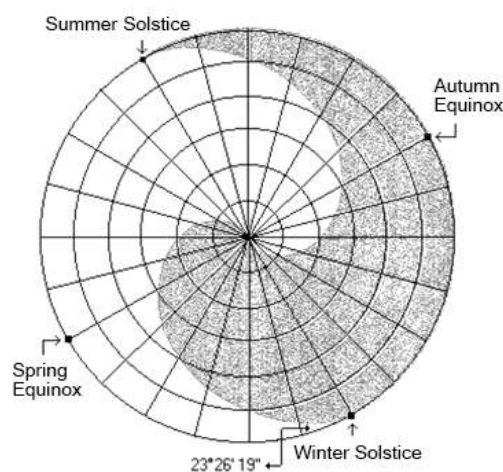


Figure 10. The vernal equinox and the autumn equinox are equally divided. The summer solstice and winter solstice are illustrated in the shortest and longest nights of the year, respectively.

4.3 People's Expectation of TST cultural inheritance

4.3.1 Children are the new force to inherit the TST: The survey shows that 84% of children are willing to be guardians of the TST culture. The TST involves solar, animal, plant, weather, temperature, and

seasonal changes, which can help children better understand and perceive nature and its time order of seasonal changes. Children have the advantage of absorbing information easily and a good memory. If children have an opportunity to learn the TST from a young age, they will consciously respect the time rhythm of nature and contribute something meaningful to humanity, the natural environment, and society.

4.3.2 Most of parents are willing to study the TST with their children: According to the survey, 54% of parents are willing to participate in parent-child activities related to the TST to help them develop a good awareness of nature. However, 32% of parents expressed their unwillingness to join due to busy work schedules and already having little time with their children. It is worth noting the desire to learn the TST does not only occur among the children but also parents desire to learn it together with their children. Even though the knowledge of the TST is lacking in modern society, it can be revitalized by supporting children and parents to learn the TST side by side, which would also cultivate the parent-child relationship.

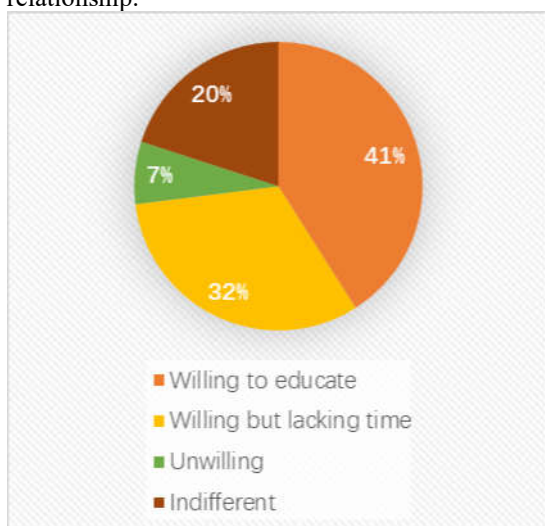


Figure 11. Responses of Parents willing to participate in educating their children on the TST.

4.3.3 Education in Schools is crucial in revitalization in conjunction with education in families: According to the survey result, 42% of people believe that education in schools is an important way to inherit the TST. People have a high degree of trust in educational institutions. The educational atmosphere at schools is more advantageous for children to successfully learn the TST. Also, 25% supported education in families. In family life, parents are the everyday teachers of children, and education in a family is the foundation of life education. Parents can pass on their knowledge of daily life to children. As children grow, schools become the mainstay because of its more comprehensive education. Education in schools fulfills what is lacking in family education by using the availability of the learning atmosphere and

educational resources. As an important institution of education, schools can link to family education to provide two learning tracks for children, thereby providing opportunities for cultural practices in connecting and improving life in modern society.

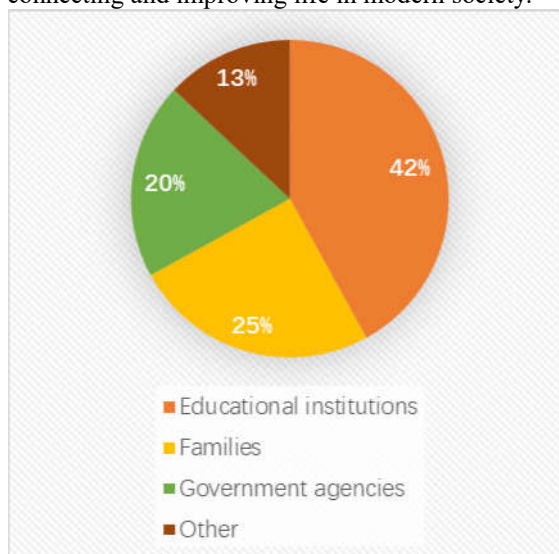


Figure 12. Survey participants' opinion on who bears the responsibility for TST education.

5. CONCLUSION

The TST reflects clearly a relationship between Chinese people and the laws of nature: respect, conformity, cosmological knowledge, precious time of seasonal changes, and daily life activities in accordance with nature. Although it is an indisputable fact that the role of the TST in people's daily life is decreasing, it still has much cultural significance and social functions in the modern society of China. In order for the next generation to protect and inherit this cultural value in a lively manner, it must be combined effectively with people's lifestyles and able to maintain its significance to the modern context. The function of the TST system in agricultural guidance has faded away due to rapid lifestyle changes in the modern world. Although revitalizing the TST in a modern context is a challenging task, it can be done; beginning with assigning cultural value to activities in people's daily life in seasonal changes, food, and health. The use of the educational institution as a tool to promote the TST will be an effective way to revitalize this intangible cultural heritage of China.

Revitalizing the TST of Chinese traditional culture is a complicated and long process. In recent years, the People's Republic of China has dynamically advocated the revival of traditional culture. It seems the revitalization process might begin well with the young generation who still have the potential to learn and practice many almost-forgotten Chinese pearls of wisdom. The TST is a time guide for Chinese people to understand natural phenomena: the relationship between the sun, animals, plants, weather, temperature, and agriculture. It is suitable for

children to understand and learn these concepts , Children can discover nature and experience folk customs. Because the TST is the philosophical and cultural basis for Chinese people to carry out folk activities, the effective inheritance of TST will affect children's understanding of nature and traditional Chinese culture in a deep way. This understanding influences the next generation's worldview and outlook on life in modern society. Children's contact with and knowledge of the TST will inevitably lead many parents to study together, which will have a direct and positive effect on the revival and inheritance of the TST. The TST will bring people closer to nature and their heritage. Children are China's future and hope. They are the new force to revive and continue Chinese culture and revitalize the Twenty-four Solar Terms.

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Research on the Training of Applied Talents in Economics and Management in Anhui Province under the New Economic Background

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Abstract: Under the background of new economy, the demand for applied talents in business management in various industries in anhui province has been growing steadily. Economics and management majors aim to cultivate application-oriented talents who are familiar with professional knowledge and theories and have the ability to analyze and solve professional problems. Therefore, compared with other majors, economics and management majors have stronger characteristics of practicality and application. However, there are some problems in the training mode of applied talents in economics and management in anhui province, such as the over-theoretical curriculum setting, the lack of dual-teachers and dual-energy teachers, and the imperfect mechanism of school-enterprise cooperation, etc. This paper puts forward corresponding Suggestions for these problems.

Keywords; Economics and Management Major; Applied Talents; Anhui Province

1. INTRODUCTION

The quality of economics and management personnel determines the depth and potential of local economic development. ^[1] At present, most of the training of economic management professionals is concentrated in the developed areas such as North, Shanghai, Guangzhou and Shenzhen, but there is very little research on the central and western regions. Based on the existing theoretical research on the training of economic management talents, this paper explores the training model of economic management talents in Anhui Province, finds out the problems and puts forward corresponding suggestions.

2. LITERATURE REVIEW

Xijun Zhang^[2] pointed out that the basic characteristics of applied talents in economics and management are as follows: first, they have solid and complete professional theoretical knowledge; second, they are capable of innovation and practical problem solving; third, they have good professional qualities such as integrity and sense of responsibility. Ying Wang ^[3] pointed out that the role of colleges and

universities in training application-oriented talents of economic management majors is to enhance students' practical ability and increase the employment rate, and to provide assistance for the cultivation of talents for economic development. Taking xi 'an aviation vocational and technical college as an example, Chunmei Han^[4] put forward the talent training model of building a professional curriculum system integrated with business content and integrating teaching resources of the university, enterprises and society, and explained the good practical effect of this model.

3. EXISITING PROBLEMS

3.1 Separation of theory and practice

The implementation of exam-oriented education in China for a long time has had a certain adverse effect on the improvement of the professional competence of applied talents in economics and management. As a result, undergraduates cannot keep up with the pace of financial technology development, and Anhui Province is no exception. ^[5] In the investigation of universities and training institutions in anhui province, we found that more than 60% of the students believed that curriculum is more theoretical, and there is a lack of opportunities for practical practice in teaching. It does not enable students to really participate in extracurricular practice activities, nor can it cultivate students' ability to solve problems in practical economic life.

3.2 The lack of "dual teacher and dual ability" teachers

The cultivation of applied talents not only has high requirements on students, but also stricter requirements on the level and quality of the teaching staff. "Double teacher and double ability" teacher refers to a teacher who has both good teaching ability and professional practical guidance ability. However, due to the short history of the cultivation of economics and management professionals in China, colleges and universities currently engaged in the cultivation of applied economics and management professionals are the products of traditional education models.

3.3The school-enterprise cooperation mechanism is not perfect

Although some universities' economic management majors have signed cooperation agreements with local enterprises, they lack a long-term cooperation mechanism. First, because the school is afraid of trouble and has not actively managed the off-campus practice base to give full play to its role; second, because the company is reluctant to accept the internship requirements of students on campus out of control of its own costs, even if it is signed with the school. After the contract, it is difficult to take this seriously as the core business, so the expected internship effect of the students cannot be achieved.

4. REFORM IDEAS AND SUGGESTIONS

4.1Comprehensively improve the quality of curriculum construction

Based on the needs of economic and social development, optimize the proportion structure of economics and management public courses, professional basic courses and professional courses, improve the planning and systematicity of course construction, and avoid randomization and fragmentation. Create a large number of innovative and challenging offline, online, online and offline hybrid, virtual simulation courses. Actively organize students to participate in practical activities such as social surveys, productive labor, volunteer services, public welfare activities, scientific and technological inventions, and work-study programs. For example, the school of economics and management of anhui university of science and technology carries out the provincial excellent management talent training plan, which sets up an experimental class, adopts the two-stage training model, and is taught by enterprise experts and school teachers.^[6]

4.2Improve students' practical operation and innovation ability

Universities should increase the intensity of scientific research practice platform construction, strengthen the guidance of students' scientific research activities, and improve students' innovation and practical ability with high-level scientific research. The use of innovation and entrepreneurship competitions allows students to apply the theoretical knowledge they have learned in the classroom to the competition, which not only stimulates students' interest in professional learning, but also improves students' ability to solve practical problems.

4.3Improve college teacher management system

The "double teacher and double ability" teacher team is the key to the cultivation of professional and applied talents in economics and management in colleges and universities. Therefore, colleges and universities should further improve the teacher management system, set up a certain percentage of mobile positions as needed, and increase the intensity

of hiring teachers with industry enterprise work experience. , Establish a two-way flow mechanism for industry enterprise professionals and university teachers, and optimize the structure of the series of university experiments.

4.4Strengthen school-enterprise cooperation

School should actively carry out external exchanges and cooperation. Through holding academic seminars, professional scholars at home and abroad are invited to open seminars and share lectures with the school. Teachers are sent to Japan, the United Kingdom, Italy, Germany, Canada and other countries and Hong Kong and Macao. Taiwan and other regions for further study and visits, and actively promote exchanges with domestic and foreign institutions. In addition, the school should increase support for students' internship work, strive to build a group of shared internship bases, maintain long-term effective interaction and contact with enterprises, and provide students with a platform to participate in social practice.

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Research on the Status of the Ownership Reservation Clause in the Bankruptcy Reorganization Procedure

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Abstract: Because the buyer's possession is the subject matter in the ownership retention sale, when the buyer enters the bankruptcy reorganization process, whether the seller can retrieve the subject matter is related to the realization of the seller's price. China's legislative legislation is not clear about this. It is advisable to refer to the British legislation and consider it as the right of retrieval subject to the reorganization procedure. That is, during the management period, the owner cannot retrieve the subject matter. Before being punished, the owner of the claim for ownership can try to retrieve the subject matter.

Keywords: reorganization, right of recovery, guarantee, bankruptcy

1. STATEMENT OF PROBLEM

One of the most important features of the reorganization procedure is the treatment of the property of the severely related parties. According to the provisions of the "Corporate Bankruptcy Law" of China, during the period of reorganization, the security right enjoyed by the debtor's specific property is suspended. However, according to the provisions of Article 75, Paragraph 1 and Article 92, Paragraph 1, if the value of the collateral may be damaged or the value may be significantly reduced, which is sufficient to jeopardize the exercise of the creditor's rights, the security right may request the court to resume the exercise of the security right. The reorganization plan approved by the people's court is binding on all creditors, and the secured creditor can only accept repayment in accordance with the provisions of the reorganization plan. Regarding the status of the retention of title clause in the buyer's bankruptcy proceedings is related to the realization of the seller's property claims, it is necessary to conduct relevant analysis and review.

2. THE DOCTRINE OF RETAINING THE RIGHT OF SELLERS TO BUY BACK

For the seller who has not fully received the payment from the buyer, whether the subject matter can be retrieved, so as to realize the final price claims is the most relevant issue. Regarding whether it can be retrieved, there are still differences in the legislation and judicial practice of various countries.

2.1 Get back permission

Both French and Belgian legislation stipulate that, in

order to exercise their rights, the seller in the retention of title clause decides that the buyer's reorganization proceedings should start, only the subject matter remains in the buyer's hands and is in "physical form" On the premise of existence, the right to get back is established. This requires the subject matter to exist in the form of real objects, and retain the personality of the subject matter to achieve a recognizable state^[1].

Article 76 of China's "Corporate Bankruptcy Law" stipulates that in the sale of reserved title, after the buyer initiates the reorganization process, the seller may exercise the right of retrieval. In most cases, the buyer's entry into the bankruptcy proceedings is usually stipulated as a condition for exercising the right of retrieval. However, it is not clear whether the administrator has the right to choose to continue to perform the reserved title sales contract.

2.2 Take back the prohibition

In countries where the retention of title is requalified as a security interest, the seller cannot retrieve the subject matter after the buyer enters the bankruptcy proceedings.

Article 123 of the Japanese "Company Renewal Law" stipulates that, at the beginning of the company renewal process, the seller who retains ownership shall exercise the renewal security right as the renewal security right. If the renewal guarantee is adopted, the request for the right of recovery should not be approved^[2]. After making a decision to start the company's renewal, the court will select a financial manager who specializes in the management and disposal of the company's property and handles business operations. Auctions and late sanctions are also prohibited and suspended. The exercise of the rights of the security right is not only stopped, but also included in the rehabilitation plan, and can only be repaid in accordance with the plan.

2.3 The right of retrieval subject to the reorganization procedure

The British legislation refers to the reorganization process as the management process. From the time the application management order is made until such an order is made or the application is not accepted, no steps can be taken to retrieve the goods held by the company under the ownership retention agreement. However, the administrator may agree to return the goods supplied with the retention of title clause, and

the court may also allow such return, subject to conditions imposed by it. [3] Once the management is over, the claimant of ownership can try to retrieve their goods if the goods have not been disposed of. This means that if the goods are not disposed of, the supplier may have to wait until the management order is released before he can retrieve the goods.

3. FURTHER DISCUSSION ON THE EXERCISE OF THE SELLER 'S RIGHT OF RECALL IN BANKRUPTCY AND REORGANIZATION

In the reorganization process, the subject matter purchased by the buyer through the retention of title clause may help to rebuild the buyer 's debt. If the seller is allowed to retrieve it, it will be very unfavorable for the buyer 's reorganization process. The author believes that the position of English law is particularly reasonable from the perspective of the nature of retaining ownership as a guarantee. The effectiveness of the reorganization procedure is in principle related to the reservation. At the same time, the administrator or the court is granted discretionary power. When the reservation is not beneficial to the reorganization procedure, the retained seller can retrieve it. The benefits of prohibiting sellers from retrieving the reorganization of the enterprise are obvious. Not only can the reservation be used for the rebuilding of the enterprise, the enterprise does not have to pay the price immediately. In the liquidation procedure, if the administrator chooses to continue to perform the contract, the seller 's creditor 's rights in the price will be repaid from the bankruptcy property as a common creditor 's right. Of course, it is forbidden to take back the autonomy of compensating for the retention of the seller, that is, participating in the reconstruction process, and the seller should have the right to vote on the reorganization plan.

The binding of the reorganization procedure on the retention of the seller is manifested in at least three aspects: first, from the time when the application for reorganization is submitted to the time when the court makes a reorganization decision or is not accepted, the seller must not retrieve the subject matter, otherwise, the buyer Owners who are about to enter the reorganization process will come one after another, and the subject matter of the reservation will be lost from the buyer. Second, after the start of the reorganization process, without the consent of the administrator or the court 's permission, the retention seller may not take any steps to retrieve his goods owned by the company. However, the court has very wide discretion and will consider the hardships suffered by the seller and the overall benefits of the buyer 's creditors. If the goods are necessary for the company's business, such a permit may not be granted, but effective measures to protect the seller should be taken. For example, in order to maintain the value of the preserved subject matter, the seller may apply to the court to pay cash from the reorganization of the property (such as interest on the

secured debt); increase the guarantee or other appropriate preservation measures; the seller may apply to the court to dissolve the suspension of the practice based on specific reasons. Restrictions, such as the reservation is not necessary for the reorganization process or the value of the reservation subject is decreasing, ② the seller has not obtained protection means for this. Thirdly, if the administrator can persuade the court, such punishment may promote one or more purposes clearly stated in the management order, he is authorized to sell the goods. That is, the administrator has the right to dispose of the reserved subject matter. Except for cash gains. With regard to the reorganization of the enterprise 's property, the administrator may use or dispose of it within the normal business process. If the disposition is outside the normal business scope, the proceeds of the disposition of the property shall retain the seller 's priority. [3] Specifically, the net income of the disposition should be used to pay off the amount payable under the ownership retention agreement, where these incomes are less than the net income achieved by the voluntary sellers selling goods on the open market as determined by the court. Next, it is necessary to make up for the shortfall from the reorganization of property. However, the administrator must notify the seller before disposing of it, and should give him an opportunity to object to the court. When the management of the property is reorganized or the disposition is detrimental to the preservation of the seller 's interests, the court 's consent should be obtained.

The above positions are in terms of simple reservation clauses. For complex reservation clauses, specific issues should be analyzed. The expanded reservation clause can be treated in the same way as the simple reservation clause. The extended retention clauses and aggregated retention clauses are of course no different from simple reservation clauses before the subject matter is not resold or processed. The extended retention clause, in the case where the subject matter is resold, the income clause therein constitutes a guarantee of transfer. Although it is an atypical guarantee, the substance of the right to guarantee should be unconditionally subject to the reorganization procedure. If the guarantor is not subject to any restrictions on the reorganization process, and the guarantor 's important assets have become the majority of the collateral, the guarantor 's enterprise will inevitably be disintegrated as a result of the implementation of the security right in the collateral without any reconstruction. The possibility of regeneration is also possible. [4] The retention clause for aggregation, in the case where the subject matter is processed, if the processing clause in it is interpreted as an assignment guarantee, it should be understood in the same way.

4. ANNOTATE :

Article 123 of the Japanese "Company Rehabilitation

Law" stipulates that at the beginning of the renewal process, the renewal creditor's right that is guaranteed on the company's property by special privileges, pledges, mortgages or liens prescribed by commercial law or based on the renewal process The right to claim on property arising from the cause is a security right for regeneration.

By analogy applying the guaranty of Article 75, paragraph 1, of the "Security Law", "However, if the collateral is likely to be damaged or the value is significantly reduced, which has endangered the rights of the security right, the security right may request the people's court to resume the exercise of the security Property rights.

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Research on the Taxation of Network Red Envelopes Marketing Model

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Abstract: Network red envelopes have become unstoppable under the development of the Internet in recent years, and have become a popular means of corporate marketing. New things are emerging and so do the hidden dangers. How to correctly interpret the contents of tax regulations, reasonably deal with the difficult problems of tax collection and collection of network red envelope marketing methods, and effectively avoid the cost management minefield in the marketing process are challenging to both parties. In this regard, it is of great significance to prevent the tax risk of network red envelopes. This paper will study and explore the marketing model of network red envelopes in the e-commerce market of Company H. to manage tax risks, reduce tax costs, and put forward practical suggestions for enterprises, individuals and authorities.

Keywords: e-commerce, network red envelope, tax risk, individual income tax

1. INTRODUCTIONS

The rapid development of Internet big data not only facilitates our lives, but also brings new challenges and opportunities to tax collection in China. The rise of "Internet +" will inevitably promote the integrated development of all walks of life, and new industry trends will emerge and bring new tax sources^[1].

Therefore, with the widespread application of third-party payment platforms such as WeChat and Alipay, there are more and more red envelope payments. Through the rapid development of Internet and mobile payment in the financial industry, "Internet red envelopes" have also been increasingly used in the payment settlement of various enterprises. But the tax-related issues involved also have blurred boundaries. Should such red envelopes be taxed? How to pay taxes for enterprises and individuals?

2. THE BIRTH OF THE NETWORK RED ENVELOPE

WeChat red envelopes were first launched by Tencent in 2014 and belong to the category of online red envelopes. On January 26, 2014, WeChat red envelopes went online, and now it has become an important corporate marketing strategy in the mobile payment field. With this "network red envelope" based on Internet consumption, it was quickly

welcomed by young consumer groups once it was launched and occupied various markets^[2].

In recent years, the phenomenon of companies issuing network red envelopes to promote their internal products has become more and more popular, and network red envelopes have gradually become a new marketing model.

3. CONTENT OF CASE ON NETWORK RED ENVELOPES

Suppose H Company was established in M City in 2012. In 2018, the company decided to expand the e-commerce market and sell on its official shopping platform. At the same time, company develops the following sales and marketing strategies:

3.1 Cash red envelopes will be issued on the eve of the "6.18" promotion

On the eve of the event, cash red envelopes ranging from 0-5 yuan were randomly distributed, totaling 5,000 yuan. On June 1, 2018, assume that resident A received a red envelope of 2.8 yuan; on June 10, 2018, A received a red envelope of 0.8 yuan. He received a total of 3.6 yuan red envelopes. Company H withheld and paid individual accidental income tax of RMB 500 for A in July, and paid RMB 500 of individual accidental income tax for A in August. A total of 1,000 yuan will be withheld^[3].

In September 2018, A received a notice from the Social Security Center of M City, saying that its minimum security audit, public rental housing audit, housing subsidy and government-related audits failed because the company H paid for it in July and August 2018. The tax records paid for A violated the subsidy policy stipulated by the state, which directly affected whether A's public rental housing review would pass^[4].

Therefore, A and company H have different opinions on this case.

A believes that:

(1) He is not obliged to bear the tax of thousand yuan that is only payable from the cash red envelope income of 3.6 yuan;

(2) Company H does not need and is not obliged to withhold individual income tax for it. Because of the individual income tax record, it has seriously affected his life. Company H should eliminate the individual income tax paid in July and August 2018 to the tax

department.

Company H believes that:

(1) A receives the cash red envelopes issued by the company, which is an accidental income according to the tax law, and should fulfill the obligation to pay individual income tax;

(2) After A obtains the company's online cash red envelopes, it is also the company's statutory obligation for the company to pay individual taxes for incidental income. There is no need to apologize and compensate A, so no compensation has been made.

3.2 Cash red envelopes and vouchers issued by the event (non-cash red envelopes)

On the day of the event, the company launched the following promotional offers for consumers who purchased the goods in the store:

(1) 40 yuan vouchers for purchases of goods over 400 (it can be used directly in the purchase of this product);

(2) 80 yuan cash red envelopes for purchases over 800, and cash red envelopes can be withdrawn by binding bank cards.

During the promotion process, the actual voucher was 60,000 yuan, and the cash red envelope was 50,000 yuan. The company did not invoice the commercial discount that occurred with the sales amount. The total expenditure of issuing the voucher and the amount of the cash red envelope were summarized as commercial discount to offset current sales.

4. THE RESULTS OF CASE PROCESSING

4.1 Issue cash red envelopes on the eve of the event

However, according to regulations, individuals who receive cash red envelopes distributed by enterprises should levy personal income tax on accidental income, and tax enterprises are responsible for withholding and paying.

But if the amount of individual income tax paid by H company on behalf of A is wrong, A can apply to the tax authority for refund of the tax. According to the relevant provisions of the "Tax Collection Management Law", "taxpayers pay more tax than the amount payable, taxpayers can request the tax authorities to refund the overpaid tax".

In this case, Company H paid cash red envelopes to A through the online platform, which belonged to the situation where the enterprise distributed network red envelopes to individuals. The income of A should be calculated based on accidental income and pay individual income tax, withheld by the paid company H. A should undertake tax payment obligations according to law, so the tax authority cannot eliminate his tax payment records.

The withholding agent shall report the relevant information of all individuals paid to the tax authority within 15 days of the month following the payment income. In this case, although Company H collected personal information in accordance with the law, at the time of filing, some of the red envelopes were jointly declared, and the income of others was used to

pay taxes together with A's name, which caused A to bear the tax of others. It belongs to abuse of name rights. The declared amount needs to be adjusted.

Accidental income is paid in sequence, and the applicable tax rate is 20%. Therefore, A's red envelopes received in June 2018 totaled 3.6 yuan, and the tax to be paid was 0.72 yuan.

The taxable amount is less than one yuan, and the case of applying the zero tax rate stipulated by the State Administration of Taxation No. 25 of 2012 also requires a tax declaration. The tax authority determines whether the tax amount is exempted, and the zero tax amount does not affect the tax record.

4.2 Issue cash red envelopes and vouchers (non-cash red envelopes) in promotions

The discount plan launched by the company on the day of the store celebration is "40 yuan vouchers for purchases of goods over 400 (it can be used directly in this purchase)", which is essentially a non-cash red envelope on the Internet, "80 yuan cash red envelope for purchase of goods over 800", essentially belongs to the buy one get one free behavior of online cash red envelopes. Different types of network red envelopes are taxed differently. Because the company failed to correctly classify it, it made an intentional or unintentional error handling, which brought tax risks to the company.

5. MEASURES TO SOLVE THE PROBLEM OF NETWORK RED ENVELOPE TAX

5.1 For enterprises

Enterprises should pay attention to the following three points when issuing network red envelopes to users during promotions:

(1) When issuing online red envelopes in the name of the enterprise, it should be clear whether there is an obligation to pay individual income tax for the group receiving the red envelope. If enterprises do not pay individual income tax more than required in accordance with the regulations, it may cause the enterprise to fall into tax risk;

(2) The amount of online red envelopes is small, but the number of people who receive them is huge. It is difficult for enterprises to collect the personal information of each person who receives red envelopes and declare taxes for them. At this time, enterprises can choose to make a summary declaration and make it correct. The advantages of the operation procedure and summary declaration are that there is no need to collect the information of all personnel, and to a certain extent, certain tax risks are avoided.

(3) Enterprises should keep pace with the times, constantly study the corresponding tax policies, and make correct and reasonable interpretations. If the enterprises' interpretation of the policies is wrong, it will also increase the tax risk of the enterprises. Therefore, enterprises can establish a strict learning mechanism and supervision mechanism internally, and corporate finance and taxation personnel need to

have excellent taxation expertise and operational skills.

(4) Enterprises should actively innovate tax risk control ideas and strengthen tax risk control. The production and operation personnel of the enterprise should attach great importance to this technological change, and start with the decision of the enterprise operation.

At the same time, enterprises must closely cooperate with the financial department of the enterprise and pay attention to the relationship between finance and tax, so that the logic of tax declaration and financial statements is unified. In daily work, strict management of invoice issuance, reimbursement, and transfer should be done, and special legal personnel can be hired to assist. Make good use of Internet big data technology, through the dynamic comparison of data, control and supervise the tax declaration data of the production, sales and operation of the enterprise, and grasp the tax risk points that may exist in the operation of the enterprise.

5.2 For individuals

Individuals should learn to obtain the corresponding information by themselves. Taxation is a major issue for people's livelihood and is inseparable from each of us. It is necessary to learn basic tax law knowledge. Because learning the corresponding knowledge is also a protection for ourselves. We can learn through the Internet or consult the tax department to properly avoid some tax problems that may arise due to ignorance.

5.3 For tax authorities

Although e-commerce is rapidly developing and maturing, the tax administration's collection and information construction need a process of gradual exploration and continuous improvement. There are some design flaws in Internet transactions, which make many companies have the opportunity to make use of loopholes in tax laws to maximize their own interests. Nowadays, some tax evasions on China's Internet platforms are gradually emerging, and the means are more diversified and hidden. It must be highly valued by tax authorities and strengthen tax collection and management.

In this case, the clarification of the tax scope of network red envelopes means the following two points: First, the taxation of network red envelopes issued by enterprises to individuals with winning nature can effectively block the gaps in tax evasions, and then standardize the business operations of

businesses. Second, because the promotional benefits such as buying gifts, full reductions, coupons, and discounts that merchants often provide are not accidental, that is, non-winning, the red envelopes issued by relatives and friends are personal interactions, and neither is taxed. In this way, the positive side of the network red envelope function will not be affected. All these have allowed network red packets to develop in a more standardized and orderly manner.

6. CONCLUSIONS

The development of the Internet economy has brought new businesses such as network red envelopes, and enterprises must pay attention to the taxation of these new businesses. The relevant financial authorities should also adapt to the development of the Internet era, timely formulate corresponding fiscal and tax treatment rules, and regulate the Internet accounting business involved in the enterprise. In addition, accountants must keep up with the times in thinking and technology. Under the background of the rapid development of Internet technology, they should pay attention to updating knowledge and improve the processing ability of network accounting business.

Under the downward pressure of the economy, the mutual competition between enterprises is becoming more and fiercer, and the tax risk points in business activities are also increasing. Enterprises should take the initiative to adapt to the trend of the times, bring the "Internet + tax" operating model into the modern management of the enterprise, and operate the enterprise with efficient ways.

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Research on Modern Development and Enlightenment of Optimizing Managerial Philosophy from the Perspective of Traditional Culture

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Abstract: With the rapid development of the times, social and economic development develops more rapidly in the popularization of Internet. The social and economic development in China has also made some breakthroughs, but there are still many business management modes that can not keep up with the economic development trend under the influence of the trend of economic globalization, and there are many challenges to be faced on the road of development. The development and production of enterprises is the key to the development of the economy of China. Only the reasonable management and operation of enterprises can play its greatest role. To develop the economic culture with Chinese characteristics, we need to combine traditional culture with management, promote the formation of management mode with enterprise characteristics, and help Chinese enterprises to develop in an all-round way under the trend of the times.

Keywords: Traditional culture; Managerial philosophy; Modern development and enlightenment

1. INTRODUCTION

The development of China is not accidental, it has evolved over thousands of years, and has been developing steadily. On the road of development, it has been carrying forward and developing the fine traditional culture through the principle of "removing its dross and taking its essence". It enables our country to develop advanced science and technology better and achieve good results [1]. The two famous philosophical classics are *Book of Changes* and *Tao Te Ching*. *The Book of Changes* mainly talks about the changing process of everything in the world as a whole, as well as all kinds of changing thinking. And *Tao Te Ching* mainly talks about the deep philosophical argumentation thinking, which inspires the development of people's thinking. The philosophy thought inherited in traditional culture is not behind the times, and it is still reflected in philosophy education thought. The philosophical thinking of Chinese traditional culture can be inherited to the present, which means that there must be some reasonable points in it before it can be recognized. Traditional philosophical thinking will never be out of date. The inspiration of traditional philosophical

thinking can promote the management and operation of enterprise.

2. MANAGERIAL PHILOSOPHY OF TRADITIONAL CULTURE

Nowadays, the guiding ideology of enterprise management mode still benefits from the philosophy thinking idea of traditional culture. After a long history of development, many philosophy thinking ideas have been derived, which affect every generation, help them to build philosophy thinking mode. In addition, it can be used in the production and development of social life to promote the progress of human civilization.

2.1 Management significance of "the unity of man and nature" in philosophy

In the history of philosophy, "the unity of man and nature" is the ideology put forward by Zhuangzi. From the perspective of Taoism, heaven is nature, and humans are a part of nature, and they are inseparable. The concept of "the unity of man and nature" mentioned by Taoist means the way to unify nature and man. From the traditional point of view, the concept of "the unity of man and nature" advocates the mutual connection, harmony and unity between man and nature. In management, the concept of "the unity of man and nature" is to follow the trend. People should pay attention to the cultivation of their own moral quality, have a full understanding of themselves, and do things in accordance with nature [2]. The integration of all things in the world also points out that people should constantly carry out self-criticism, deepen self-awareness, understand the laws of nature, so as to achieve the harmonious coexistence and common progress of human and nature. In enterprise management, corporate culture is created by the philosophy of "the unity of man and nature". Corporate culture is important for an enterprise. It can not only reflect the spirit of an enterprise, but also be an invisible guiding light for the development of an enterprise, which affects the common values of the enterprise and employees, and can better promote the healthy development of an enterprise.

2.2 Implementation of "people-oriented" managerial philosophy

The purpose of the Communist Party of China is

"serving the people", from which we can see how important democracy is. Based on the broad masses of the people and benefiting them, this idea was first conceived by Chairman Mao. Any organization that wants to develop and have a long-term future must receive the support of the masses of people. Since the war, the Communist Party of China has been loved by the broad masses of people, and it has developed better and better. The relationship between enterprise and employees is mutual, and they are inseparable. Some studies have found that a positive working atmosphere is more helpful to improve the efficiency of employees and stimulate their potential. The "people-oriented" managerial philosophy means that enterprises must think from the perspective of employees, and employees should be satisfied with their benefits. Under the influence of corporate culture, the treatment of employees should be humanized and respected, and every management within the company must think about the meaning of management and how to effectively create a positive and harmonious working atmosphere. After that we will promote the rapid development of the enterprise with the joint efforts of all people.

2.3 Attaching importance to market morality

The quality of an enterprise's image has a great impact on the enterprise and its employees, which affects the efficiency of employees and the operation of the enterprise. The operation of an enterprise needs to have integrity and market morality, and maintain professional ethics in fierce competition. It is responsible to the enterprise and to employees. Enterprises with good market morality can develop steadily and give employees a sense of security, so that employees are willing to trust the company. The key to the development of an enterprise depends on two points, that is grasping the market and managing employees. Confucianism of "benevolence, righteousness, etiquette, faith" [3] is suitable for the marketing of modern markets. Confucius said that "Kind people love others. Those who respect others will always respect them." Therefore, we should take "benevolence" as the concept of marketing to win the recognition of the market and gain the trust of customers by treating people sincerely and doing things in good faith. With the development of science and technology, many criminals use the convenience of the Internet to commit crimes, plagiarize and falsify, deceive customers with fake and inferior commodities, and make the market sullen. Enterprises should ensure good supply of goods and sales channels, do a good job in cracking down on counterfeit goods, ensure the quality of products as authentic products, and gain the trust of consumers. With a good reputation, the company's image has been improved, and employees have more motivation to work, which has played a role in promoting its development.

2.4 Emphasis on employee education

Employees are a part of the enterprise. In order to make the overall development of the enterprise, it needs to focus on the company's marketing and the working environment of the employees, as well as employee education. Every company has its own unique set of employee training models, but at present, in modern enterprise management system, many new employees are only trained when they just come in. Old employees bring new employees to master the work content. After they master the work content skillfully, they will not carry out training and learning. The longest time to train talents is one year. Chinese traditional culture has always advocated that people who "live and learn" should keep learning, acquire new knowledge and constantly break through themselves, and realize the value of life [4]. Although employees of the enterprise are familiar with the nature and content of the work, they do not arrange training after the training of newcomers, and people are inert, and employees cease to study in disguise. Over time, employees who lack learning and thinking will become "lazy", their thinking will no longer be active, and they have no passion to work, and they will gradually develop into "sophisticate" in the enterprise. Therefore, the enterprise cannot stop the training of the employees. It is necessary for employees to keep learning and think better. At the same time, it also needs to cultivate the public professional ethics and improve their professional ethics.

3. CONCLUSION

In conclusion, the traditional culture is enlightening to the managerial philosophy of the enterprise. We should learn from the traditional and rich philosophy of enterprise management of Confucianism and Taoism, take "benevolence, righteousness, courtesy, trust" as the concept of marketing to win the recognition of the market and gain the trust of customers. In addition, we need to give employees reasonable treatment through the "people-oriented" guiding concept, and constantly train in-service employees, so that they can keep learning, and do the work with energy, and promote the development of enterprises.

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Comprehensive reform and practice of soil science teaching

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Abstract: In the new era, quality education has become the theme of educational reform and development, and the existing teaching mode of "teachers only speak, students only listen" needs further reform. As an example, the course "Soil Science" focuses on combining theory with practice in teaching reform, the purpose is to cultivate students' independent thinking ability, problem analysis ability and comprehensive practical ability to solve specific problems. This article combines the characteristics of the course and the experience in the teaching work, introduces the reform plan of the "Soil Science" course in the teaching content reform practice, the diversification of teaching forms, encourages students to integrate into the scientific research team as early as possible and pays attention to process management, and introduced the positioning of the soil science course in professional training, the course construction goals and evaluation mechanism. Through comprehensive course reform and practice, it can effectively improve the teaching quality of "soil science" courses and improve the teaching effect. Through the comprehensive reform of curriculum teaching, break the traditional boring teaching mode, stimulate students' autonomous learning ability, and then adapt to new challenges in the new era.

Keywords: Soil science; Teaching reform; Practice; Subjective learning initiative; Comprehensive ability training

1. INTRODUCTION

Quality education is the theme of educational reform and development. In the new historical period, quality education also needs to uphold new concepts and adapt to new challenges in order to effectively respond to the requirements of the new era. College education does not belong to cramming education, and college education is more flexible and diverse, which requires college students to have an independent learning consciousness and exert their subjective initiative.

In many agricultural and water conservancy colleges and some engineering colleges, soil science has become a required course for agriculture, forestry, environment and other majors. Soil science, as an applied basic discipline of agricultural science, widely serves the sustainable development of agriculture, environmental and ecological construction, regional governance, resource

utilization and maintenance, etc. This course focuses on the soil minerals, organic matter, soil organisms, and soil water and composition and properties of gas materials, soil colloid chemistry and surface chemical processes, soil nutrient cycling and balance, soil acid-base reaction and redox process; soil conservation theory and technology such as soil cultivation and management; analysis of the occurrence and development of soil resources, understanding of soil morphological nature and reasons for its formation, put forward plans for rational use of soil resources and measures for soil improvement, to provide a scientific basis for the rational development and utilization of soil resources^[1].

The teaching content of soil science includes three major chapters and fourteen chapters including the material composition of soil, soil properties and processes, and soil utilization and management. It has the characteristics of wide content coverage, strong foundation, many knowledge points and many theoretical concepts^[2]. When students are studying soil science courses, because the knowledge points of soil science content are relatively complex, their learning initiative and interest are not high. Although the current soil science teaching adopts multimedia teaching, it is too simple in content, focusing on the explanation of theoretical knowledge in books, interacting with students less, and having the disadvantages of relatively old teaching content. Therefore, there is an urgent need for an effective teaching model, optimizing teaching methods, and reforming the teaching of "Soil Science".

2. CURRICULUM REFORM GOALS AND SIGNIFICANCE

2.1 Course objectives

Understand and master the basic material composition (organic matter and minerals) and basic properties (physical, chemical and biological properties) of soil through learning. Understand and master the formation factors, formation processes, soil classification methods and distribution rules of the soil. Grasp the structure, tillage and fertility properties of the soil and the relationship between soil and plant growth. Understand and master the relationship and interaction between soil and environment, and the interaction between soil and hydrosphere, lithosphere, atmosphere, and biosphere. Master the scientific management and utilization of soil, such as soil texture improvement, structure

improvement, tillage improvement, hydro-thermal regulation measures, etc. 1) The goal of theoretical knowledge: Must grasp the basic concepts and characteristics of soil, and be able to flexibly use the basic knowledge of soil science to analyze and solve scientific problems in soil science encountered in agricultural production and resource environment. 2) Ability goal: enable students to use soil science knowledge to solve soil problems in agriculture and forest production, further use, control and transform soil, and improve ecological environment conditions. 3) Achieve the goal: this course corresponds to the professional knowledge, professional skills, collaborative ability and innovative thinking required for graduation in the talent training program. It requires a comprehensive understanding and understanding of soil properties and functions; scientific use of soil, scientific management of soil, and protection of soil quality. Continuously explore and reform the teaching model of "Soil Science" based on wisdom teaching, take students as the main body in teaching activities, change students' preference for individual, passive, knowledge oriented learning, change to cooperative, inquiry, ability training oriented learning mode, let each student participate in learning spontaneously, change the role of teacher as knowledge authority and monopolist, from the former "subject teacher" to the "teacher" of students, guide and encourage students to learn independently, to learn from society, to learn from each other, and to make common progress. Change the traditional classroom teaching mode, break away from the shackles of the classroom, and turn the laboratory and training base into a place for learning. Transform the "one-way indoctrination" that traditionally boring teachers of agricultural courses teach students to listen into the "two-way interactive" teaching model of active interaction between teachers and students, and real-time feedback, renew thinking about the concepts of education and learning, through the use of tools to enhance the sense of time and attractiveness of teaching, and effectively achieve the three-dimensional teaching objectives of curriculum knowledge, ability and emotion [3].

2.2 Significance in specialty cultivation programme

"Soil Science" is an important professional basic course for agricultural majors. The course is rich in content, covering a wide range of theories and practicality. It has an important role in the cultivation of students' scientific quality and practical ability [4]. Tightly integrating the talent training goals of agricultural engineering majors, integrating knowledge transfer and ability training, greatly improving students' learning enthusiasm and initiative, changing students' attitudes to study the course, improving students' subject research ability, ability to use knowledge and innovation capacity. In view of the employment situation and the postgraduate examination in recent years, schools and

employers have paid more attention to the practical ability of professional talents. Therefore, in the process of practical teaching, we continue to accumulate and sum up experience, pay more attention to the teaching reform of soil science, and vigorously cultivate new and innovative talents, so that the teaching quality of "Soil Science" will go up a step. Through the reform of the soil science curriculum, to meet the needs of social development and the requirements of the times, improve the students' ability to think, analyze and solve problems [5].

Reform teaching methods and means, improve the quality of teaching, and stimulate students' enthusiasm for learning. Reform the practical teaching model, cultivate and improve students' innovation ability and scientific research quality [6]. Optimize experimental teaching content, enhance comprehensive design experiments, and integrate teaching practice resources and practice content. Strengthen the training of course paper writing to improve students' ability to comprehensively apply knowledge. Through the reform and practice of the teaching content and methods of this course, the characteristics, key points, difficulties and the systematic nature of the course "Soil Science" will be further highlighted to improve the quality and level of undergraduate teaching, cultivate students' innovative thinking and innovative ability, and stimulate students the interest in soil science, and that is of great significance [7].

Because the theory of this course is abstract and boring, the students generally think that it is not only difficult to learn but also useless. Therefore, we should reform the teaching methods as soon as possible, dissolve the abstractness of the theory in the teaching, strengthen the practicality of the application, complete the teaching task successfully, and achieve the teaching goal better. At the same time, we should accurately position, establish the innovative personnel training mode, and cultivate a large number of high-quality application talents recognized by the people, enterprise needs, good employment prospects, and strong entrepreneurial awareness for the society. Therefore, the comprehensive reform and practice of this course, focusing on how to achieve the above goals through the reform and improvement of teaching content and teaching methods, has positive research and exploration significance.

3. PROBLEMS IN THE TEACHING REFORM OF SOIL SCIENCE COURSE

3.1 Key issues involved in curriculum reform

Due to the need to reform the teaching system with a thick foundation and a wide range of specialties, the course "Soil Physics" as a major in agricultural water conservancy project profession of Kunming University of Science and Technology has gradually developed into a professional platform course. It is open to the three majors of agricultural water and soil

engineering, agricultural machinery Engineering and agricultural electrification. Class hours adjusted from 48/16 to 32/8. Due to the substantial reduction in the number of teaching hours, it is impossible for students to master the basic knowledge and basic skills of soil science, the development direction and application technology of Soil Science in a limited period of time if they still follow the original teaching model. However, the teaching method of soil science course still follows the traditional teaching mode of teaching material-based and teacher-centered indoctrination, because teachers pay attention to completing teaching tasks mechanically, there are still some shortcomings, such as less teaching interaction between teachers and students, students' subjective initiative can not be developed and exerted well. On the one hand, many contents in the soil science textbook lag behind the frontier field of soil science development to a certain extent, which leads to the lack of close connection between the teaching theory of soil science and the actual situation. On the other hand, the examination of soil science courses still adopts the traditional close-book assessment method, with a single form, which cannot comprehensively measure the students' learning ability and the real mastery level of knowledge [8]. Therefore, in theoretical teaching, the original classroom system should be broken, the curriculum content should be reorganized, the teaching methods and teaching methods should break through the traditional teaching model, and the discussion and discussion should be carried out to establish the problem situation. The combination of theory and practice should guide students to learn independently. In practical teaching, it is particularly important to optimize and integrate the original practical teaching content and construct a relatively independent and practical teaching system with rich contents, diverse forms, and multiple levels including experimental teaching, course papers, and scientific research training [9].

3.2 Issues to be further addressed

It is planned to build a website supporting the course within five years, which includes live teaching videos, course syllabus, exercises, practical teaching (experiments, training) guidance and other course construction resources, and strive for course resources online within five years to achieve resource sharing. The teaching material is selected from Huang Changyong's "Soil Science", which has a more comprehensive explanation of soil science, but there is still a certain gap in the coverage and depth of basic knowledge compared with the classic foreign soil-related textbooks, and less attention is paid to the problems of foreign soil science. Various books, reference books, literature journals and other relevant materials will be supplemented within five years.

4. SOIL SCIENCE TEACHING REFORM PROGRAM

4.1 Reform of teaching forms and methods

In the reform of the teaching methods of soil science courses, we have adopted various teaching methods such as discuss teaching and case teaching^[10]. Discuss teaching is a teaching method that is different from the typical classroom teaching. Its main purpose is to provide students with opportunities to discuss problems, so that students will have a deeper understanding of the concepts and content learned, and other teaching methods unsolvable problems can be solved through discussion. In the course of soil science classroom and experimental, using the discussion teaching method, students can grasp the basic concepts, basic principles and basic processes of the soil science curriculum, and cultivate students' ability to use the knowledge they have learned to analyze and solve problems. The teacher or the experimental instructor sets up a number of soil science problems, such as the analysis and research of the soil physical and chemical properties of different crops; the relationship between different soil mineral compositions and soil physical and chemical properties; soil management in modern agricultural production, rational utilization and management of soil water resources, etc. Students access information through Google, Baidu, cnki database, Wanfang database, Vip database, soil science forum or library, discuss in groups, write lectures, and teachers choose some representative questions communicate, discuss and summarize in the class. In the discuss teaching, teachers according to their own scientific research projects and the actual situation of local agriculture and region, as the organizer of the discussion activities to promote the conduct of the seminar activities, its responsibility is to ensure that each step and link of the seminar activities are carried out in an orderly manner. Discuss teaching is a free teaching method, which not only enables students to exert their creativity and innovation, increase and consolidate knowledge, broaden their horizons, and stimulate interest, but also helps to cultivate students' intelligence, do it themselves and strengthen students' research skills. It can also activate the academic atmosphere of this course, which is conducive to the discussion, discovery and research of teachers and students. Furthermore, the relationship between teachers and students will be strengthened to promote the development of teaching, research and interpersonal relationships. The case teaching is a typical case teaching method derived from practical activities, which has a strong metaphorical reason and has a role in dispelling doubts. The case teaching used in the teaching of soil science is mainly for students to find some practical problems found in practical life or surveys, such as soil nutrients, soil moisture, soil management and soil pollution. A good teaching case should be typical, authentic, enlightening and interesting. The case should focus on the concepts, principles and methods involved in

the course content; it should be true and reliable, and it is a practical problem in the local production and life; The case should have certain interest, leave certain thinking space for students, be able to inspire students' thinking through case analysis and discussion, and exercise the ability to find, analyze and solve problems. Through the reform of teaching methods, it is conducive to the cultivation of students' subject consciousness in learning, the stimulation of students' initiative in learning, the enhancement of students' interest in learning, the cultivation of students' creative thinking, the application of students' learning, the exercise of comprehensive induction and reasoning ability and expression ability; It is conducive to play the leading role of teachers, and form a multi interaction mechanism between students and teachers, thus promoting the further promotion of teachers' teaching art and teaching philosophy.

The reform of teaching form: 1) Adopt advanced teaching methods, enrich teaching materials and promote autonomous learning. In order to adapt to the characteristics of modern teaching, the form of teaching was comprehensively reformed. The course content explanations are all provided in multimedia, the courseware is mainly based on charts and data, and the online courseware is produced. It should be published on the website of Faculty and the Academic Affairs Office, and gradually enrich the teaching resource database (such as the formation and development process of soil, soil type, soil profile, China's main soil, the hazards of soil pollution, the use and protection of soil resources, etc.). At the same time, in the reference materials, the websites on soil science research and learning at home and abroad are listed as materials for further study and reference of interested students. 2) Innovate the teaching form, activate the teaching atmosphere and strengthen the effect of conscious learning. In terms of methodology, it emphasizes the reform of the traditional, plain and straight-forward and introductory lectures, giving full play to the characteristics of enlightening teaching, and applying inductive teaching to raise questions to attract students' interest^[11]. For example, in the lecture on soil moisture, the question of why the survival rate, low preservation rate, and poor growth of vegetation or crops was first raised, and then asked: What is the relationship between these and the soil? This inspired students to explore the inner mysteries and strive to achieve discuss interactive teaching and change the distance between teachers and students in the teaching method. For example, when teaching about soil pollution, teachers and students think and discuss the role of soil in production and life, agriculture, ecological environment and ecosystem together in a forum. Finally, the teacher summarized the ecological environment and the role of the ecosystem, so that the atmosphere is relaxed and the knowledge has a profound influence.

Practical teaching reform: In the teaching activities of soil science, only classroom teaching is not enough. Due to the particularity of soil science courses, it is necessary to combine theory with practice and combine learning with application. In the teaching process, we always adhere to the basic principle of combining theory with practice and combining learning with application^[12]. We have set up the teaching content of soil field investigation, students take the group as a unit to investigate the soil near the campus, surrounding rural areas and farms, visit agronomists, gardening teachers and farmers, understand the soil problems encountered in local agricultural production. For example, many farmers are eager to know the N, P, and K content of their land, so as to use fertilizer and apply fertilizer scientifically. On the one hand, farmers welcome students to collect soil samples, analyze and determine relevant data, and provide advice to farmers on fertilization^[13]. On the other hand, the students also learn the true ability, understand the basic principle of soil nutrient supply, and master the measurement and skills of soil nutrient. In the teaching of soil science, we deeply realize that the theoretical connection with reality is the most effective and direct measure to give full play to students' subjective initiative, increase students' interest in learning, and deepen students' understanding of theoretical knowledge. In addition, in terms of course thesis, combined with teachers' scientific research projects, mainly to cultivate students' ability to engage in scientific research work, so that students learn the methods of scientific research. Under the guidance of teachers, each student selects a topic, writes a project design, and participates in scientific research activities in various links, and finally organizes and analyzes the materials, writes a course thesis, and organizes communication and defense.

4.2 Building teaching resources

1) Book resources: the collection of "Soil Science" is relevant, and there are complete Chinese and foreign books, periodicals, and electronic journals, which can meet the needs of undergraduates for learning and document query. Further enrich the teaching content, collect and compile basic materials such as soil aggregates and soil moisture types, and provide abundant materials for classroom teaching and curriculum design. 2) Teachers: There are 5 teachers in this course, including 3 professors and 2 associate professors, and 1 full-time experimenter. The teaching team has a reasonable academic structure and age structure, and has sufficient teaching ability, professional level, engineering experience and communication skills, strong sustainable development ability. By actively introducing high-education and high-scientific teachers, encouraging and subsidizing existing teachers to go to famous universities and research institutes at home

and abroad to further improve the structure of the teaching staff and improve the level of teaching and scientific research. 3) Laboratory utilization: For this course, there is a laboratory for soil science, a laboratory for agricultural water system and a laboratory for water-saving irrigation technology and equipment, so as to improve the utilization rate by optimizing the configuration and expanding the opening^[14]. To continuously improve the comprehensiveness and design of experimental projects to meet the needs of curriculum reform, students can also apply for the innovative experiment fund or participate in Teachers' scientific research projects, and carry out experiments independently under the guidance of experimental teachers. The laboratory equipment resources are sufficient. In addition, the agricultural water conservancy engineering training base is planned to be built, increased investment, additional professional direction instruments and equipment, and the establishment of corresponding supporting management measures, which can meet the needs of soil science experiment teaching and meet the support of teaching courses. To further improve the practical teaching environment, on the basis of the existing experimental teaching environment, introduce experimental management personnel to standardize the experimental management and improve the teaching environment.

4.3 Design of the assessment method of soil science course

The assessment content of this course includes process assessment and final examination, in which process assessment accounts for 50% and final examination score account for 50%. The process assessment mainly includes: 1) classroom discipline, learning attitude, attendance, classroom discussion and speech, language organization ability and response quality account for 5%; flexible attendance mode is adopted, which is reflected through the teacher's teaching log; 2) personal written work accounts for 5%, whether the homework assignment can be completed on time, independently, and with high quality at ordinary times; 3) Under the guidance of the experimental teacher, the students are divided into experimental groups and operated according to the requirements of the experimental guide, completing the experiments, data processing and experimental reports of the contents of each experiment, accounting for 40%.

4.4 Evaluation mechanism reform

Teaching evaluation mechanism is an important condition for improving the quality of teaching and learning in soil science courses. Leaders, peers, experts and supervisors are invited to test the teaching process and effect in multiple dimensions, and collect opinions and suggestions from multiple channels to guide the teaching work. Through listening, watching and checking classes, checking

teaching plans, teaching plans, homework correction, questionnaire survey, teacher-student interviews and other forms, we can understand the actual situation of curriculum design, teaching process and teaching effect in detail, excavate outstanding models, put forward opinions and suggestions, and help improve teaching. After that, through face-to-face communication, the leaders of the Academic Affairs Office of the expert supervision group feed back the problems of the teachers to the teachers themselves. Through this way of communication, improve the quality and level of teaching. Teaching evaluation mechanism should evaluate the performance of students in their daily learning process, the results achieved and the problems, attitudes and strategies reflected in them, conduct a comprehensive assessment^[15]. First, teachers can establish quantitative criteria for a graded evaluation system, and second, use a comprehensive evaluation that incorporates students' test scores, coordinated Ability, practical ability, and communication ability are included in the evaluation of all performance of teachers and students in their usual teaching and learning. Finally, three types of evaluation were implemented: teacher evaluation, student self-evaluation, and student mutual evaluation.

5. SUMMARIZE

"Soil Science" is rich in content and knowledge points, less class hours and heavy teaching tasks, so that teachers still follow the traditional teaching method of teaching material-based and teacher-centered indoctrination, which is not conducive to arousing students' interest in learning and their subjective initiative development. Using the Rain Classroom network platform and the online course of "Soil Science" to connect with the latest scientific research, combined with the case teaching method, the "Soil Science" course is built into an effective classroom with students as the center and teaching supplementary learning, inspiring students to learn actively initiative. Through continuous reform and practice, we will gradually improve the teaching content of the course, improve the teaching methods, steadily improve the teaching level and quality of the course, and build the soil science course into a first-class credit system undergraduate course with advantages in teacher-team, teaching content, teaching methods and teaching resources.

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Research on Situation of Exercise Physiology Teaching in Colleges and Countermeasure to Reform Teaching

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Abstract: With the continuous development of society, it has caused a certain impact on the teaching of physical education in colleges and universities. It requires universities to increase the emphasis on physical education, and conduct in-depth study of exercise physiology through a series of measures. This paper analyzes the problems existing in the experimental teaching of exercise physiology in colleges and universities, and proposes corresponding solutions to improve the teaching quality of physical education.

Keywords: Exercise physiology; Teaching status; Countermeasure research

1. INTRODUCTION

In the exercise physiology courses of colleges and universities, the emphasis is not only on rich theoretical knowledge, but more importantly on its strong practicality. Therefore, higher demands are placed on the teaching of exercise physiology. In recent years, with the adjustment of physical education in colleges and universities, the course time of exercise physiology has been continuously reduced, and it has been unable to meet the needs of physical education. This paper further analyzes the reform of teaching methods by analyzing the teaching status of exercise physiology in colleges and universities.

2. TEACHING STATUS OF EXERCISE PHYSIOLOGY

2.1 Lack of refined theoretical teaching content

Exercise physiology is a discipline that intersects multiple disciplines such as sports and medicine. Its theoretical basis relies on cytology and sports anatomy with combination of relevant sports knowledge. Exercise physiology is extremely rich in teaching content and is theoretical. At the same time, when setting up teaching courses, it has certain variability, particularity and complexity. In addition, in the teaching process of exercise physiology in colleges, human physiology and human anatomy are involved, and the design of teaching courses is inseparable from these two disciplines. However, under the influence of their own factors and professional factors, students majoring in physical education often feel a little abstract about theoretical knowledge, and students tend to feel boring and uninteresting in learning. As a result, students will lose interest in the study of theoretical knowledge

when they have a preliminary understanding of theoretical knowledge.

2.2 Programmatic content of practical teaching

Practical teaching is carried out on the basis of theoretical teaching. Students can gain a deeper understanding of theoretical knowledge through experiments and practical training which can also test students' proficiency in theoretical knowledge and their practical ability and have great help in cultivating their excellent thinking ability, innovative ability and comprehensive analysis ability ^[1]. At present, most colleges and universities pay too much attention to the teaching of theoretical knowledge when carrying out teaching activities, but there are certain limitations to practical teaching. For example, in the classroom teaching of traditional exercise physiology, the theoretical knowledge is mainly transferred to students through one-way transmission, and students can only passively accept it. In practice teaching, teachers often arrange some more typical practice cases of exercise physiology to cater to theoretical teaching when conducting teaching, and students only need to conduct experiments according to teachers' requirements and the steps that teachers have planned, and the final conclusion is consistent with the theory. Such teaching mode limits students' divergent thinking, and students have certain limitations in independent thinking and analyzing problems.

3. REFORM MEASURES OF EXERCISE PHYSIOLOGY IN COLLEGES

3.1 To innovate theoretical teaching content

After selecting the teaching materials of exercise physiology, teachers should ensure the integrity of teaching contents and appropriately delete inappropriate or repeated teaching materials according to the actual situation of students and the actual needs of physical education teaching, so as to reduce the time of students' repeated learning. For example, the related knowledge involved in sports anatomy can be no longer or less involved in other courses; the content of eyes, mouth, and ears will be involved in the teaching of physical health care courses, so the time of related knowledge can be reduced in other courses. In this way, we can make the teaching content closer and reduce the waste of time. In addition, in the teaching process, teachers should highlight the explanation of key knowledge,

guide students to solve difficult problems, so as to help students lay a solid theoretical knowledge foundation. Furthermore, the reform of teaching content includes the reform of theory teaching and practice teaching.

3.1.1 To innovate theory teaching method

When teaching exercise physiology, teachers should pay attention to the main role of students. For example, they should change from the former "cramming" teaching mode to teach exercise physiology with an inspiring teaching model. In classroom teaching, teachers can create a relaxed and interesting teaching atmosphere, such as slides, teaching aids, and wall charts, so as to mobilize students' learning enthusiasm and fully stimulate their potential abilities. In addition, teachers can convey new thinking and new ideas to students with the help of multimedia information, so that students can quickly grasp the relevant knowledge of exercise physiology^[2]. In the traditional classroom teaching, when explaining the complex structure of human body and the related knowledge of physiological changes, it depends on the teacher's explanation. Such teaching method consumes manpower and wastes time, and increases the learning difficulty of students. Teachers can arrange the dull and obscure knowledge points in the courseware, so that the key and difficult knowledge points are more intuitively displayed, the complex and difficult knowledge points will become simple and easy to be understood, and finally the teaching effect of exercise physiology can be improved.

3.2.2 To pay attention to the application of practical teaching

The exercise physiology course covers many proper nouns, and has characteristics of abstract principles and complex concepts. If we only use theory teaching, we can't directly convey effective knowledge to students. Therefore, in the process of classroom teaching, teachers should improve the shortcomings of theory teaching through practice teaching. At the same time, practical teaching can effectively deepen theoretical knowledge and further integrate students' knowledge system, so that students can develop in a round way. In addition, by strengthening the application of practical teaching, the second classroom of teaching can be enriched, and students' horizons can be broadened and their knowledge can be enhanced. In this process, students' ability of practical operation, problem analysis and problem solving have been greatly improved, and students are trained into excellent comprehensive talents.

3.2 To break through the constraints of classroom teaching and improve professional settings

In the exercise physiology course, when setting up specialties, teachers should proceed from the

peculiarities of students specialized in physical education to reduce the cultural differences between students. And they must constantly innovate the teaching content, making the boring theoretical knowledge vivid and interesting to stimulate students' enthusiasm for learning and further improve the efficiency and quality of classroom teaching. In addition, classroom teaching is the most important means for students to learn theoretical knowledge, and it is also a place for teachers to preach, teach, and solve puzzles. Therefore, classroom teaching is crucial^[3]. After students have gone out of the classroom teaching, they can further enhance their knowledge understanding ability by participating in appropriate social practice activities. The teaching of exercise physiology in colleges and universities aims to improve the teaching effect and teaching quality. Consequently, students can break through classroom learning and continuously improve their comprehensive abilities through the organization of related activities. For example, teachers can organize students majoring in physical education to visit relevant sports research institutions to effectively stimulate students' interest in exercise physiology.

4. CONCLUSION

From the above, majority of universities should constantly improve their teaching methods and reform and innovate the teaching content and majors in accordance with the teaching status of exercise physiology, so as to effectively improve the teaching efficiency and quality of exercise physiology. At the same time, it can ensure the smooth development of exercise physiology teaching, and cultivate excellent comprehensive talents in sports.

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An Innovative Study on the Construction of Football Teams on Campus in Guangdong Province

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Abstract: Football is a sport with a long history. Under the background of new curriculum reform, colleges and universities have also increased the proportion of football in physical education. With the rapid development of football, the traditional football teaching method has been unable to meet the needs of current classroom teaching. In order to further promote the development of sports and effectively cultivate football teams on campus, this paper analyzes the current situation of football teaching in colleges and universities, and explores its innovative strategies effectively.

Keywords: Team building; Football on campus; Innovative research

1. INTRODUCTION

With the continuous reform of education, physical education has become an important part of college teaching, and football is loved by students. Therefore, innovation in the construction of football teams on campus can effectively improve students' interest in football, and promote students to actively participate in football. Football practice can further enhance students' physique, cultivate their team spirit, and improve their excellent quality.

2. THE CURRENT SITUATION OF FOOTBALL TEACHING IN COLLEGES

2.1 Backward concept of football teaching

As an important guiding ideology of football, the concept of football teaching should be innovated to form a better football team on campus. At present, the concept of football teaching in colleges and universities is still relatively backward, most colleges and teachers do not pay enough attention to football teaching, and they ignore the importance of football teaching to the development of students, so that colleges and universities do not invest too much energy in football teaching. As a result, football teaching of colleges and universities do not have relevant teaching theory support, and there is also a lack of scientific and effective guidance in the actual training process of football, which has led to certain difficulties in the formation of football teams on campus.

2.2 Lack of perfect football teaching system

In the process of building a football team on campus, a perfect teaching system is an indispensable guarantee and necessary condition. Only a perfect

teaching system can effectively support the development of the football team on campus. At present, many colleges and universities are lack of perfect football teaching system. In football training, many coaches do not pay attention to the individual differences of students, do not teach according to the actual situation of students. They usually choose unified teaching, which leads to the actual strength of players in the football team on campus is uneven ^[1]. In addition, many colleges and universities do not arrange football teaching courses reasonably, and the football training ground is limited, which has an adverse impact on the development of football team on campus.

3. How to innovate the construction of football teams on campus

3.1 To increase emphasis on football training

At present, colleges and universities should increase the importance of football training to lay an important position for football training in physical education. In addition, they should increase human and financial investment in football training and teaching and improve the existing football training venues to provide students with sufficient space for football training and stimulate students' enthusiasm for football training, and guide students to actively participate in football. The training of football team on campus on the football training ground can double the football training and improve the football training quality of football team on campus effectively.

3.2 To formulate a scientific football training plan

In order to ensure the training effect of football teams on campus, colleges and universities should formulate effective and scientific football training plans, so that football team members can carry out systematic training to improve their football skills and abilities. First of all, football coaches and football team members can be divided into two groups of football teams. One group uses traditional football training methods, such as dribbling, passing and other basic training ^[2]. The other group uses a new type of football training method to attract players' attention through innovative training methods to stimulate their interest in training methods, so that players can actively participate in football training, for example, imitating the street basketball training method. And students can actively participate in football training, and increase their interest in football to form an

excellent football team. In addition, body stretching can further improve students' physical flexibility. Therefore, football coaches can properly organize some football matches to allow students to compete with football teams of other colleges and universities. During the game, students can fully realize their own shortcomings, and carry out more targeted training after the game to improve their football skills and abilities.

3.3 To further improve the football education system

During the construction of football teams on campus, we should implement the campus football course teaching system, regard football as one of the physical education courses, and ensure that there is at least one football class per week, focusing on the development of school-based football courses. In addition, we need to implement and improve the safety guarantee and supervision and assessment system of campus football activities, so that students can play football in a safe environment, ensuring the personal safety of students. Moreover, it is necessary to establish and improve the management process of football sports, include accidental injury and insurance compensation into the emergency management system of campus football risk, and focus on the transportation of campus football team members and football team competition. The situation and other activities are used in the evaluation system of university supervision and assessment. In this way, students can fully devote themselves to football training and effectively improve their football skills and abilities. Coaches in colleges and universities should lead students to practice frequently during the teaching of football, so that students can learn the skills of football more proficiently and understand the written knowledge of football. At the same time, when coaching students in football training, coaches should communicate more with students in order to cultivate the flexibility of their thinking, so that students can adapt randomly in football matches and effectively improve their football skills. In addition, coaches can guide students to practice more football practice in their spare time, so that students can actively carry out football training. In the long time, they really fall in love with football, and often start friendly games with other campus football teams to understand their own shortcomings. Consequently, they will better improve the construction of football teams on campus to make football a charming sport.

3.4 To innovate football teaching methods

In football teaching, colleges and universities should be committed to the innovation of teaching methods. Only continuous innovation of teaching methods can effectively improve the quality of football teaching,

and make the team building of campus football team more perfect. In the construction of football teams on campus, coaches should change the traditional football teaching methods and focus on the practical teaching of football, so that students can master the relevant football skills and techniques, and further improve the football level and techniques of football team. In addition, the coach should focus on the initiative and enthusiasm of students when teaching the football to make students actively participate in the football and devote themselves to the football training, constantly improve their football skills and make the campus football team develop better [3]. What's more, in the construction of football teams on campus, coaches should make full use of modern technology, play football related videos to students, better show football training skills, so that students have a more detailed understanding of football. With the help of modern technology, students can master relevant theoretical knowledge and skills of football more accurately, and the football level of football team can be effectively improved.

4. CONCLUSION

From the above, in the process of building football teams on campus, colleges and universities should give full play to their own advantages, improve the football teaching system, constantly innovate the development road of campus football, and ensure that the development of campus football team can be guaranteed to a certain extent. In addition, they should promote the healthy development of campus football work in Guangdong Province and even in China.

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Life Insurance Assets and Household Financial Risks

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Abstract: life insurance is an important part of family portfolio and plays a unique role in family portfolio. This paper analyzes the role of life insurance in household portfolio based on the data of China Household Finance Survey (CHFS) in 2013. It is found that there is a positive correlation between life insurance and household total assets, that is, there is wealth effect. Households with higher risk tend to allocate more life insurance assets. Life insurance complements risk assets in family portfolio and has negative correlation with stock assets.

Key words: life insurance, portfolio, complementarity, family financial vulnerability

1. INTRODUCTION

Life insurance is an important part of family asset portfolio and plays a unique role in it. Because of life insurance products are usually provide safeguard for the whole family (the beneficiary of the life insurance product is usually for family members, such as the directly-related members of one's spouse, children and parents), based on the Chinese family financial investigation (CHFS) 2013 survey data, from the family level of the financial risk faced by life insurance and family relationship between are analyzed.

2. LITERATURE REVIEW

Life insurance assets, as a special part of resident assets, play an important role in guaranteeing the uncertainty of the householder's life. Campbell(2006)^[1] found in his review that there was heterogeneity in asset types held by families of different wealth classes in the United States. The main assets of the poor were liquid assets and cars, the middle class was real estate, and investment assets such as equity were the main assets of the rich class. Wang Xiangnan and Xu Shu (2012)^[2] compared and examined the differences in the impact of major factors on the demand for investment life insurance and traditional life insurance. It is found that financial development plays a greater role in promoting investment life insurance than traditional life insurance. Wang Xiangnan et al. (2013)^[3] studied the relationship between family life cycle and family asset selection, and found that the holding shares of family life assets and stock assets presented an "inverted U-shape" with the change of family life cycle. To sum up, researches on family asset portfolio

focus on participation in financial market, especially on risky assets such as stocks, and pay less attention to the particularity of life insurance assets in family asset allocation. The core of this paper is the position of life insurance assets in the family portfolio.

3. RESEARCH DESIGN

3.1 Data Sources

The data used in this paper is from the data of China Household Finance Survey (CHFS) of Southwest University of Finance and economics in 2013, with a total of 28000 valid samples. After deletion and processing, the sample used in this paper is 4385 households.

3.2 Research Model

The core problem studied in this paper is the attributes of life insurance in the family portfolio. According to this problem, a basic regression model with life insurance as the explanatory variable and personal attributes, family attributes and assets as explanatory variables is designed. Among them, $lifeinsurance_i$ represents life insurance variables, $person_i$ represents personal characteristic variables, $insurance_i$ represents medical insurance variables, and $asset_i$ represents asset variables.

$$lifeinsurance_i = person_i + insurance_i + asset_i + \varepsilon_i$$

4. EMPIRICAL TEST AND ANALYSIS

In order to understand the relationship between life insurance assets and other assets, and to better understand the role of life insurance assets and other assets in the family asset portfolio, we first choose whether to buy life insurance as the dependent variable, and other types of assets are Independent variables were used for full sample regression, and it was found that there is a significant negative correlation between whether to buy life insurance and risk assets and whether to hold stock accounts, thus indicating that the essential attribute of life insurance is to provide protection, investment and financial management are only ancillary functions of life insurance, and residents choose to buy Life insurance is to obtain protection. Families who choose to buy life insurance tend to hold more savings assets than risk assets. For households purchasing life insurance, the probability of holding a stock account is 8% less than households not purchasing life insurance.

Table 1 Regression results of life insurance and other assets

Explanatory Variable	Explained variable :
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	Whether to buy life insurance	
	Coefficient	Standard Error
Whether hold stock account	-0.0865395***	0.098656
Ln(Savings assets)	0.0122895**	0.0060743
Ln(Risk assets)	-0.0147585***	0.0085188
Ln(total value of property)	0.0794232***	0.0249455

In order to further explain the attributes of life insurance products, we conducted a further study on households that purchased life insurance, using 343 households that purchased life insurance as a sample, the total sum insured as the independent variable, and other asset values as the dependent variable for regression. There is a negative correlation between the total value of household risk assets and the total sum insured, that is, households with fewer risk assets will choose to hold more life insurance assets in hopes of obtaining more protection. This corroborates the protection attribute of life insurance assets in the household asset portfolio, not the investment attribute. Life insurance is positively related to savings assets and real estate value, which reflects that the configuration of life insurance is consistent with the family's prudent risk appetite. Allocation of life insurance is a robust investment, the purpose is to avoid risks, not to obtain high returns

Table 2 Results of regression of life insurance coverage and other assets

Explanatory variable	Explained variable : Total sum assured	
	Coefficient	Standard Error
Savings assets	0.0809112**	0.089982
Risk assets	-0.0675207**	0.047212
Total Value of Property	0.0414664*	0.009759

5.CONCLUSION

Based on the regression analysis of the CHFS 2013 survey data, this article analyzes the role of life insurance in household asset allocation. From regression and analysis, we can conclude that

(1) Life insurance has a positive correlation with total household assets, that is, there is a wealth effect.

(2) The basic attribute of life insurance is protection, and families with higher risks tend to allocate more life insurance assets.

(3) Life insurance is complementary to risk assets in the family asset portfolio, the purpose is to avoid risks rather than obtain high returns.

Life insurance, as a part of household asset allocation, still has a low proportion in my country's household asset portfolio, and households with stock accounts are much higher than households purchasing life insurance. As for the property of life insurance in the allocation of family assets, protection is still the most basic. Investment and financial management are only subsidiary functions, and there is a significant positive correlation between the risk index of households and the life insurance sum. Insurance companies should pay more attention to the protection attributes when designing products, which is also in line with the insurance surnames called for by the regulatory authorities. Life insurance products usually provide protection for the entire family. The family asset portfolio is an organic system that affects each other. Different assets interact with each other to form a family asset portfolio.

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Implementation of AES and RSA Hybrid Encryption System

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Abstract: Traditional encryption methods are not secure enough, and hybrid operations consume a lot of time. In order to solve the potential danger of using only AES algorithm or RSA algorithm, we will take the advantages of the two algorithms to optimize and form a hybrid encryption system. The system manages keys well and ensures encryption and decryption efficiency.

Keywords: Cryptography, Hybrid encryption, RES, AES

1. INTRODUCTION

With the wide application of the Internet, information security issues have become increasingly prominent, and information security technologies with data encryption technology as the core have also been greatly developed.

The current data encryption technology can be divided into a private key encryption (symmetric encryption) system and a public key encryption (asymmetric encryption) system according to the encryption key type. The two parties use the single key they share in the encryption/decryption process. Due to its simple algorithm and fast encryption speed, it is still one of the mainstream cryptosystems.

Symmetric encryption has the following defects: 1) Before data transmission, both parties shall stipulate and keep the specific secret key in advance, once the leakage will cause the risk of information exposure. 2) Because of the uniqueness of the key in symmetric encryption method, the number of keys owned by the receiver and the sender will be too much, which brings a great challenge to the key management. While, asymmetric encryption and decryption take a long time and are slow, and are only suitable for encrypting small amounts of data.

Therefore, the efficiency of symmetric encryption algorithm is higher than that of asymmetric encryption algorithm, but the defect lies in the management of secret keys and the security of key exchange cannot be guaranteed when communicating in insecure channels. So in a real network environment, mixed encryption is used. Here we mainly introduce the hybrid encryption system used in the development process, RSA algorithm with AES algorithm.

There are two different situations. First, the client transmits information to the server, and the information returned by the server does not need to be encrypted. In this scenario, it is okay to use only RSA encryption. Second, the client transmits information to the server, and the information returned by the server needs to be encrypted. In this scenario, a hybrid encryption scheme is required.

2. THE AES ALGORITHM

2.1 DESCRIPTION

AES is based on a design principle known as a substitution-permutation network, and is efficient in both software and hardware. AES is a variant of Rijndael which has a fixed block size of 128 bits, and a key size of 128, 192, or 256 bits. By contrast, Rijndael per se is specified with block and key sizes that may be any multiple of 32 bits, with a minimum of 128 and a maximum of 256 bits.^[1]

2.2 FOUR IMPLEMENTATION MODES

The ECB (ELECTRONIC CODEBOOK) is the simplest block cipher encryption mode. Before encryption, it is divided into several blocks according to the encryption block size, and then each block is separately encrypted using the same key, and the decryption is the same.

In the CBC (CIPHER-BLOCK CHAINING) mode, each cipher block to be encrypted is XORed with the ciphertext of the previous cipher block before being encrypted and then encrypted by the cipher. The first plaintext block is XORed with a data block called an initialization vector.

CFB (CIPHER FEEDBACK) can convert block cipher into stream cipher.

The OFB (OUTPUT FEEDBACK) first uses a block cipher to generate a keystream and then XORs the keystream with the plaintext stream to obtain a ciphertext stream. The process of encryption and decryption is the same due to the symmetry of the XOR operation.

2.3 FOUR OPERATIONS

The main loop of the AES algorithm performs four different operations on the State matrix, called SubBytes, ShiftRows, MixColumns, and AddRoundKey^[2-3].

The Subbytes step shows that each byte $a_{i,j}$ in the state array is replaced with a SubByte $S(a_{i,j})$ using an

8-bit substitution box. The S-box used is derived from the multiplicative inverse over $GF(2^8)$, known to have good non-linearity properties. To avoid attacks based on simple algebraic properties, the S-box is constructed by combining the inverse function with an invertible affine transformation. The S-box is also chosen to avoid any fixed or opposite fixed points. While performing the decryption, the InvSubBytes step (the inverse of SubBytes) is used, which requires first taking the inverse of the affine transformation and then finding the multiplicative inverse.

The ShiftRows step operates on the rows of the state; it cyclically shifts the bytes in each row by a certain offset. For AES, the first row is left unchanged. Each byte of the second row is shifted one to the left. Similarly, the third and fourth rows are shifted by offsets of two and three respectively. In this way, each column of the output state of the ShiftRows step is composed of bytes from each column of the input state. This step is to avoid the columns being encrypted independently, in which case AES degenerates into four independent block ciphers.

In the MixColumns step, the four bytes of each column of the state are combined using an invertible linear transformation. The MixColumns function takes four bytes as input and outputs four bytes, where each input byte affects all four output bytes. Together with ShiftRows, MixColumns provides diffusion in the cipher.

In the AddRoundKey step, the subkey is combined with the state. For each round, a subkey is derived from the main key using Rijndael's key schedule; each subkey is the same size as the state. The subkey is added by combining each byte of the state with the corresponding byte of the subkey using bitwise XOR.

3. THE RSA ALGORITHM

3.1 DESCRIPTION

The RSA algorithm involves a public key and a private key. Messages encrypted with the public key can only be decrypted in a reasonable amount of time by using the private key. The public key is represented by the integers n and e ; and, the private key, by the integer d . m represents the message. The RSA involves 4 steps.

3.2 FOUR STEPS

3.2.1 KEY GENERATION

The keys for the RSA algorithm are generated as follows:

- 1) Choose two distinct prime numbers p and q . For security purposes, the integers p and q should be chosen at random, similar in magnitude but different in length by a few digits to make factoring harder. p and q are kept secret.
- 2) Compute $n = pq$. n is used as the modulus for both the public and private keys. Its length, usually expressed in bits, is the key length. n is released as part of the public key.
- 3) Compute $\lambda(n)$, where λ is Carmichael's totient

function. Since $n = pq$, $\lambda(n) = \text{lcm}(\lambda(p), \lambda(q))$, and since p and q are prime, $\lambda(p) = \phi(p) = p - 1$ and likewise $\lambda(q) = q - 1$. Hence $\lambda(n) = \text{lcm}(p - 1, q - 1)$. $\lambda(n)$ is kept secret.

4) Choose an integer e such that $1 < e < \lambda(n)$ and $\text{gcd}(e, \lambda(n)) = 1$; e and $\lambda(n)$ are coprime. e having a short bit-length and small Hamming weight results in more efficient encryption – the most commonly chosen value for e is $2^{16} + 1 = 65537$. The smallest and fastest possible value for e is 3, but such a small value for e has been shown to be less secure in some settings. e is released as part of the public key.

5) Determine d as $d \equiv e^{-1} \pmod{\lambda(n)}$; that is, d is the modular multiplicative inverse of e modulo $\lambda(n)$. The equation is $d \cdot e \equiv 1 \pmod{\lambda(n)}$. d can be computed efficiently by using the Extended Euclidean algorithm. d is kept secret as the private key exponent.

3.2.2 KEY DISTRIBUTION

Suppose that Bob uses RSA to send information to Alice, he must know Alice's public key to encrypt the message and Alice must use her private key to decrypt the message. To enable Bob to send his encrypted messages, Alice transmits her public key (n, e) to Bob via a reliable, but not necessarily secret, route. Alice's private key (d) is never distributed.

3.2.3 ENCRYPTION

After Bob obtains Alice's public key, he can send a message M to Alice. First, he turns M (the un-padded plaintext) into an integer m (the padded plaintext). He then computes the ciphertext c , using Alice's public key e , corresponding to $c \equiv m^e \pmod{n}$. Bob then transmits c to Alice.

3.2.4 DECRYPTION

Alice can recover m from c by using her private key exponent d by computing $c^d \equiv (m^e)^d \equiv m \pmod{n}$ [4-5]. Given m , she can recover the original message M by reversing the padding scheme.

4. AES AND RSA HYBRID ENCRYPTION

4.1 DESCRIPTION

In cryptography, a hybrid cryptosystem combines a public-key cryptosystem with the symmetric-key cryptosystem. Public-key cryptosystems are convenient because a common secret is not required. However, feasible mathematical computations are needed, which causes inefficiency comparing to symmetric-key cryptosystems. In many applications, the high cost of encrypting long messages in a public-key Cryptosystem can be prohibitive. A hybrid system can fix the problem.

4.2 IMPLEMENTATION PROCESS

To encrypt a message to Alice in a hybrid cryptosystem, Bob does as follows:

Obtains Alice's public key.

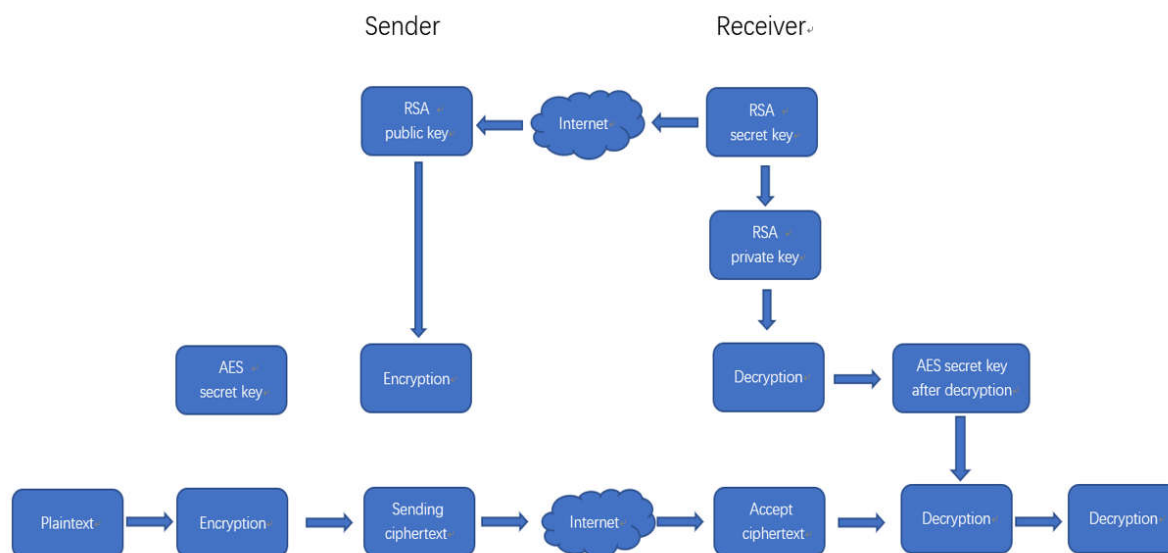
Generates a fresh symmetric key for the data encapsulation scheme.

Encrypts the message under the data encapsulation scheme, using the symmetric key just generated.

Encrypts the symmetric key under the key encapsulation scheme, using Alice's public key.
Sends both of these encryptions to Alice.
To decrypt this hybrid ciphertext, Alice does as follows:

Uses her private key to decrypt the symmetric key contained in the key encapsulation segment.
Uses this symmetric key to decrypt the message contained in the data encapsulation segment.

Figure 1. The Implementation Process



The specific process is that the receiver first creates the RSA key pair, the receiver sends the RSA public key to the sender over the Internet, and the RSA private key is saved. The sender creates the AES key, encrypts the plaintext data to be transmitted with the AES key, encrypts the AES key with the accepted RSA public key, and finally sends the AES key encrypted with RSA public key to the receiver via Internet transmission. When the receiver receives the encrypted AES key and ciphertext, it first invokes the

RSA private key saved by the receiver and USES the private key to decrypt the encrypted AES key and get the AES key. Finally, the plaintext is obtained by decrypting the ciphertext with the AES key.

4.3 COMPARISON BETWEEN RSA AND AES

4.3.1 ENVIRONMENT

OS: Ubuntu 14.04.1 LTS

CPU: Linux ubuntu 3.13.0-32-generic

4.3.2 AES ENCRYPTION (WITHOUT ENCAPSULATION)

Table 1. AES ENCRYPTION (Megabit data processed per second) (Without Encapsulation)

type	16bytes	64bytes	256bytes	1024bytes	8192bytes
aes-128 cbc	7.4461938	2.0679909	0.5039534	0.3054819	0.0376751
aes-192 cbc	6.1082163	1.6837033	0.4257034	0.2469626	0.0306645
aes-256 cbc	5.0051669	1.3777478	0.3874933	0.2239936	0.0288614

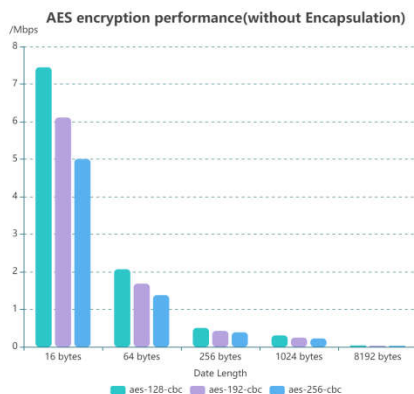


Figure 2. AES ENCRYPTION (Without Encapsulation) (/Mbps)

4.3.3 AES ENCRYPTION (AFTER ENCAPSULATION)

Table 2.AES ENCRYPTION (Megabit data processed per second) (After Encapsulation)

type	16bytes	64bytes	256bytes	1024bytes	8192bytes
aes-128 cbc	65.1628656	17.9179758	4.6736707	1.1694037	0.1471557
aes-192 cbc	56.8194250	15.1919381	3.6987646	0.9003003	0.1118582
aes-256 cbc	48.3402244	12.9851708	3.2778014	0.8075523	0.1030577

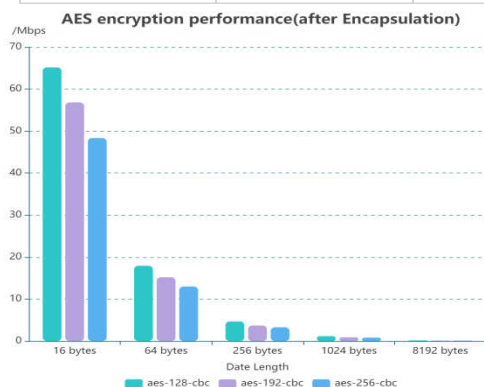


Figure 3.AES ENCRYPTION (After Encapsulation) (/Mbps)

4.3.4 AES DECRYPTION (AFTER ENCAPSULATION)

Table 3.AES DECRYPTION (Megabit data processed per second) (After Encapsulation)

type	16bytes	64bytes	256bytes	1024bytes	8192bytes
aes-128 cbc	65.67659	61.18043828	18.25448688	4.859104072	0.614364067
aes-192 cbc	53.84351188	51.53078656	13.87298617	3.795347139	0.470589899
aes-256 cbc	47.41689813	46.08069656	12.98063953	3.513298662	0.443732997

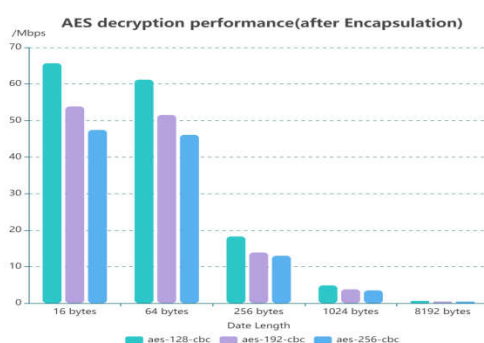


Figure 4.AES DECRYPTION (After Encapsulation) (/Mbps)

4.3.5 RSA (ENCRYPTION)

	sign	verify	sign's	verify's
RSA 512 bits	0.000044s	0.000004s	22570.8	280032.6
RSA 1024 bits	0.000140s	0.000010s	7132.3	101107.9

RSA 2048 bits	0.001131s	0.000035s	884.4	28211.6
RSA 4096 bits	0.008226s	0.000131s	121.6	7649.5

4.3.6 RSA (DECRYPTION)

	sign	verify	sign's	verify's
RSA 512 bits	0.000045s	0.000003s	22408.0	288751.3
RSA 1024 bits	0.000139s	0.000009s	7173.3	106153.0
RSA 2048 bits	0.001023s	0.000032s	977.9	31403.3
RSA 4096 bits	0.007422s	0.000119s	134.7	8383.6

4.3.7 PERFORMANCE RESULTS

Test the performance of various encryption algorithms, execute 1 million times, and count the total number of milliseconds consumed.

Table 4. The performance of AES and RSA

Algorithm	KeySize	DataLength	Encrypt(millis)	Decrypt(millis)	KeyGen
AES	128	1024	12841	/	/
AES	192	1024	14772	/	/
AES	256	1024	16672	/	/
RSA	512	32	38372	308731	13597000
RSA	768	32	61475	816705	36877000
RSA	1024	32	102841	1668865	70976000
RSA	2048	32	323458	9973702	619253000
RSA	3072	32	679590		2769700000
RSA	4096	32	1167000		7506900000
RSA	6144	32	2486000		

Once the current AES algorithm is operated, it automatically recognizes the presence of Intel aes-ni hardware, which will enable hardware encryption. The processing data speed has increased by about 5 times.

The RSA algorithm has a very short encryption time and is basically negligible. The decryption efficiency is much lower than the encryption efficiency.

The performance of the AES algorithm under three key lengths (128/192/256) is similar.

The performance of the encryption and decryption of the RSA algorithm rapidly decreases as the length of the key increases.

The decryption performance of the RSA algorithm is much worse than the encryption performance, which is almost an order of magnitude difference.

The RSA key generation is very slow.

Comparison between symmetric and asymmetric algorithms

Table 5. Comparison between AES and RSA

	Key management	Speed
AES	More difficult, generally used in internal systems	Faster several orders of magnitude (can add and decrypt M-bit data per second),

		suitable for large data volume encryption and decryption processing
RSA	Easy to manage keys	Slow, suitable for small data volume encryption or decryption or data signature

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Comparative Analysis for TMDB Box Office Prediction

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Abstract: In this paper, 3000 past film metadata from a Kaggle competition were explored including cast, crew, plot keywords and budget, etc. To leverage the model, each movie in the dataset on Root-Mean-Squared-Logarithmic-Error (RMSLE) between the predicted value and the actual revenue were evaluated. The findings suggest: 1) XGBoost model performs better than neural network model and 2) This methodology can be used to forecast box office movie revenues.

Keywords: TMDB, movie box office revenue, neural network model, XGBoost;

1. INTRODUCTION

According to The Motion Picture Association of America (MPAA), movies grossed an estimated \$41.7 billion in 2018. Predicting box-office revenue accurately helps in reducing market risk and improve the management of the film production, budgeting, advertising and promotion^[1-4].

However, it is not easy. There have been many studies on movie success through leveraging factors such as director's influence,, release date and movie type.

Delen and Shard harnessed a multilayer perceptron (MLP), which resulted in a 36.9% absolute accuracy rate and a 75.1% relative accuracy rate. This was the first attempt to use a neural network to predict box office revenue and they compared it against other machine learning techniques, such as logistic regression and decision trees. A similar study was done by Zhang et al.^[5-7]. Rhee and Zulkernine proposed a back-propagation neural network model to predict the box office of 375 movies from 2010 to 2015. This was the first attempt to use both data from the movie database as well as data extracted from social media. Only one paper to date^[4] harnessed Natural Language Processing (NLP) techniques to extract features from plot descriptions to predict box office revenue.

Based on their research, a back-propagation neural network model and an XGBoost (Extreme Gradient Boosting) model to predict the box office revenues were proposed. We compared the results of the neural network model with XGBoost model, through

RMSLE, and discovered that the XGBoost performs better than neural network model.

2. DATA

Movie data from a Kaggle competition associated with a diverse group of 3000 films metadata was used.

Table 1 shows the movie attributes.

Table 1. Movie Attributes

Id	Popularity	Runtime
Belongs to collection	Poster path	Status
Budget	Imdb id	Spoken languages
Crew	Revenue	Title
Genres	Production companies	Keywords
Homepage	Production countries	Tagline
Original language	Release date	Cast
Overview	Original title	

The relationship between different features and revenue was analyzed and it shows significant correlations that between budget, popularity, release year, runtime and revenue (Tab. 2.).

Table 2. Correlation Matrix

	budget	popularity	release_year	runtime	revenue
budget	1.000000	0.342584	0.210902	0.236695	0.754983
popularity	0.342584	1.000000	0.109711	0.133690	0.461524
release_year	0.210902	0.109711	1.000000	-0.028941	0.137857
runtime	0.236695	0.133690	-0.028941	1.000000	0.216638
revenue	0.754983	0.461524	0.137857	0.216638	1.000000

Higher popularity leads to higher revenue can be seen in Fig. 1. It is evident that a direct relationship exists between movie budget and revenue. The third chart shows that the film market is expanding rapidly.

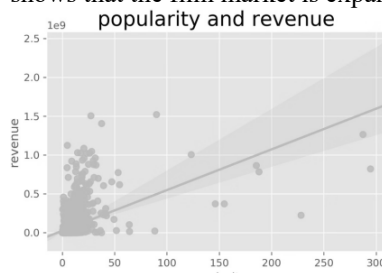




Figure 1. Relationship between popularity, budget, runtime and revenue

It was confirmed that the correlation exists between genre and average revenue [8-11], where adventure, fantasy and animation (Fig. 2) receive more commercial success.

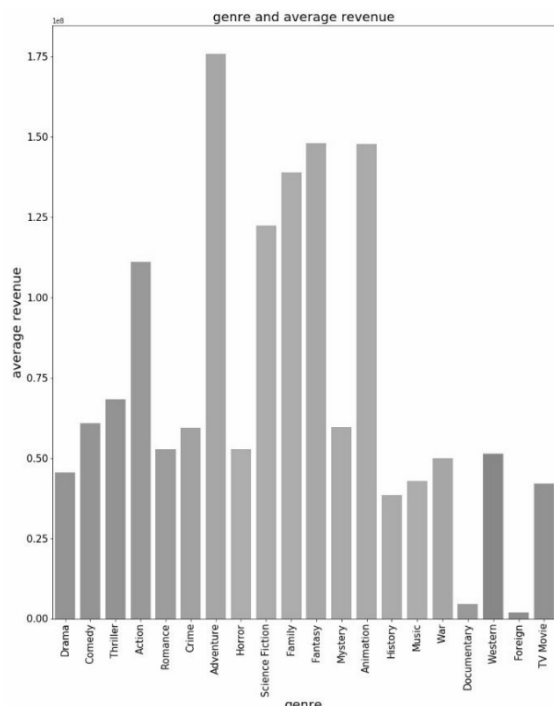


Figure 2. Relationship between genre and revenue

3. DATA PROPROCESSING

Python was applied to clean features and fill in missing data. Some features were removed. Hence, twelve variables were shown as below (Tab. 3).

Table 3. List of variables

Budget	Crew	Runtime
Revenue	Popularity	Spoken languages
Genres	Production companies	Keywords
Overview	Release date	Cast

The numerical values, including popularity and

budget are normalized (Formula 1). Besides, revenue into values between 0 to 1 was normalized and multiplied ten, which allows us to better compare the results with another paper.

$$X' = \frac{x - \bar{x}}{\sigma} \quad (1)$$

Considering the independent effects of the various genres, binary classification factors of all genres to evaluate their contribution to the movie box office were established. Since 'spoken language' with low frequency makes a negligible influence on revenue, only the top twenty languages were selected.

Using the 'cast_id' information listed in each film, we computed (Formula 2) each actor's 'Actor Power Score (APS)'. Then computed (Formula 3) the top 30 power scores of actors in each film which called the 'Total Actor Star-power (TAS)'.

$$APS_{actor} = count_{actor}(all\ movies) \quad (2)$$

$$TAS_{movie} = \sum_{(actor\ in\ movie)} APS_{actor} \quad (3)$$

4. METHODOLOGY

Performance of this model was evaluated using RMSLE. The following is a detailed introduction of these three models (Fig. 3).

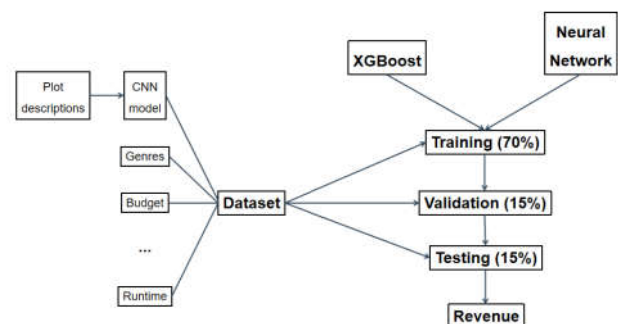


Figure 3. Work flow of the methodology and experiments

4.1. Xgboost

XGBoost is a scalable boosting algorithm. Compared with GDBT (Gradient Boosting Decision Tree), the loss function is developed by Taylor series expansion, and the first and second derivative are used together, which helps to speed up the optimization. Output is shown in the following formula:

$$\bar{y}_i = \sum_{k=1}^K f_k(x_i), f_k \in F \quad (4)$$

The objective function is defined in formula (5).

$$Obj = \sum_{i=1}^n l(y_i, \bar{y}_i) + \sum_{k=1}^K \Omega(f_k) \quad (5)$$

$\Omega(f_k)$ is a regularization terms to prevent overfitting. To simplify the objective function, the objective function becomes formula (6).

$$L^{(t)} \approx \sum_{i=1}^n \left[g_i f_t(x_i) + \frac{1}{2} h_i f_t^2(x_i) \right] + \Omega(f_t) \quad (6)$$

4.2. Neural Network

A multi-layer backpropagation neural network was designed as shown in Fig. 4. The weights and offsets of the layers in the neural network were adjusted using backpropagation method and stochastic gradient descent (SGD) algorithm [6].

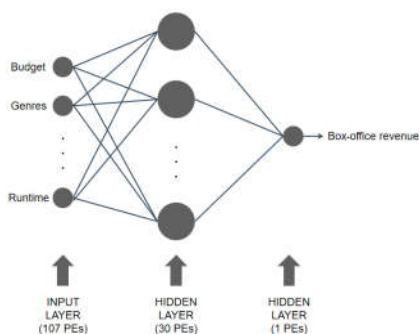


Figure 4. Graphical representation of our MLP neural network model

4.3. Convolutional Neural Network (Cnn)

Convolutional neural network (CNN) models have been shown to be effective in natural language processing [12-15]. The basic work flow of the CNN model used for sentence-level classification tasks was shown in Fig. 5.

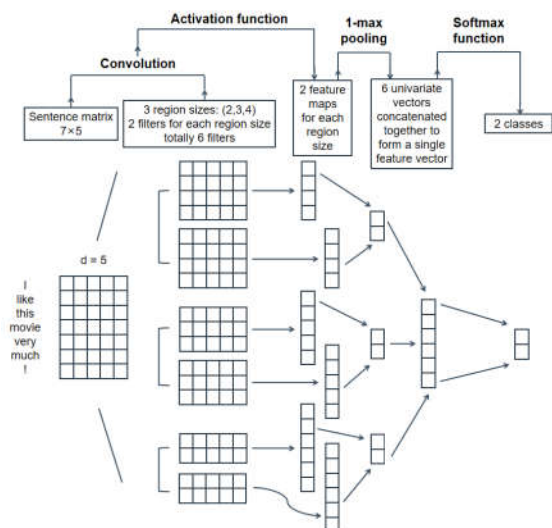


Figure 5. Work flow of CNN model

ReLU was adopted as the activation function and the sigmoid function was employed following the flatten layer to generate the categorical results. Performance was evaluated with a cross-entropy method and optimized using the Adam algorithm [16-17]. Details of the CNN architecture was shown in Fig. 6.

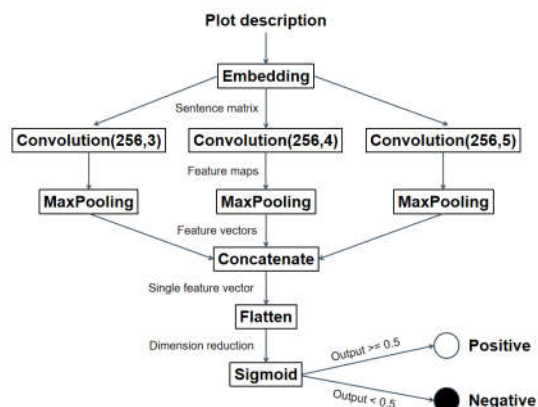


Figure 6. Graphical representation of the CNN model

4.4. Rmsle

We use the Root-Mean-Squared-Logarithmic-Error (RMSLE) formula to indicate the difference between the box office predicted from the model and the actual box office (Formula 7).

$$RMSLE = \sqrt{\frac{1}{n} \sum_{i=1}^n (\log(p_{i+1}) - \log(a_i + 1))^2} \quad (7)$$

5. RESULTS

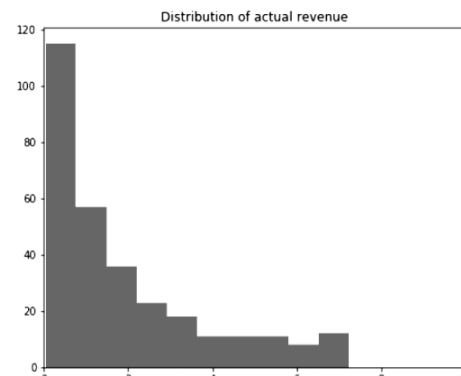


Figure 7. Distribution of actual revenue

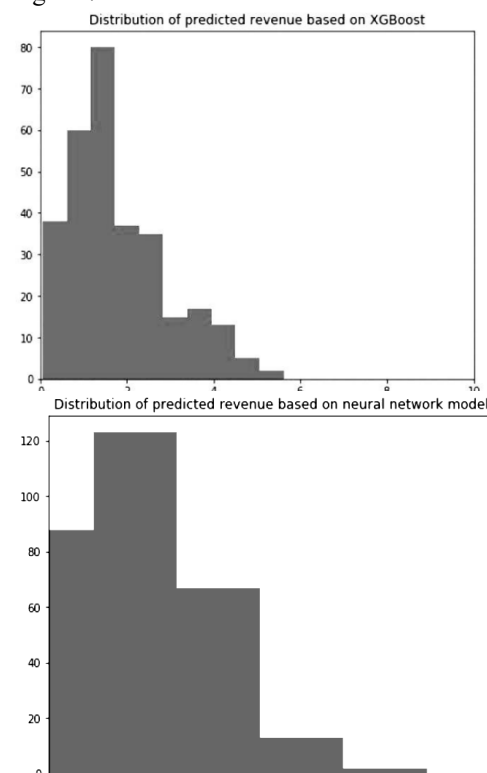


Figure 8. Distribution of predictive revenue based on XGBoost and neural network model

Fig. 7. shows the distribution of actual revenue, which is mainly distributed among 0 to 8. The predicted revenues are from 0-6 under XGBoost and 0-8 based on neural network model.

The accuracy of the prediction model achieved by XGBoost is higher (Tab. 4). Moreover, the RMSE values of XGBoost and neural network are 0.15 and 0.21(Tab. 5), which indicates that the models using CNN to evaluate keywords and plot performs better. Table 4. RMSLE statistics of prediction model based on XGBoost and neural network model

	XGBoost	Neural Network
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		Model
RMSLE of validation set	0.12588	0.17058
RMSLE of test set	0.12468	0.17096

Table 5. RMSE statistics of prediction model based on XGBoost and neural network model

	XGBoost	Neural Network
RMSE of test set	0.16128	0.21138

Table 6. RMSE statistics of prediction model in Movie Score Prediction Model Based on Movie Plots

	Linear regression	BP neural network
RMSE of test set	1.08387	1.34105

5. CONCLUSIONS

In conclusion, the accuracy of the prediction model constructed by the XGBoost model is higher than that based on neural network model under this circumstance. Additionally, the overall performance of our models works better than the paper we explored. In future research, a larger dataset and more information from the audience as features to improve the performance of models can be utilized, such as vote score, vote count and reviews.

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The Transformation from the Traditional Personal View to the Modern State View

--Comment on Shuoguoja (Talk about Country) by Chen Tu-hsiu

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Abstract: Chen Tu-hsiu sublated the traditional personal view and elaborated on the modern state view in the article Shuoguoja (Talk about Country), which is discrepant from such kinds of views in the western world in the essence and the approaches. He believed that founding a modern country is crucial to salvage the then endangered nation. Despite different times and historical missions, the historical situations are similar. Given current risks and opportunities, "Chinese Dream" is essential in guiding, uniting and stimulating nationals to secure both the sound operation of the country and achieve individual achievements.

Key Words: traditional; personal view; state view; Chen Tu-hsiu

Chen Tu-hsiu, a major leader of both the New Cultural Movement and the May Fourth Movement and a founder of the Chinese Communist Party, published the article Shuoguoja (Talk about Country) in the 5th issue of the journal Anhui Common Saying Newspaper in 1904. In the article, he stated that only at the eleventh hour did the traditional intellectuals wake up and realize the meaning of "country". Such revelation not only smashed their illusion about the fame and fortune with the invasions by foreign powers, but also shed a new light on the vision of the elite intellectuals and bureaucrats, thus promoting the transformation from the traditional personal view to the modern state view.

1. THE TRADITIONAL PERSONAL VIEW BASED ON THREE CARDINAL GUIDES AND FIVE CONSTANT VIRTUES

In feudal society, the Confucian thought of "benevolence" is based on the relationship between the rulers and subjects, fathers and sons, and husbands and wives. Only in such kind of hierarchical system did individuals feel the sense of their existence and acquire the meaning of their lives which lies in pleasing secular critics and meeting expectations of others. "In his adolescence, Chen Tu-hsiu followed the route 'from Xiucui, Juren, Jinshi, to Zhuangyuan' (Note: Xiucui, Juren and Jinshi refer to the successful candidates in the imperial examinations respectively at the county level, the provincial level and the national level, and

Zhuangyuan the champion who comes first in the national-level imperial examinations nominated by the emperor. Such kind of talents-selecting mechanism prevailed in Ming and Qing Dynasties.) This ladder was not only dedicated to intellectuals but also 'dominated the life of the ordinary. With scholarly honor or official ranks, individuals had the chance to locate a high position in the bureaucracies' so as to make a fortune."^[1] Chen Tu-hsiu confessed that "he ever studied hard just to succeed in the imperial examinations and bring honor to and escalate the status of his family."^[2] "It was inherently common among intellectuals in ancient dynasties to strive to succeed in the imperial examinations, return to hometown in glory and make their ancestors illustrious.

Foreign powers invaded the country and the weakened Qing government was forced to cede territory and pay indemnities, shocking and awakening those living in a fool's paradise and shattering the illusion of elite intellectuals and bureaucrats about the incompetent government. The invasion of foreign forces not only dismantled the imperial examination system, without which people lost their sense of belongingness and were depressed and helpless in the realization of individual values, but also psychologically shook their faith in the feudal empire. "If a tree withers, its branches cannot survive; If the nest is destroyed, its inhabitants cannot be preserved."^[3] The agonizing national crisis rippled far and caused mountainous waves in the declining "Celestial Empire". Numerous patriots with lofty ideas waked up, dedicated themselves to exploring solutions to salvage the country and reflected on how to find a new direction in life and redefine the meaning of life.

2. THE MODERN STATE VIEW ENTAILING TERRITORY, PEOPLE AND SOVEREIGNTY

"Ancient Chinese people equate the concept of the empire with that of the state, interpreting the loyalty to the emperor as patriotism. Thus, they deem that the empire or the state is the achievement born of ancestors' painstaking efforts to be inherited by the descendants, in which lies the essence of acquiring authority over a political unit."^[4] For ancient Chinese people, the empire was the state, and being loyal to

the emperor was being patriotic. "The land all over the empire is under jurisdiction of the emperor, and inhabitants who dwell on the land are subjects of the emperor."^[5]Therefore, people viewed that the rise and fall of the empire was exclusively related to the emperor and the ruling class. The invasion of foreign powers put the state in serious jeopardy and exerted considerable influence on such kind of views. "The View of Empire" was gradually replaced by the view of state and sovereignty in the modern sense. In such a process, "individuals in the late Qing Dynasty freed themselves from various communities to merely meet the requirements set forth by a new modern power and ensure their identities in it."^[6]"Hence, to reestablish the integration of families and the state, individuals must develop a proper and comprehensive understanding of the modern state and comprehend the interrelationship between themselves and the state so as to endow life with new connotations.

What's the definition of the state? Chen Tu-hsiu believed that a state entails three dispensable elements, namely territory, people and sovereignty. Territory means that "a state shall cover an area of land" ^[7]which is indivisible and inviolable. As for people, "a state shall be home to groups of people"^[8]who are not a disorderly and in-cohesive crowd but "a nation of people who are bound together by a common history, culture and language."^[9]"It is believed that people with a common set of cultures and beliefs are to build a modern state. Sovereignty denotes that "a state has the legitimate and ultimate authority which shall be owned by people and exercised by the government on behalf of the people." ^[10]"The government of a state shall independently exercise all its legitimate powers, including judicial power, tax power, military power, diplomatic power and power over personnel, free from the interference and influence of the foreign governments.

3.THE COGNITIVE TRANSFORMATION FROM THE TRADITIONAL PERSONAL VIEW TO MODERN STATE VIEW

Chen Tu-hsiu believes that China is neither the center of the world nor the only state in the world. However, Chinese people paid too much attention to their own interests, sought for maximum benefits for their own "families" and disregarded the modern state view and the view on overall interests. Consequently, it was disunited and couldn't withstand even a single blow stricken by foreign powers. "People didn't hear about the Empire of Japan until the year of 1894 when the First Sino-Japanese War broke out and ended up with the surrender of the Qing government. In 1900, the Eight-Power Allied forces of Britain, Russia, France, Germany, Italy, the United States, Austria and Japan captured Beijing and scrambled to carve up China"^[11]. "Only when seeing the country split and homes destroyed did Chinese people keenly feel the pain. "All people of a country share its rise

and fall and no one will survive from its destruction. I broke out in a cold sweat and felt ashamed of my thought. If the huge family was destroyed, I will be not happy and the prosperity of my own family would be based on nothing, which conjured up intense grief to me."^[12] The strong sense of urgency and awareness of individual survival crisis prompted Chen Tu-hsiu to sublimate the traditional personal view and retain the emotion of "Family-country" upheld by the elite intellectuals and bureaucrats. The family is the miniature of the state, and the state is the amplification of the family. "The state and families are closely related and interdependent. If the state is in peril, how could the families be intact? A country is the integration of numerous families, resembling the relationship between whole and parts. If one part breaks down, the whole could manage to work well and the part could be repaired finally. However, if the whole disintegrates, its parts will definitely perish."^[13]

Facing national disasters, individuals must redefine their loftiest ideal of life, not securing fame and fortune but salvaging the endangered nation, and be unselfish to strive for the survival of the huge family rather than personal benefits. To revitalize the nation, individuals must endeavor to achieve the open and integrated development instead of the closed and singular one, and seek for the national well-being other than interests of families. "In such lights, I dare affirm: 'a country will certainly be powerful if its nationals contribute their parts to defending it, while it will definitely collapse if its nationals disregard its significance'"^[14]. It is true not only for China but also for other countries in the world. "Provided everyone understands that the country is a huge family and devotes great efforts to its development, the country will prosper, each one will be joyful and content as well as each family will take a pride in it."^[15] During the course of struggling for the national survival and salvation, only if everyone is aware of the relationship between the country and individuals can they realize the ideal of life of "the integrated development of the country and families" and fulfill the long-cherished wish of "national independence".

4.REFLECTION FROM A MODERN PERSPECTIVE

In the article *Shuoguoqia* (Talk about Country), Chen Tu-hsiu analyzed his ignorance and the poverty and backwardness of modern China, accepted the western concept of modern country entailing "Three Elements", namely "territory, people and sovereignty", and elaborated on the definition of the country, realizing the cognitive transformation from the traditional personal view to the modern state view.

The personal view and the state view stated in the article are of Chinese characteristics and features of the era, distinctive from those of the western world. Even though the article was published 100 years ago,

it still sheds some lights on the modern relationship between the country and individuals. To secure the sound operation of the country and achieve individual goals, we need to develop a better understanding of the relationship between the country and individuals and harbor “Chinese Dream” in our heart as the beacon of our lives.

4.1. The personal view and the state view stated in the article *Shuoguojia* (Talk about Country) are distinctive from those in the western world.

Chen Tu-hsiu sublated the traditional personal view and elaborated on the modern state view in the article in response to the national chorus for the national survival and salvation, embodying the features of the era and the core of Chinese traditional culture values. “According to Confucianism, an individual is not independent but just the totality of social roles and the individual behavior is to fulfill one’s role, responsibilities and duties”^[16] While the personal view in the western world is based on innate rights of man, safeguarding individual rights and interests and realizing individual achievements. Influenced by Confucianism, Chinese people understand themselves in the terms of relationship, whereas western people view themselves in terms of legal rights, thus their personal views, the concept of nation are different in the culture essence and the realistic connotation.

4.2. In the wave of globalization, “Chinese Dream” is essential in guiding, uniting and stimulating nationals to secure both the effective and efficient administration of the country and achieve individual achievements.

“All history is contemporary history”.^[17] Despite different times and different historical missions, the historical situations are similar, requiring us to develop a clear understanding of the relationship between the country and individuals. Nowadays, China has become the engine in promoting the world economic recovery and an important pole in maintaining the world peace and development. Meanwhile, obvious improvement has been noted in people’s living standards, autonomy and the all-round and free development. In an era of globalization, informatization and global network, no state could be the center of world and various cultures coexist and influence each other, Especially in the industrial 4.0 era, new higher requirements are proposed for the country and the people, such as how to unleash people’s initiative and creativity, how to bring into full play the roles of “double engines”, namely mass entrepreneurship and innovation, in the shaping of the new normal of economic development, and how to realize the transformation from a country abundant in human resources to one with quality human resources, in face of these development opportunities and severe challenges, it is necessary to further promote the modernization of the state governance and guided by the vision of people-centered development. As socialism with Chinese

characteristics has entered a new era, “Chinese Dream” to prompt “prosperity of the country, the rejuvenation of the Chinese nation and the well beings of Chinese people” is essential in guiding, uniting and stimulating nationals to make concerted efforts to compose a new chapter in the Chinese nation’s rejuvenation endeavors and make new contributions to the development of world civilization.

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