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CONTENTS

Research on the Strategies of Entrepreneurial Ability Cultivating for Industrial Design Majors in Higher Vocational Colleges

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Abstract: The development of industrial design industry promotes universities' rapid enrollment for industrial design majors, which causes the students, especially the higher vocational colleges' students to run into severe employment crisis. The paper takes Guangdong province which has large population of ecdemic employment as an example, researches industrial design majors' employment status of 25 higher vocational colleges in this province, analyzes necessity of entrepreneurial ability cultivating for students, and proposes four strategies: establishing professional teaching system based on entrepreneurial ability cultivating-oriented, fusing effectively entrepreneurship education and professional education, strengthening "entrepreneurial" teaching staff construction and creating dense entrepreneurial atmosphere.

Key words: higher vocational colleges; industrial design majors; entrepreneurial ability cultivating; strategies

1 Introduction

In 2004, National Development and Reform Commission drafted Development Strategy of Industrial Design Industry, and indicated for the first time that industrial design majors' cultivation must be as the most important development strategic of industrial design industry. In 2007, Premier Wen Jiabao made a series of special instructions for attaching great importance to cultivate industrial design majors in Suggestions About Developing Vigorously Industrial Design Industry in China. [1] In 2010, the Ministry of Education pointed out that it was very necessary to explore a new cultivating mode in favor of industrial design majors' growth and cultivate many industrial design majors to meet the needs of industrial development and strengthen industrial design industry in A Number of Guidances about Promoting the Development of Industrial Design Industry. [2] Many universities take advantage of the occasion and set up industrial design major. However, it results that industrial design majors, especially the higher vocational colleges' industrial design majors in Guangdong province which has large population of ecdemic employment run into severe employment crisis. The paper takes Guangdong province as an example, researches industrial design majors' employment status of 25 higher vocational colleges in this province. The result shows that entrepreneurial ability cultivating must be an important breakthrough in order to widen employment channels of students and alleviate current severe employment situation. According to the research conclusion, the author puts forward to some strategies which are very timely and necessary.

2 Employment Status of Higher Vocational Industrial Design Majors

2.1 The job-hunters increase constantly inside and outside the province

As we all know, Guangdong, as a manufacturing province, is one of core bases for the development of industrial design industry in China. It has strong design culture and plays an important role in the process of conveying design talents. According to the survey statistics, there have been 45 universities that set up industrial design major in Guangdong, including 25 higher vocational colleges, the number is the top three in China. In 2015, the numbers of industrial design majors in this province are about 6,600, and they will be more than 7,000 until 2017. The employment pressure rises following incremental quantity of employment year by year. Moreover, according to Research Report on the Employment of Chinese University Graduates in 2016, the numbers of university graduates were 7.65 million in 2016, and there were more than 0.8 million students who went to Guangdong for jobs, including many industrial design majors from domestic and foreign famous universities[3][4][5]. The job-hunters increase constantly inside and outside the province, which results that higher vocational industrial design majors in Guangdong who haven't academic advantage run into severer employment situation.

2.2 Professional education and talent demand dislocate

Among the 25 higher vocational colleges surveyed, 11 schools set up industrial design major in department of engineering, mainly recruit engineering students, and students' product structure design capacity as the importance of talent cultivating; the other 14 schools set up the major in art department, and pay attention to product appearance design ability cultivating for the art students. However, the two types of students' studying period is only for 2.5 years and internship for 0.5 year, the limitations of professional positioning in engineering and art industry design major make the students with weak learning ability can't reach completed knowledge structure and skilled professional skills within a short time. And with the continuous progress of technology, enterprises' requirements on industrial design professional practitioners are no longer confined to product structure or appearance design abilities, but comprehensive design quality with art, technology, humanities and psychology and other highly integrated. Therefore, serious dislocation between industrial design professional education and talent demand inevitably leads to embarrassing situation that is "job-hunters in difficult employment, enterprises in scarce labor". In 2015, higher vocational industrial design majors in Guangdong gave 74.04 points for "satisfaction on the professional setting and professional direction of alma mater" and 71.23 points for "satisfaction on the curriculum design and teaching content of alma mater",[6] which confirms convincingly main problems.

2.3 Professional salary-rise is less than growth in per capita GDP

According to Annual Report on Guangdong Provincal University Graduates' Employment Quality in 2015 and Annual Report on Guangdong Provincal University Graduates' Employment Quality in 2016 issued by Department of Education of Guangdong Province, from 2014 to 2016, the average monthly salary of higher vocational industrial design majors was respectively about 2,447¥, 2,652¥ and 2,836¥[6][7]. During this period, per capita GDP in Guangdong rose from 63,452¥ to 72,787¥.[8] It can be seen that increased annual income of the students is far less than per capita consumption level in Guangdong. At the same time, current professional compensation and students' high capital investment in the process of learning form a great contrast. Moreover, reference to the labour market wage for design jobs published by Guangdong Provincial Department of Human Resources and Social Security in 2017, mechanic's monthly salary is about 2,500¥, which is the same as the higher vocational industrial design majors'. Therefore, some enterprises are more willing to recruit college students to replace mechanic in order to enhance overall level of culture and quality of employees. Professional salary-rise is less than growth in per capita GDP and the level of living is continuous improved in Guangdong, which make that the higher vocational industrial design majors start to reduce employment intention and even think "useless studying".

2.4 "Choosing different way to solve problems" leads to the loss of design talents

When the job-hunters increase constantly inside and outside province and professional salary –rise is less than growth in per capita GDP, some higher vocational students are forced to try to create entrepreneurship. However, reference to teachers' feedback from the 25 higher vocational colleges surveyed and the sharing of previous students' entrepreneurial experience, the numbers of higher vocational industrial design majors in Guangdong who start up business are very low, and the entrepreneurial success rate is not satisfactory. Under double oppression with cruel social reality and great pressure of life, some industrial design majors begin to seek their new way by engaging in some jobs mismatched with their major, such as sales staff, trainers, clerks and planners and so on. "Choosing different way to solve problems" gradually turns into normal employment form, which must cause the loss of design talents and decline in students' professional counterpart rate. To some extent, it can inevitably lead to downturn of students' satisfaction on the professional setting and professional direction of alma mater, and then affect the sustainable development of the professional of alma mater in turn.

3 Strategies of Entrepreneurial Ability Cultivating for The Majors

Higher vocational education belongs to vocational technical education, and it is based on employment as the goal of education. At present, in order to cultivate the first-line design talents for social needs, many higher vocational colleges set up industrial design major, help students to master skills and ensure their employment successfully. However, under the severe employment situation, students must be encouraged to explore entrepreneurship road to broaden their own employment channels.In Notice on Implementing the Plan about Guiding University Students' Entrepreneurship, National Human Resources and Social Security Ministry clearly pointed out that the state must inspire the vitality of university students, encourage them to guide entrepreneurship by innovation and promote employment by entrepreneurship; and the state must make full use of public resources and other social resources to provide strong support for university students[9][10]. As industrial design major is a special subject which needs higher practical ability and creative design ability, it is very conducive to students' entrepreneurship because of its high specificity and flexibility; the industrial design majors have generally prominent personality and active creative thinking, which is very consistent with entrepreneurial characteristics[11]. Therefore, it is very necessary to accept entrepreneurial ability cultivating and improve self-entrepreneurial ability for higher vocational industrial design majors in the employment crisis.

3.1 Establishing the professional teaching system based on entrepreneurial ability cultivating-oriented

In the circumstances of "public entrepreneurship, peoples innovation", higher vocational colleges must advance with the times, make concrete market research and analysis, improve professional theoretical courses teaching and practical courses teaching, and establish professional teaching system based on entrepreneurial ability cultivating-oriented to broaden smoothly students' employment channels: (1) In the theoretical courses teaching, higher vocational colleges need to integrate into complementary courses for different art background students, perfect professional orientation, cultivate students' comprehensive ability in product appearance and structure design, help them master solid professional knowledge to adapt to the rapid update of advanced technology;(2) In the practical courses teaching, higher vocational colleges can draw into "Maker" mode[12][13], encourage students to form teams and make full use of professional equipment resources of the schools, such as 3D printers, CNC machine tools and other hardwares, change the best creative product draft ideas into actual products and then try to put them up for sale, which can not only cultivate students' comprehensive design ability, but also impel students to think initiatively and explore actively, and exercise them to learn and solve problems independently. This kind of micro-entrepreneurial activity is conducive to the cultivation of students' innovative consciousness, creative thinking and entrepreneurial ability, and also helpful to expand their career planning.

3.2 Fusing effectively entrepreneurship education and professional education

In recent years, entrepreneurship education integrated into professional education of higher vocational industrial design major has been an established direction and inevitable trend with which the Ministry of Education, the Ministry of Human Resources and Social Security and other government departments advocate to promote higher vocational students' comprehensive quality and their employment and entrepreneurship rate. According to the characteristics of industrial design major, higher vocational colleges must abandon traditional mode of entrepreneurship education, reduce theoretical courses teaching and increase actual combat guidance. For example, higher vocational colleges can encourage students to team up to create "Maker" practices, and focus on the most common problems they encounter in the process of their micro-entrepreneurial activities, such as how to produce products in batches, how to build reasonably external sales platforms, how to deal with cash flow problems, and how to deal with product after-sales service and so on, introduce pertinently entrepreneurial process guidance, entrepreneurial failure coping strategies and other contents. Based on the efforts to implement the spirit of entrepreneurship education, the colleges can cultivate students' abilities of self-design and self-marketing. At the same time, it is conducive to impel professional theoretical courses, professional practical courses and entrepreneurship courses to form a diversified professional education system which is coordinated and complementary.

3.3 Strengthening "entrepreneurial" teaching staff construction

Students' entrepreneurial ability cultivating quality guarantee comes from the strong teaching staff. In order to enhance the higher vocational industrial design majors' entrepreneurial ability, "entrepreneurial" teaching staff construction must be strengthened. (1) Higher vocational colleges can adopt the way of schools selection and off campus hired, employ teachers who are experienced and familiar with the form of entrepreneurship for industrial design major by supplying high salary, and then make them to form a specialized teaching and research section for industrial design major entrepreneurship education, organize regularly the members to accept profound entrepreneurial guidance cultivating in famous universities or well-known enterprises, and enhance their abilities to meet the requirements of undertaking entrepreneurship education tasks; (2) The colleges can determine the members' future by formulating strict performance appraisal program, such as students' entrepreneurial ability test, students' entrepreneurial success rate and student feedback, etc., which can encourage teachers to improve continuously self-teaching ability on one hand, also ensure the quality of entrepreneurship education on the other hand. According to the above stringent selection criteria and assessment mechanism, the purpose is to optimize continuously entrepreneurial education faculty for industrial design major to improve the quality of entrepreneurial ability cultivating.

3.4 Creating dense entrepreneurial atmosphere

Dense entrepreneurial atmosphere of the campus is helpful to stimulate higher vocational industrial design majors' positive entrepreneurial willingness. (1) Higher vocational colleges can make full use of social resources to establish good communication platforms for students. For example, often organize students go to visit business incubators or alumni's design companys, let the students regularly listen to successful entrepreneurs' entrepreneurial experience, and experience the entrepreneurial characteristics and cultural atmosphere of design companys by themselves; (2) In order to exercise industrial design majors' entrepreneurial ability, the colleges can organize entrepreneurial competitions related to industrial design major, encourage the majors to actively participate in, and then offer entrepreneurial support for the participating teams with the most entrepreneurial potential. Let the students begin to accept the initial examination of entrepreneurial practice in school to reduce their future entrepreneurship venture; (3) Build external sales platform, encourage industrial design majors to try out to sale the products made by themselves, let them spend more time to communicate with customers, and understand the customers' aesthetic hobbies to insight into the corresponding product market demands, which is very helpful to enhance the students' entrepreneurial ability and communication skills.

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Exploration of graphic communication and development

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Abstract: Graphic design as a new discipline was proposed in the 20 century 20 times. "Dissemination" was already a concern for a cultural topic, many scholars have begun to "human language systems" established, through a standardized worldwide language to realize extensive human exchanges. Produced at least six kinds of Esperanto in the field of Linguistics, in the field of Visual Arts are also set off a "non-Esperanto movement of the text"(also called a graphic symbol design movement). American designer Dreyfus George predicted: "originates from the Basic Visual symbols of the early human culture will become the universal communication tool. "This special historical background and the social and cultural environment, will cause the design to Visual design to serve as the main means of mass media activity this height; would have to disseminate information for the design and nature of the new design concept, this new professional graphics design. American designers deweijinsi first "graphic design" term to refer to his book decoration, advertising design professional activity, this is actually a sign, it means that the designers had realized that in the information age, their work is Visual communication. "The graphic phrase", and "information", "communication" have close ties.
Keywords: graphic, communication, information

1. INTRODUCTION

English "graphics" is the term "graphic". It comes from the Latin "Graphicus" and Greek "graphikos", the meaning of the word is: by means such as painted, written, engraved, printed pictures of marks is a descriptive picture image is the Visual Forms of words, text, language Can be through a variety of means to carry out a large number of copies; is to disseminate information in Visual form. "Thegraphic" was referred to in popular works are those of an advertising nature pictures, characterized by human design, to explain some concepts of Visual symbols. In short, it is marked and there are nature and meaning of art. Then, specific differences and works of art which does ? More than explain the meaning of the word tips we can to understand: the main function of art is aesthetic, and its value is on the original, its purpose is to explore the Visual presentation was created for Visual vocabulary and speech patterns; the creative process is a manifestation, pouring process of personal thoughts, emotions, and spirit, Without much thought, or even completely regardless of the specific work value and whether the audience understands, accepts, and other factors. Graphics are different, it is first "descriptive", is to illustrate a concept to others, communicate a content, its value is through a large number of copies of works in the face of a considerable number of spectators and after effects can manifest and is employed by a particular enterprise, organization or State departments to implement this behavior, So many objective factors must be considered in the creative process, the employer, and the audience psychology, and so on, in short, the graphics is the information medium. American graphic designer Hebo·lubaning pointed out, referring to the graphic designer's responsibility :"graphic designer's vocation is to image projection information" from essentially clear a "Graphic" nature. Also because of this, "for concepts to understand" nature is designed to solve the problem. Design, through to information content and order of the Visual image, and organizational relationships formation order, constitute a clear expression of information content complete "vision statement". Complete statements mean is another essential characteristic of the graphics. So, exactly, range in graphics between text and art work in Visual form. American graphic design theorist and Mei Luosi turning graphic distinction between art and said: "If the graphic design does not have a symbol or the meaning of the words, is no longer in Visual communication and become art. "In many Western countries and even graphic design known as" Visual design "(Visual communication design) or" information design "(Information Design).

With the development of science and technology, creating visual identity means more and more rich, graphic concept from "painted, written, engraved, printed" means "picture sign" expanded to include photography, video, tools such as computer-generated images. With the growing importance of dissemination activities, information carriers are more and more graphic design ranges from old posters, newspapers, books and expanded to include television graphics, movies, graphics, design, environmental graphics, graphics rendering from the plane to the activities, comprehensive and stereo sound and light. So, some graphic design graphic design is, strictly speaking, is not accurate, to say the least, is not comprehensive.

Thus, we can easily see the design disciplines in the "graphics" concept and General Chinese dictionary in the "graphics" comments there is some difference in the term, so long as we from the functional point of view, its similarities and it vivid. "Picture" is the designer of design elements, all forms are used to convey Visual information graphic language. Modern design is based on the design of functional antibody design on the basis of the system class. Thus can be the basis of modern design is divided into three systems: one is to design products using the function and structure of industrial design; the second is on functional and structural design of environmental space design; the third is aimed at information dissemination information design, graphic design, book design, advertising design, packaging design, Illustration design, logo design, character design, photography, graphic design, film and TV graphics design, computer graphic design, public recognition system design. Everything to do with the dissemination of information relating to the special design, a graphic design.

2.The origin of graphic communication and change

Graphic of the original form which can be traced back to prehistoric times.

As early as the beginning of the Upper Paleolithic era, human ancestors started with charcoal or mineral pigments in painting on cave walls where they live. This is not only the reflection of the nature of art, is their a way to communicate. The image symbol is in the labor and social information transmission medium. In Figure 1-1, plan 1-2, plan 1-3, it could be their collective prior to hunting, in order to better collaboration and communication "language", they may be taught hunting skills to the next generation of ideographic languages, May is a sign of their magic spell or prayer ... ... All in all, these pictures have a language component, this is the modern graphics of the original shape.

Along with the evolution of human consciousness, human living space to expand and further understanding on the importance of communication, so some original graphics to text evolution. The text, which has a certain standardization, standardization (within a certain range) form of Visual communication, enables information to disseminate accurate and on a broader scale, it can be said, the text makes a great first step in human culture, This is the first major revolution in the history of graphic design. It means humans have begun to find a way to integrate complex information content and the public is very easy to understand way of Visual communication. As Chinese seal character in the word "tea", that is today's "lease" character, succinctly expressed "wood notes" this complex dynamic behavior. It can be said that "design", start here.

The invention of papermaking and printing in China, and second major revolution in human visual communication activities. These two great inventions in human visual information can replicate and for larger audiences, people spread wider, to the mass communication.

Meanwhile, extensive use of printing and further promote the development of graphic design. First, it makes all kinds of cultural knowledge, scientific knowledge of mass communication and social culture was relatively popular, making the academic experience and to Exchange, thus making the speedy development of the socio-cultural and socio-cultural developments brought about by the various cultural, scientific and technological achievements, in turn, became the impetus to the development of graphic design. Especially after the printing press was introduced into Europe, expediting and facilitating the arrival of the European Renaissance. European Renaissance for graphic design is a very important historical stage of development, such as Leonardo da Vinci and other contemporary artists and scientists found in Visual principles and laws, on the discovery of the structure and the many laws of the human body, have become important experience and scientific design of the graphic design skills. Pay attention to the combination of art and science, is an important contribution to graphic design in the Renaissance. In addition, continuous printing technology in the development of many of the printing process and the resulting, increased graphic types and styles. Especially in 1870 year improvement of lithographic printing, graphic design work for more subtle color and image effects. Combination of design and production is due to print production began. In addition, the invention of the printing press is also another important significance in promoting the development of graphic design: print production, graphic design has become a specialized professional, printers and printing supplies consumers virtually as a graphic design career patron, which makes graphic design careers get financial support and stimulation, Thus resulting in a certain amount of professional graphic design team, the fierce competition in this sector (including competition between market competition and design), and developments in the competition. Combination of printing and graphic design graphic design skills and more rich, more subtle, while forcing designers began to pay attention to the mass of psychological research. In addition, paper production and printing is widely used, and rapidly expanding range of graphic communication, all paper prints (including stationery and supplies) are capable of graphic communication.

Visual communication of a third revolution began in the 19 century. 19 century was a time of change, science and technology and the rapid development to the graphic design industry has brought many new opportunities for development. In particular the invention of photography, graphic information add a new medium, and completely transformed the vision of human consciousness, graphic design won an unprecedented level of freedom and convenience, project information more accurate visual presentation is more abundant. Photography also lead to further innovation in printing technology, volume production photomechanical printing to big machine, Visual communication of the vastness of expansion again. In addition, the photographic film appeared inevitable, film made from plane, still in the form of Visual communication to activities , towards integrated sound and light.

It can be said that after printing invention, this is a revolution of human visual communication.

Today, advanced scientific and technological achievements have been an impetus for development of graphic design, graphic design has entered a Transwarp field. Fax, satellite, computer networking and other modern means of communication to make Visual communication has gone beyond the time limits of distance and space limitations, all kinds of Visual information with incredible speed, rapid, accurate communication on a global scale. Color holography, graphic thumbnail method, computer imaging and graphics design is almost the way for freedom of expression, the promise of advanced scientific and technological achievements to the designer is: "If you can dream, no less ... ..." graphic film, laser synthesis technology world became unprecedented rich and wonderful, Which leads to significant changes in the design concepts of graphic design. "Design" concept of the word "painted, written, engraved, printed" into "all can be used to generate Visual images and convert information communication technology". Designed with science in this age where tightly together, ideal for creating the graphic design in close future. "Graphic scientists" may be the future of the "Visual Designer" as a new title.

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Current Research Trends of SLA and Challenges and Strategies for Native Chinese English-learners

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Abstract: Current research of second language Acquisition (SLA) has several main trends: cognitive oriented perspective, social oriented perspective, and holistic perspective. Under these perspectives, many theories have been used to explain the process of SLA such as, primary theory, the theory of affordances, and sociocognitive approach. Native Chinese English-learners may have more challenges to learn English as a second/foreign language compared with other ethnic groups whose mother tongues are alphabetic based languages. It could be related to thinking differences, language distance, as well as effective teaching methods. Teaching under holistic perspective may be a practical method to enhance Chinese English-learners.
Keywords: cognitive oriented perspective, social oriented perspective, challenges and strategies, Chinese English-learners, teaching and learning

1.INTRODUCTION

Among different languages, English is one of the most popular languages widely used and studied in the world. Despite of the various purpose of English learning, people from different countries have different challenges and strategies. For native Chinese speakers, there are many successful examples to acquire English proficiency. For example, Tubergen and Kalmijn (2009) reported that Chinese immigrants in the US arrived with around 35% people speaking English well, and after 20 years in the US, extra 25% Chinese immigrants spoke English well. Others, however, have reported that it seemed to be challenging for Chinese English-learners to acquire English proficiency. These people perhaps had more difficulties learning English because of their learning abilities, their ages, and their cultural background (D. Zhang, 2010).

2. CURRENT RESEARCH TRENDS

Current research on SLA has two dominant research dimensions: cognitive oriented approach and social oriented approach (Firth & Wagner, 1997). Before the social and contextual orientation was introduced in 1996 by Firth and Wagner, cognitive research method dominated SLA research for 30 years, although many researchers brought social related indicators in the cognitive oriented research. In the past 15 years, debates and issues focused on the dispute between cognitive and sociocultural perspectives in SLA. In a holistic point of view, whether the balance between cognitive and social oriented approaches has been built up, both perspectives are valuable bases to explore the challenges and strategies for second language learning/foreign language learning (SLL/FLL).

(1)Cognitive Oriented Perspective

Many researchers contributed to the development of the cognitive oriented research field. Fries (1954), for example, systemically discussed the features of adult English learning including the sounds, the structure, the words, the contextual orientation, and so on. Chomsky (1959) disagreed with the perspective of behaviourism by Skinner and presented his own views of language learning in the ways of improving the frame of modern linguistics, psychology, and philosophy. Up to the 1990s, cognitive oriented approaches had many valuable results making teachers and learners understand how the second language (L2) has been processed and adopted. The perspective of Kasper (1997) clearly told us that cognitive processing is the main method for the brain to learn new things. Along with the tremendous growth of neuroscience over the last 15 years, many new findings strongly support the cognitive processing perspective of SLA. For example, event-related brain potentials (ERP) showed that late English learners did not rely on left hemisphere systems for grammatical processing but used both hemispheres to finish the processing (Weber-Fox & Neville, 1996). This is evidence to show that English can be acquired by processing in different ways in our brains. Pütz and Sicola (2010) systemically analyzed cognitive processing in SLA and explained the SLA processes not only top-down operation from universal grammar to first language (L1) and L2, but also bottom-up procedure. Besides this, attention, memory, and priming and affordance theories are also trends in the current SLA field.

Priming theory. The concept of priming has been well attested for over a hundred years but only applied in second language research in recent years (Benati, 2009). The definition of priming is described as "the phenomenon that prior exposure to something influences subsequent responses to the same or related things" (Benati, 2009, p. 10). Language learning has this property that previous linguistic features influence the subsequent language learning. According to Benati (2009), for example, the previous features of language influence the current language learning in reaction time, amount of use, accuracy, preference, and opinion, and so forth. There are positive effects, which facilitate second language learning, and negative effects, which inhibit second language learning.

Many scholars used this concept of priming for second language learning research. Cross-language priming experiments have typically shown that words in different languages primed each other (Jiang, 1999; Keatley, Spinks, Gelger, 1994). Keatley et al. (1994) found that priming occurred only when the prime was in their first language and it showed asymmetrical features by whatever among alphabet languages or between alphabet and nonalphabet languages. According to Jiang (1999), priming from Chinese to English was stronger than from English to Chinese by native Chinese subjects. The reaction time was shorter when the subjects recognized or translated an English word to a Chinese word than a Chinese word to an English word. Structural priming or syntactic priming was discovered more than 20 years and there are more than 100 studies that have used this method (Pickering & Ferreira, 2008). Cultural priming is also used to research individuals' self-construal and attendant memory strategies.

The theory of affordances. According to perceptual psychologist James J. Gibson (1977, 1979), affordance dealt with the mutual relationships between the organism and its environment in the perception area; it is the perceived opportunities that the environment provided or afforded; it is "a specific combination of the properties of [the environment's] substance and its surfaces taken with reference to the animal" (as cited in Angelis & Dewaele, 2011, p.1). Heft (2001) provided an elaboration of this term as "an affordance is the perceived functional significance of an object, event, or place for an individual. For example, a firm, obstacle-free ground surface is perceivable as a surface on which one can walk" (as cited in Singleton & Aronin, 2007, p. 84).

Based on these elaborations, Angelis and Dewaele (2011) found that language learners have certain potential affordances when they deal with language resources at their language learning and using environment. Multilingual language learners/users have more potential affordances available to them than other language users. Segalowitz (2001) believed that learners may be different in flexibility and fluency when dealing with a specific language situation, but their second language performance may be sensitive to environmental affordance, such as the ability to adjust the linguistic and nonlinguistic context of changing. When talking about language distance, Angelis and Dewaele explained that "awareness and readiness to use the affordances offered by the cognate vocabulary depends, first of all, on the perceived psychotypological distance between L1 and L2" (p. 5). Although there are not many research studies based on affordance for language acquisition, it provides inspiration for us to understand second or more language acquisition.

(2)Social Oriented Perspective

According to Firth and Wagner (1997), the ultimate goal of social oriented perspective is to argue for a reconceptualization of SLA as a more theoretically and methodologically balanced enterprise that endeavours to attend to, explicate, and explore, in more equal measures and, where possible, in integrated ways, both the social and cognitive dimensions of S/FL use and acquisition.

This perspective was built upon critically theoretical assumptions and methodological practices and to challenge the cognitive research authority. In the early 20th century, Vygotsky had already asserted that all fundamental cognitive activities have social foundations; he posited that learning and development occurred on social and psychological dimensions; the "zone of proximal development (ZPD)" is his central part of his theory (Dimitriadis & Kamberelis, 2006). Recently, SLA researches relating to sociocultural background are more and more popular. Lybeck (2002) researched nine American women who studied Norwegian and found that the success of L2 is the strongest linguistic marker of a learner's cultural identification. Tarone (2007) had an incisive analysis for building up a socioliguistic model of SLA. She stated that the model and the theory "view the learner as a social being whose cognitive processing of the L2 is affected by social interactions and social relationships with others, including those others who provide L2 input and corrective feedback" (p. 840).

Sociocognitive approach

Nowadays, A notion of a sociocognitive approach gradually appeared. According to Atkinson (2002), the sociocognitive perspective is that one side "is embedded in cognitive space, the other end is just as strongly embedded in social space" (p. 538). There are several main points involved in this term explaining by Atkinson. First, the sociocognitive approach to SLA is that "teaching is valuable, and learning and teaching go hand-in-hand" (p. 538). It embeds the relationship of equity, cooperation, and interaction. It also emphasizes that peers or other social members can be teachers, but it depends on the situation. Second, language is intimately related to the outside world. Language information is not only transferred from brain to brain. It has many connections with other fields, such as: culture, schooling, identity, ideology, discourse, social ecology, embodied action-taking, and so on. Third, since ethnographic research method will have a central place in this area, qualitative research approaches in the natural environment are mainly adopted. Fourth, these approaches "will provide a means by which second language learners can be seen as real people, doing something they naturally do—not as mere research subjects, or mere students, or mere sites for language acquisition" (p. 539). Here are handful researches. Gee (2001) argued that reading as situated language happens within a broad viewpoint that integrates work on cognition, language, social interaction, society, and culture. Atkinson et al. (2007) used qualitative methods in their SLA research on a junior high school student in Japan and found that the student and her tutor focused on the coordinated activities in their sociocognitively constructed world. Dyson (2010) presented that there is a relationship between SLA and education and we need to create a synergy between sociocognitive pedagogies and social and cognitive constructs. Churchill, Nishino, Okada, and Atkinson (2010) also analysed the tutor–learner interaction and suggested that symbiotic gesture is one example of humanly improvised resources guiding ecosocial alignment and participation in SLA. More effective studies need to be developed on this perspective.

(3)Strategy Researches

Strategy research is one of the main parts in the SLA research field. In ancient Greece, strategy involved a general's plan to win a war (Oxford, 2000, as cited in Oxford, 2003b). Chamot (2004) explained that learning strategies are "the conscious thoughts and actions that learners take in order to achieve a learning goal" (p. 14). Cohen (1998) defined L2 strategies as "any strategies related to the second language learning including strategies for learning or using the L2" (as cited in Oxford, 2003b, p. 274). Scarcella and Oxford (1992) described L2 learning strategies as "specific actions, behaviours, steps, techniques [or thoughts] – such as seeking out conversation partners, or giving oneself encouragement to tackle a difficult language task –used by students to enhance their own learning" (as cited in Oxford, 2003b, p. 274). Oxford (2003a) also stated that "learning strategies can be classified into six groups: cognitive, metacognitive, memory-related, compensatory, affective, and social" (p. 2). Learners who have good strategies should understand their goals of learning and know themselves and task requirements very well.

Strategy research can be classified by learners' personal characteristics, such as age, gender, motivation, and so on, and teaching strategies as well. Nisbet, Tindall, and Arroyo (2005) investigated the relationship between language strategy preference and English proficiency among Chinese university students. They found that although there are no significant differences between males and females on the measures, learner autonomy, in diverse cultural settings, needs to be further examined. Ehrman, Leaver, and Oxford (2003) investigated learning styles, learning strategies, and affective variables and found that there are individual differences in language learning. Dretzke and Jordan (2010) reported that the motivations between Asian students and White students are apparently different when learning Chinese as a second language, so the strategies they used or were expected to use were different.

3. ANALYSIS OF CHALLENGES AND STRATEGIES

There are many challenges and strategies that Chinese English-learners may face while learning.

(1)Thinking Differences and SLA

There are various researches regarding with thinking differences while learning English. Nisbett (2003) pointed out that it was the living conditions between Ancient Greece and China that caused the difference. The different geographical features and social organizations make this difference. From the cognitive processing view, SLA not only transits the language itself, but also passes one geometrical system of reference to another. Pavlenko (2011) clearly analysed it is apparently true that learners' thinking are still kept in L1when they have already acquired L2. This phenomenon is also explained by Affordance theory that "how the thing could possibly be used" (Norman, 2002, as cited in Singleton & Aronin, 2007, p. 84). It showed that our brains just chose the most effective way to use the resources that are constructed in our minds. If it is possible, our brains afford to find the easiest way to function. Nevertheless, this easiest way of working does not always receive expected results when Chinese learners learn English.

A famous research by Boroditsky (2001) investigated different groups of Mandarin speakers and English speakers. He found that Mandarin speakers preferred to describe time as vertical, but English were likely to talk time as if it were horizontal. But then, after English group received training, they could change their thinking conversely despite that they did not indulge in the real culture environment. Coming back to SLA, although Boroditsky only trained English group by changing their way of thinking to the Chinese way and did not train Mandarin speakers to think like English speakers, it is obvious that thinking habits can be changed if there is enough time to practice. Therefore, it apparently provides us a great deal of enlightenment for English learning.

(2)Language Distance and SLA

There are different explanations for the term of language distance. Elder and Davies (1998) described language distance as "the relative degree of similarity between two languages" (p. 1).Language distance has a cross-linguistic influence; the influence is stronger at early stage, and when the learner has proficiency of L2, the influence of L1 is lower (Benati, 2009; Ringbom, 1987, as cited in Elder & Davies, 1998). There is some evidence to support cross-linguistic influences. For example, Tan et al. (2003) found that Chinese readers were less capable of processing English because they applied their L1 system to L2 reading. Tokuhama-Espinosa (2008) emphasized that the quality of mother tongue had a strong influence on the second or multilanguage acquisition.

From priming theory we know that previous exposure to a language can influence subsequent language learning (Benati, 2009). That is to say, L1 influences the proficiency of L2 when learners try to acquire L2, and the effects can be positive or negative. For the finding of Tan et al. (2003), the influence is negative, but for Tokuhama-Espinosa (2008), the influence is positive. M. Wang, Koda, and Perfetti (2003) reported that subjects learning English whose first language was Chinese were more influenced by their first language than the subjects whose first language was Korean. This influence is negative influence.

In addition, the differences from cultural and social backgrounds make the linguistic distance even greater. Compared with Chinese language, English has many phrasal verbs which one can understand only in contextual background. For example, take up, get out, check in/out, and so on. Learners need to concentrate more on local cultures, situations, and habits. Learning slang and idiomatic usage becomes more important than understanding the history of the words in common communication. For example, the phrase "hit me up" is not beating someone but "keep in touch"; "emergency policeman" is not a temporary police worker who is hired by the police station but a volunteer who works between policemen and civilians helping people understand the work of police, and so on.

(3) About Teaching and Learning Methodologies

Teaching and learning methodologies are strongly related to strategies that teachers and learners use in their second language teaching and learning field. Research shows that there is a strong relationship between learning strategies and English proficiency among English learners in South Africa (Nisbet et al., 2005), a small and moderate correlation in Korea (Park, 1997), and a minimal correlation in China (Nisbet et al., 2005). It seems that the strategies do not fit Chinese English-learners, or it may be somewhat different between Chinese English-learners and English-learners from other countries. Therefore, we have some implications. First, pay attention to the social background. As there are differences between China and Western countries in political, historical, geographical, linguistic, and cultural backgrounds, different methodologies should be used when teaching these learners. Students need to be active in class, having their own points of view, and they need to be ready to engage in discussion all the time. Second, cultural differences are another concern if Western-guided strategies are abruptly used. Modern Chinese education has experienced many reforms. According to Mundy et al. (2008), in East Asia, Western education values interacted with Confucian traditions, under conditions of capitalist modernization and socialist construction. Although allowing different ideas, Confucian ideology is highly valued in the educational field. Modest behaviour, not showing off, and self-control are core values that Chinese people adhere to. Besides, Chinese culture has already been ingrained in every citizen's mind. From Confucian ideology, it believes that a society should have its own order and harmony. Citizens should have moderate, humble, and obedient behaviour when they interact with each other. All these cultural elements imprint in Chinese people's minds. It becomes another challenge for native Chinese English-learners when they start their English learning journey. Third, Antonio Gramsci had a notion that "every language contains elements of a conception of the world" (as cited in Giroux & McLaren, 1986, p. 230). Knowledge is constructed in a specific way in Chinese students' minds. As a result, English teaching and learning are highly based on understanding the background information. Teachers and students should open their minds to reexamine their methods and to build up more effective ways of learning.

CONCLUSION

For Chinese English-learners, it is apparent that challenges and strategies not only lies on word choosing, but the thinking style, the language sensitivity, and the learning habit that Chinese English-learner adopted. Tangling with cultural influences, Chinese English-learners obviously have more difficulties acquiring English compared with other ethnic learners. To help Chinese English-learners, holistic perspective should be adopted, while keeping in mind that learning not only transfers information from brain to brain, but happens in the contextual setting. Learners should understand the meanings not only literally but under specific language environments as well. Teachers, on the other hand, should highly connect the practical meanings when they teach words, sentences, and paragraphs. A variety of methods should be taken into account such as, a situational teaching, seminars, and other student-centred methods.

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Theoretical and Engineering Application of New Materials and Their Structural Mechanics

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Abstract: Since the 20th century, with the development of economy and the ever-changing technology, the development of human civilization is also progressing, and this is also accompanied by the development of materials. In recent years, the use of new materials more and more widely, the type of new materials are constantly enriched, new materials gradually penetrate people's lives, changing people's living habits, become social construction and development can not be an important part of the paparazzi. The article discusses the new material and its structural mechanics behavior, and explores the theory and engineering application of the structural mechanics behavior with graphene as an example.

Key words: new material; structural mechanics; theory; engineering application

1New materials and their application status

1.1 New Material Overview

New materials are materials that have excellent performance or special functionality that are not available in traditional materials, or materials that use new technology (process equipment) to significantly improve the performance of traditional materials or produce new functions. Compared with the new materials, traditional materials mainly include brick, stone, wood, bamboo, etc., relatively modern traditional materials, including steel, cement, concrete and so on. It can be said that the new material is the product of social development and scientific and technological progress, is the modern society construction and development needs.

1.2 Application of new materials

In modern society, information, materials and energy are the three pillars of modern society, the material is the basis for the survival and development of human material. With the progress of society and the development of science and technology, the development of materials and the revolution again and again, every time greatly promoted the progress of human society. The development and application of new materials is an inexhaustible motive force for the development of modern society. The research and development of new materials will directly affect the performance and life of the products, and indirectly affect the development of many industries such as industry, defense, agriculture and so on. It is the impact on national economic construction, National defense construction and national life important content. The development and application of new materials continue to be carried out, and its species is also constantly enriched, its application and impact are also different, the development potential of the largest, including graphene, embedded fullerene, black phosphorus, 3D printing materials and liquid metal five New materials. The following author will be graphene as an example of its related research.

2. Theory and Engineering Application of New Materials and Their Structural Mechanics - Taking Graphene as an Example

2.1 graphene

Since the 2010 Nobel Prize in Physics, graphene has been active in technology and capital markets and has become a hot resource in the future for a long time to show, semiconductors, touch screens, electronic devices, energy storage batteries, displays, sensors, Semiconductor, aerospace, military, composite materials, biomedical and other areas of explosive growth.

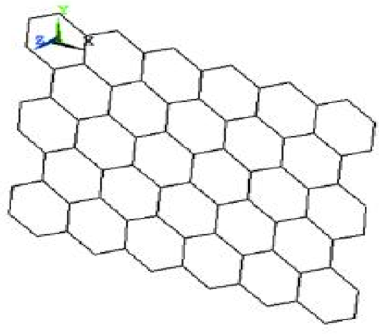

Figure 1 Schematic diagram of graphene structure

What is graphene? In fact, graphene, also known as single atomic layer of graphite, which is formed by the carbon atoms to sp^2 hybrid honeycomb plane film, is a kind of only one atomic layer of the quasi-two-dimensional material. In essence, graphene is stripped from the graphite, composed of carbon atoms composed of two-dimensional crystal. From the structure of graphene, graphene is a zero bandgap semiconductor, has a unique carrier properties, for the study of relativistic mechanical phenomenon provides an important way; electrons in graphene transmission resistance is very small, in submicron There is no scattering at the time of moving and has good electron transport properties. The toughness of graphene is good. Experiments show that they can withstand a maximum pressure of 2.9 N per 100 nm distance, which is one of the best materials found so far The The unique band structure of graphene separates holes and electrons from each other, leading to the generation of new electron conduction phenomena, such as quantum interference effects, irregular quantum Hall effects, and so on. Novoselov et al. Observed that graphene had a room temperature quantum Hall effect that doubled the original temperature range. It is also due to the particularity of its structure, making the graphene has extraordinary electrical conductivity, very low resistivity and extremely fast electron transfer rate, more than ten times the strength of steel and excellent light transmission.

2.2 Theoretical study on structural mechanics of graphene

As the graphene in many ways to show a more prominent advantages, therefore, for graphene related research is also very necessary. In the following, the author will combine the molecular structure mechanics analysis of graphene tensile properties and vibration characteristics of the study.

Graphene is a chiral material, defined by its free boundary chrysanthemum chirality. At present, the perfect graphene according to the edge of the difference can be divided into three kinds, namely armchair type graphene, zigzag graphene and intermediate graphene. As the structural symmetry of the intermediate graphene is not obvious, the tensile properties of graphene are studied by armchair type and zigzag type.

(1) Study on the Tensile Properties of

Based on the molecular mechanics theory, the tensile properties of graphene were studied. Firstly, the mechanical model of graphene finite element molecular structure is needed. The nonlinear mechanical behavior of graphene was studied by the Morse potential of intermolecular potential function. The expression is as follows.

$$E = E_{stretch} + E_{angle}$$

$$E_{stretch} = D_e\{[1 - e^{-\beta(r-r_0)}]^2 - 1\}$$

$$E_{angle} = \frac{1}{2}k_\theta(\theta - \theta_0)^2[1 + k_{sextic}(\theta - \theta_0)^4]$$

Since the tensile behavior of graphene is studied here, Morse can be simplified as follows:

$$E_{stretch} = D_e\{[1 - e^{-\beta(r-r_0)}]^2 - 1\}$$

To simplify the two times at the same time and you want that derivative, get C-C covalent bond between the force and the length of the bond between the length of the relationship between the following formula:

$$F = 2D_e\beta e^{-\beta(r-r_0)}\left[1 - e^{-\beta(r-r_0)}\right]$$

$$\varepsilon = (r - r_0)/r$$

$$F = 2D_e\beta e^{-r\beta\varepsilon}\left[1 - e^{-r\beta\varepsilon}\right]$$

According to these three types of graphene on the interatomic force on the C-C covalent bond bond length expressed, as shown in Figure 2. It can be seen from the figure that the intermolecular repulsion increases greatly when the distance between the carbon atoms decreases gradually. When the distance between the atoms increases gradually, the stress and strain continue to change and reach the linear relationship after reaching a certain peak value. Reached the peak when the strain is about 20%, also at this time C-C covalent bond break. In the study of the gravitational behavior of graphene, it is only necessary to consider the C-C covalent bond for the fracture.

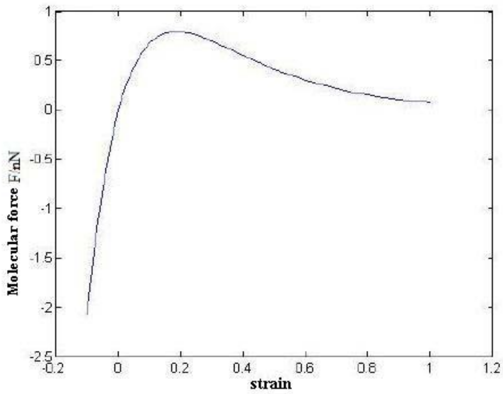

Fig.2 C-C covalent bond F-ε diagram

On this basis, the parameters of the beam element are further determined, and the finite element software ANSYS is used to model and analyze the finite element model of perfect graphene. According to the research topic, the finite element model of the armchair type graphene and the zebra type perfect graphene finite element model should be established by ANSYS software. Further analysis of the two, compared to its stress strain removed as shown below. It can be seen from the figure, 8% of the amount of stretch is a dividing ridge: two perfect graphene in the tensile amount of less than 8%, the stress and strain are basically a linear relationship; when the tensile volume is greater than 8% The non-linearity of the chair type and the zigzag shape is different. In the case of the same stress, the strain of the serrated graphene is smaller, that is to say, the stability and stability of the serrated graphene Sexual performance is relatively poor.

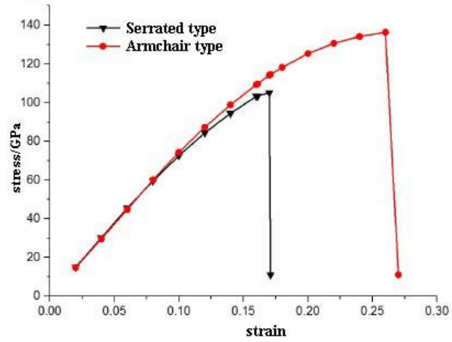

Fig.3 Stress and strain curves of 10nm serrated graphene and armchair-type graphene

Which can be further analyzed, because there are linear elastic phase between the two, so the continuum mechanics can be used to describe the elastic properties of the perfect graphene elasticity of the parameters of exploration, as shown in Figure 4,5 below. According to Fig. 4, the response of the armchair type to the zigzag graphene to the width variation is different.

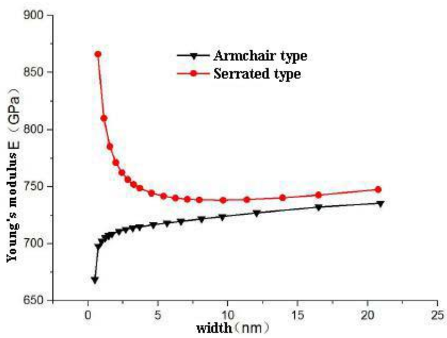

Fig.4 armchair type and zigzag graphene Young's modulus with the width of the curve

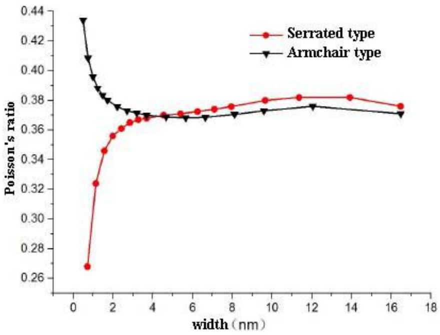

Fig.5 The variation curve of Poisson 's ratio of armchair and serrated

(2) Study on the vibration characteristics of graphene

Since the advent of graphene has been gradually applied to a number of industries, the field, its broadness has been unanimously approved. At present, graphene in the field of sensor development is also constantly infiltration, mainly for the graphene telephone characteristics and biosensing characteristics to be applied. The following is a study of the vibration characteristics of perfect graphene, and the selection of boundary conditions, chirality and size as variables are studied.

First, the boundary condition. Boundary conditions include unilateral fixed, bilateral fixed, three fixed and four fixed boundary conditions, respectively, calculate its natural frequency and vibration mode. The natural frequency curve is shown in Fig. 6. It can be seen from the figure that the more the number of boundary fixations increases, the natural frequency increases, and the increase of the frequency of the perfect graphene is high, It is said that the boundary condition (fixed quantity) has a great influence on the fixed frequency of graphene, and the natural frequency and vibration mode are different under different boundary conditions.

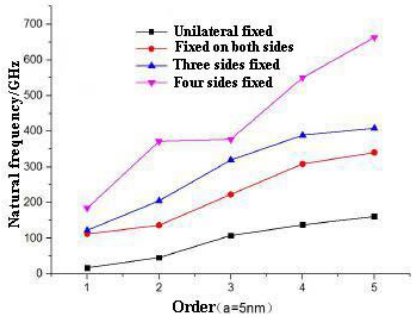

Fig.6 Natural frequencies of graphene under four boundary conditions

Secondly, the effects of chiral differences on the natural frequency and mode of perfect graphene were studied. A set of the same size armchair-type graphene and serrated graphene models were established to calculate the values of the natural frequencies of the two at different boundary conditions. It can be concluded that when the size and boundary conditions are the same, the natural frequency curve of the armchair type graphene and the serrated graphene are basically coincident, which can lead to the difference of chiral difference on the natural frequency of perfect graphene. In order to make the conclusion further validated, the above conclusions can be drawn from the comparison of the natural frequency of a large set of armchair-type graphene and serrated graphene. Thus, it can be considered that the chiral difference of perfect graphene has little effect on its natural frequency and is almost negligible.

Third, the influence of graphene size on its natural frequency and mode.

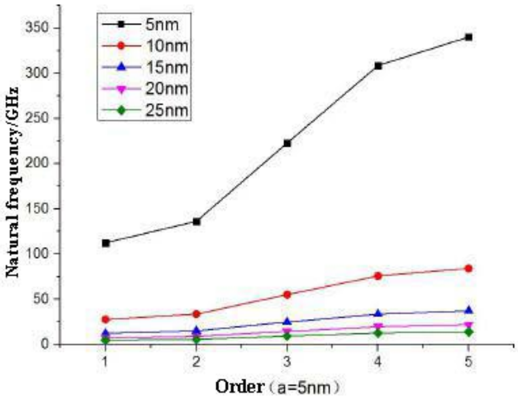

Fig.7 Effect of different side lengths on the natural frequency of graphene

As shown in Fig. 7, the natural frequency variation curve of 5 nm graphene is more remarkable. The base frequency of the perfect graphene model decreases gradually with increasing size. Comparing the natural frequencies of the graphene under the five sizes, it can be found that the modes are similar to each other. Under the same chirality and boundary conditions, the change of size has a great influence on the natural frequency of perfect graphene. The smaller the size, the greater the natural frequency of perfect graphene.

2.3 Graphene engineering applications and prospects

Graphene in the actual project with a more extensive, the following author will introduce some of the more common graphene applications.

battery development - lithium batteries with solar cells

In 2010, the researchers at Dalian Institute of Chemistry of the Chinese Academy of Sciences used high-quality graphene sheet materials by thermal expansion of graphite in an inert atmosphere and applied them to secondary lithium-ion batteries to obtain a higher age density. For solar cells, graphene is transparent, with its manufacture of electricity than other materials have more excellent light transmission. The transparent graphene film can be made into an excellent solar cell. Lutheran University has developed a technology to make transparent graphene films, which is a few centimeters wide, l ~ 5nm thick film. The graphene film is a flat monatomic carbon thin and can be used to replace transparent conductive ITO electrodes for use in organic solar cells. Researchers at the University of Southern California have developed a flexible carbon atom film transparent material and used it to produce organic solar cells.

instead of silicon to produce electronic products

Scientists have found that graphene is currently known as the most excellent conductive material. This characteristic of graphene is particularly suitable for high frequency circuits. The high frequency circuit is the leader of the modern electronics industry, and some electronic devices such as mobile phones, as engineers are trying to fill more and more information in the signal, they are required to use higher and higher frequencies, The higher the frequency, the higher the heat, so the high frequency of the upgrade will be subject to great restrictions. As the appearance of graphene, high-frequency upgrade of the development prospects seem to become infinite broad. Which makes it in the field of microelectronics also has great potential applications. Researchers even see graphene as a substitute for silicon and can be used to produce future supercomputers.

Graphene in addition to the above aspects of the application, but also in other areas to play a huge performance, such as the space elevator cable, high-frequency circuit; graphene matrix composite material is graphene and other ingredients compounded after the preparation of materials, Graphene and the composite material of the superiority. Graphene in the enhanced composite material reflects the excellent performance, beyond the carbon nanotubes, can be used to manufacture wind turbines and aircraft wing reinforced composite materials. In addition, graphene can be used as adsorbent, catalyst carrier, transmission media, etc., graphene structure is special, excellent performance makes it has a wide range of applications.

3. The conclusion

To sum up, with the development and progress of society, new materials will be in the future for a long time to play an important role. In this paper, the typical material - graphene as an example, discusses its structural mechanics theory and engineering applications and prospects, mainly to explore its tensile properties and vibration characteristics. Based on this purpose for China's future research and development of graphene provide a little reference.

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Live education: a new education on the context of "Internet +"

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Abstract: Live education becomes to a new type of education because of its breakthroughs and innovations in both traditional and online education: it exchanges the status of the learning-goal maker and the estimator; creates a new interactive learning style. The advantage of live education lies in: it breaks the limitation of time and space of traditional education and meets the individual needs of the educated. It has important social significance and brings new challenges to our education, and it will certainly receive more attention and research.
Keywords: Live education; breakthrough innovation; social significance

1. INTRODUCTION

With the deepening of the reform of education and the rapid development of Internet technology, teaching tools and teaching methods have also been updated. From sports shows to entertainment shows, from work to daily leisure, everyone seems to be involved in the wave of live broadcast. Live education, a new form of learning, is gradually gaining popularity and is sought after by educational institutions and commercial platforms [1].

Live education brings breakthroughs and innovations to learning and brings opportunities and challenges to the development of education. What challenges and prospects does it face in the future? These problems deserve educators and researchers to pay attention to and think about.

2. LIVE EDUCATION IS LATE-MODEL EDUCATION

The traditional form of learning is based on class learning, students learn by participating in the teachers' teaching activities who is commander. With the development of internet, the forms of online learning represented by network courseware and MOOC are beginning to emerge and flourish. Students learn knowledge by watching online courses, thus it form the situation of online learning and offline learning. Online learning enrich students' learning resources, expand students' autonomous learning and learning space selection. In particular, MOOC allows students to study the online courses from world-famous teachers and well-known universities and to choose their own courses of interest.

Although online learning has the advantages, the visual learning only faces the screen has the disadvantages due to lack of interactivity: on one hand, the students often have a feeling that online learning cannot meet their requirements; on the other hand, online learning makes it difficult for learners to adapt themselves to such informal communication, and it is difficult to achieve self-regulation，and easy to fall into shallow learning [2], thus, the effect of distance learning is affected.

2.1. Breakthrough and innovation of live education

With the rapid development of mobile technology, live education, a new form of Internet learning, has made up for the lack of interactivity in online learning. Live education is a live teaching activity on the Internet platform, although it does not appear long, but it is welcome both inside and outside the school, this is because of its breakthroughs and innovations in both traditional and online education.

2.1.1. learning-goal maker's status is changed

In traditional school learning, learning-goals are generally formulated by education administrators or educators. Educators organize teaching activities around pre - arranged learning goals. Learners, after learning activities, can be considered qualified or excellent if they are able to achieve their intended learning goals, correspondingly, the teaching of educators is regarded as effective or efficient; on the contrary, learners are regarded as unqualified if fail to meet the requirements of their learning goals after learning activities, the teaching of educators is regarded as inefficient or ineffective.

Learners lose the right to speak in the process of learning because they are not the makers of learning goals. Learning activities are in such a pattern of unbalanced rights, it is difficult for learners to express their individuality, and for the teachers it is also difficult to teach students in accordance with their aptitude. For some learners with special abilities or personalities, their special needs and personal needs are often suppressed and difficult to release and satisfy.

In online course learning, learners can choose courses and select educators based on individual needs, although this can alleviate the unified process and unified requirements of the standardization of traditional school in some extend, but most online courses are mostly videotaped and transmitted by educators whose teaching is around the course content, based on the regular model. Therefore, online teaching is still universal, and there is no individual targeted, that is difficult to take into account the special individual learning needs. The learner does not require the online courses teachers to carry out teaching according to their learning needs.

Live-education is different. In the broadcast platform, learners can timely put forward their own learning needs, tell the educator their targets expected to reach. The educator generally around the learner's goals and specific needs, targeted to carry out teaching activities, thus learners become the people who have the right to decide their own learning goals. The role of an educator is to help learners achieve their desired learning goals effectively.

2.1.2. The estimator’s status is changed

In traditional schools and online courses, learners are the evaluators of learning activities, and educators evaluate learners' learning effects according to their learning goals. In the mode of live education, educators are the producers of educational services that meet the needs of learners and help learners achieve their desired learning goals, learners are consumers who decide what to teach and how to teach. Learners judge their learning effects according to their self perception, and then evaluate the teaching behaviors and contents of the educators. Through the timely communication and feedback with the educators on the live platform, the educators are guided to adjust their teaching to achieve the best learning results. The learner's assessment enables the educator to keep abreast of the actual effects of teaching and adjust the content or manner of the course immediately to suit the learner's needs. Obviously, live education brings new changes in the role of educators and learners in learning activities, and the educators in the learning activities become the objects to be evaluated.

2.1.3 New interactive learning methods

Relying on openness and mass, MOOC swept the world rapidly and became a new force to reform the traditional learning model [3]. However, after experiencing flourish, the questioning to MOOC also appeared constantly. For example, MOOC is composed of recorded teaching videos, reading materials, assignments, quizzes, discussions, and so on, which makes it difficult to be flexible and generative. In addition, there are thousands of registered learners, and the interactive feedback between “educator and learner” and “learner and learner” is actually very limited in the course of teaching. The National Association of Scholars researcher Pedersen commented: “MOOC does not challenge the traditional undergraduate education, nor does it provide a meaningful interactive education based on discussion. In fact, it is a video e-book to disseminate information to people all over the world. It cannot take the place of rigorous, dialogue based, face-to-face teaching [4]. ”

Live-education makes up for some deficiencies in the online learning process represented by MOOC. With the support of mobile live broadcast technology, live broadcast and learner can interact with each other anytime and anywhere through the mobile terminal. Learning activities can let learners immediately put forward their own confusion and needs, and educators can adjust their teaching according to the confusion and needs of the learners and give effective feedback. Visible, in the live education mode, as long as there are mobile networks and mobile terminals, live interactive and teaching can carry out anytime and anywhere, flexibly adjusting the teaching according to need also is easy. The flexibility and interactivity of the whole learning process have been greatly enhanced, which makes it a truly interactive learning network.

2.2. The advantages of live education

Combination with education makes the live education have many advantages.

2.2.1. Breaks the space and time limit

In traditional school learning, the interaction between learning and interaction can be carried out effectively only when educators and learners face to face stay together at the same time and in the same space. With the springing up of online learning, online courses break the restrictions of time and space, which makes learners can choose their favorite teachers online courses at any time, in any space (as long as there is a network) to study, thus expands the range of learners’ choice. However, this kind of learning is difficult to achieve immediate and effective interaction with educators.

Live education, just take the two ways of learning advantage, make up for the disadvantages of the two types of learning. Learners can interact with educators on the computer, mobile phone and other screens face to face. The face to face interaction is not limited by space distance and is not limited by time (as long as everyone agrees on the time). This advantage is not available in the past two ways of learning.

2.2.2. Meet individual needs

In live education, learners are the makers of learning goals, learning activities become active activities initiated by learners on the basis of individual needs.

What to study, how to study, and how to teach the learner are determined by the learner [5]. Just is this change in the identity of the learning role, let learners be the general director of their own learning activities, and be able to proceed from your own needs, choose learning content that meets their needs and learn from educators. On the live platform, educators are able to give feedback timely, adjust the teaching according to the individual situation of the learner. As a result, live education makes learning more close to the individual needs of learners.

3. THE SOCIAL SIGNIFICANCE OF LIVE EDUCATION

3.1. Live education can promote education equity

The development of education in China is affected by the development of regional economy, showing a serious imbalance between eastern and western regions and between urban and rural areas. Although the country has taken many measures to solve the problem of education inequity caused by the uneven allocation of teachers resources, the effect is not significant. It is difficult for students in rural and remote areas to enjoy the teaching and teaching of famous teachers.

Live education as a new way of learning, make up for the deficiency. Elite courses, through the way broadcast output to the backward schools, enlarged the radiant surface of the teacher, also promotes education equality and education equity in the region.

A famous teacher can deliver his teaching services to any place, expands the scope of his own influence and realizes the sharing of high-quality educational resources. For the backward areas of teacher resources, such interactive learning is especially valuable.

The developing areas can enjoy the education and guidance of quality teachers. This can improve the unbalanced situation of educational resources in china. In a certain extent, education equality is maintained.

3.2. Live education promote the transformation of educational concepts and educational methods

Live education requires the teachers not only have excellent professional knowledge and information technology, also require guiding live broadcast as the host, so that students devote themselves to learning to live. This new model will bring benign competition pressure to teachers, Will “forced” teachers to further change the concept of education and education, explore new knowledge constantly, enhance teaching ability, boldly explore the effectiveness evaluation method of live learning. Make education transform from preaching, teaching, dispelling doubt to multi dimension development teaching [6].

3.3. Live education stimulate students’ enthusiasm for learning

Live education is more close to the traditional classroom, teachers and students, students and students can communicate in real time by means of text comments, voice and so on. The students like in classroom, so that learning atmosphere is more intense, which lower the students’ sense of loneliness, thus can arouse the students’ study enthusiasm more.

3.4. Live education realize lifelong education

Live education brings great convenience to study. In the case of a network client, you can learn wherever you are. The convenience, flexibility and development of educational live broadcast make education from relatively close to opening, people of different ages can create knowledge, share knowledge, acquire and use knowledge at any time and place, and break through the limitation of time and space. The efficiency of knowledge acquisition is greatly improved; acquisition costs are substantially reduced, so as to lay a solid foundation for the lifelong learning society construction.

4. THE FUTURE OF LIVE EDUCATION

Live education transforms the traditional online education methods, conforms the development trend of the “internet +”, opens up a new form of online education for millions of people. However, any new thing, from birth to maturity, undergoes a complicated and tortuous process. Live education is like a baby in infancy, it healthy grows up and get success development requires the nurturing of all kinds of circumstances and conditions. Looking into the future, although the development of live education is faced with many challenges, but it conforms to the learning centered service concept, is a new way of learning metaphor supported by technology, can bring more and more convenient information interaction for learners, and it represents the future direction of learning, and will gain more attention and study.

5.ACKNOWLEDGEMENT

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Seismic Vulnerability Analysis of High Speed Railway Continuous Beam Bridge —Based on IDA Method

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Abstract: Nowadays medium span prestressed concrete continuous beam bridges is widely used in high speed railway. A lot of experience shows that this kind of bridge damage under the earthquake is mainly reflected in the piers and supports position. For a typical high speed railway continuous beam bridge as an example, the IDA(increment dynamic analysis) method is used and the finite element software Opensees is employed to build the seismic vulnerability analysis model. According to the site type, 20 seismic wave are selected for nonlinear time history analysis which obtained 200 calculating conditions. Four failure limit state are defined in this analysis, as well as the regression analysis is employed to found the different damage limit state seismic demand and seismic intensity index. Based on the assumption that the distribution of the number is too drawn destroy each state corresponding vulnerability curves and overall vulnerability curves obtained by the first-order reliability theory.

Key word: IDA method；continuous beam bridge；Seismic vulnerability analysis；OpenSees

1 Introduce

Nowadays, China's high speed railway construction is in the ascendant .Continuous girder bridge is famous for its big stiffness, small deformation, good dynamic characteristics, has been widely used in high speed railway[1]. Historical fact shows, bridge predispose to damage during earthquakes ,as transportation junction. In recent years several huge earthquakes happed in succession in our country ,such as Wenchuan earthquakes and Yushu earthquakes ,caused plenty of bridges broken and triggered a large number of social and economic problems[2]. It makes the research in the bridge structure seismic risk analysis appears increasingly important.

Seismic risk analysis mainly includes three aspects:(1)seismic hazard analysis;(2)seismic vulnerability analysis;(3)seismic disaster assessment. Among them, seismic vulnerability analysis is used to evaluate the structure regulation damage state probability caused in different level of earthquakes[3]. Hence, seismic vulnerability can evaluate anti-seismic property of bridge structure reasonably. Vulnerability represents a probability that structure damage degree over a specified value under a certain intensity earthquake. Vulnerability curve are used primarily to evaluate the vulnerability of structure on the international. The bridge vulnerability can be represent by the function below,

$$Fragility = P[EDP \geq LS \mid IM]$$

Where,EDP is engineering demand parameter, LS is structural failure state, IM is intensity of ground motion.

These days, the research in bridge vulnerability has made some achievement though it's in early stage in China. In consideration of that bridge is a system, the damage probability of whole bridge is greater than the damage probability of single component. But investigations of the whole bridge structure vulnerability are relatively less in China[8][9][10].

There are huge numbers of bridges in high speed railway line in China, and continuous beam occupy most part of these bridges. Earthquake damage of continuous girder bridge is mainly on the bearing damage and piers'destruction. It displays as (1)significant displacement in bearing leading to instability,(2)slip and fall beam girders,(3) large curvature at the bottom of the pier leading piers' destruction caused by reinforcement yielding and concrete crushing. The vulnerability analysis of high speed railway continuous beam bridges could evaluate earthquake resistant behavior and predict seismic risk of the bridge, as well as provide a reference to design this kind of bridges.

In this paper, with a high speed railway continuous beam bridge as an example, a common way of seismic vulnerability analysis of high speed railway continuous beam bridge based on IDA method is given. Bearing damage index was presented based on the displacement, and pier damage index was given based on the end of pier curvature. The software OpenSees was employed to build a finite element model of the bridge, and proceed nonlinear time history analysis. Bearing and pier seismic vulnerability curve was obtained by logarithmic normal distribution hypothesis, and then bridge system seismic vulnerability curve was obtained by the first-order reliability theory.

2 Construction of finite element model

2.1The bridge introduction

In this paper, a certain high speed railway bridge was taken as an example. The span arrangement of the bridge is (60m+100m+60m),as Fig.1 shows below. The section shape of main girder is single room with single box, the height of central bearing point is 7.85m, the height of edge bearing point and mid-span girder both are 4.85m.The floor width is 6.8m,and top width is 12.0m in whole bridge box girder. The thickness of web is between 0.6m to 0.8m and0.8 to 1.0m, top is between 0.40m to 0.50m, floor is between 0.40m to 1.65m.The section of main box girder is showed in Fig.2.The concrete grade is C50 in box beam, C35 in pier, C30 in cushion cap. Pier longitudinal reinforcement grad is HRB335,srirrup grad is HRB235.The section shape of bridge pier is showed in Fig3 below. The limit displacement of this bridge bearing is 150mm.The site conditions is type I, and the ground motion response spectrum characteristics period is 0.35s.

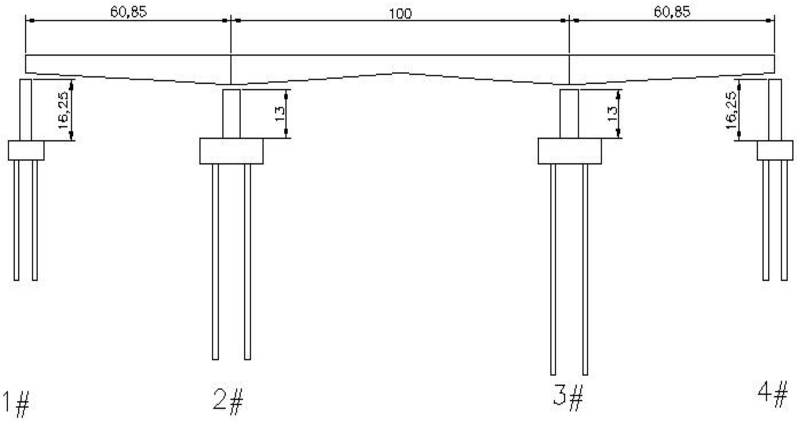
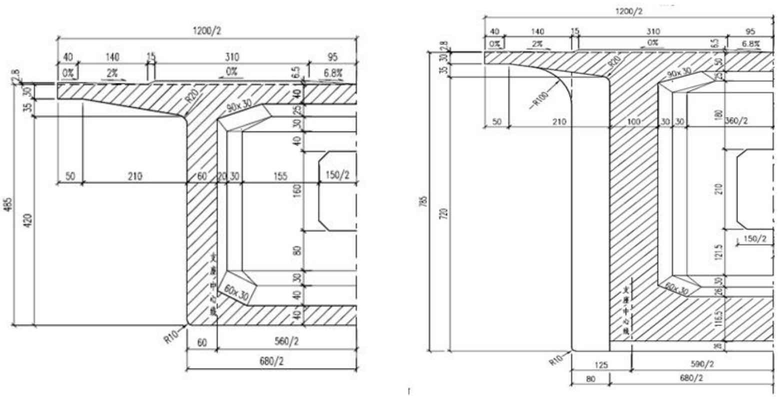
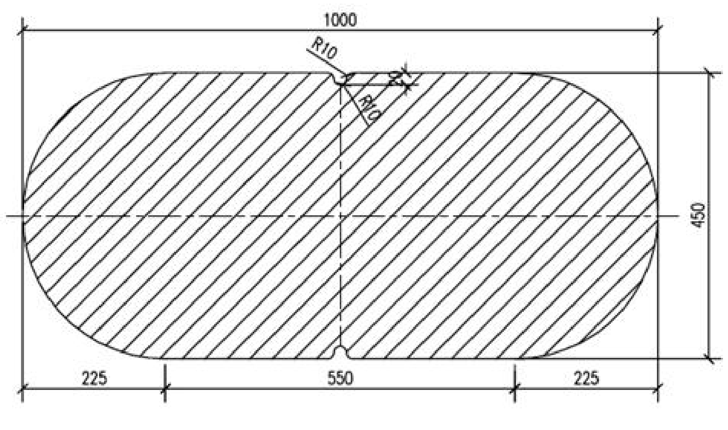


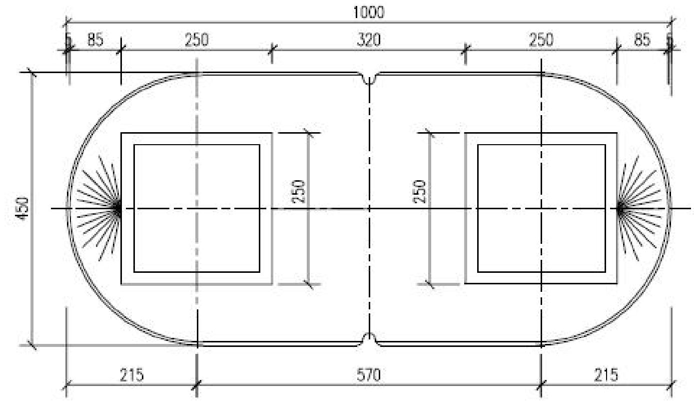
Fig.1 Span arrangement of 60m+100m+60m bridge



(a)mid-span section (b)section of support point
Fig.2 The section sharp of main beam



(a)body section sharp of 3# pier



(b)top section sharp of 3# pier
Fig.2 The section sharp of pier

2.2 Finite Element Model
OpenSees was employed to build the finite element model of the bridge. Because the bridge site geological conditions is good, pile-soil interaction was not considered in this research, consolidated with pier and ground.
Three different elements were taken to build this model for main girder, pier and bearing. Consider the principle of capacity protection, bridge pier first enter into a plastic state and ensure the safety of the main girder under seismic loading. Therefore the main girder is assumed keep in a linear elasticity state, so the elastic beam element is employed to simulate main girder. And consider the nonlinear factors, nonlinear element is taken to build bridge pier. In this research, zero-length element is used to simulate the elastic-plastic of bridge bearing.
And three different constitutive relations of materials are used to define reinforcement, concrete and bearing of the bridge. The simplified ideal elastic-plastic model is used to simulate steel, specific to OpenSees element Steel01 is employed to model steel. GuoZhenhai's concrete constitutive relation model is used to express confined concrete, specific to OpenSees element Concrete01 is employed to model concrete. Because the Zero length unit in OpenSees has ideal elastic-plastic unit character, it can be used to simulate the relationship between force and deformation in bridge bearing accurately. The finite element model of the bridge is shown in Fig4.
3 Seismic record selection
In this research, IDA method is chosen to calculate. In fact, IDA method is one kind of parameter analysis, and there two parameters included. One is structural performance parameter, another is seismic dynamic characteristics. Seismic amplitude, spectral characteristics and duration, the three important characteristics included in seismic dynamic characteristics, cause great effect to structural response under seismic load. Different seismic dynamic characteristics interact with bridge's own dynamic characteristics, lead to stress and deflection in structures. By reason of peak intensity can be changed continuously by using IDA method, the mainly considered factors of choosing earthquake waves are spectral characteristics, duration and quantity. Hence the earthquake waves' selection principles are as follow.
(1) Keep the chosen ground motion record pace with construction site characteristics such as predominant period, and epicentral distance.
(2) Consider the randomness of seismic demands, the earthquake samples need to have comprehensiveness. Hence the duration have better between 5 to 10 times structural fundamental period.
(3)A certain accuracy could be reached during choose 10 to 20 pieces of earthquake waves when using IDA method[5].
20 nature earthquake waves are chosen from PEER(Pacific Earthquake Engineering Research) database followed principles above and geological conditions on bridge site.PGA(Peak Ground Accelerations) is selected as parameter of seismic dynamic characteristics. Every chosen earthquake waves has been adjusted by times when calculate. That is PGA changes from 0.1g to 1.0g, add 0.1g each calculation steps.
4.Damage state and regression analysis
4.1 Damage State Definition
The ductility of pier is used to measure bridge damage state as mainly parameter in most bridge seismic vulnerability analysis. Shinozuka et al has analyzed a lot in same kind of bridge pier column, they concluded four damage states: slight damage, moderate damage, heavy damage and structural collapse[6].
According to the actual conditions, pier damage and bearing damage are defined the structural damage in this research.

4.1.1 Pier damage definition

Curvature at bottom of the pier is taken as EDP of bridge pier. Different damage criterion of each damage states are judged by different curvatures at the bottom of piers. There four key points $\phi_y^{'}$, ϕ_y, ϕ_d, ϕ_u in the moment-curvature curve respectively corresponded to slight damage, moderate damage, heavy damage and structural collapse. $\phi_y^{'}$ is first time yield point of steel in tensile area, ϕ_y is equivalent yield point, ϕ_d is the crushing point of confined concrete, ϕ_u is the crushing point of core concrete.

Table.1 Definition of pier damage states

Damage State	Damage Criterion
Basically Integrity	$\phi \le \phi_y^{'}$
Slight Damage	$\phi_y^{'} \le \phi \le \phi_y$
Moderate Damage	$\phi_y \le \phi \le \phi_d$
Heavy Damage	$\phi_d \le \phi \le \phi_u$
Structural Collapse	$\phi \ge \phi_u$

Table.2 Definition of bearing damage states

Damage State	Damage Criterion
Basically Integrity	$D \le 150mm$
Slight Damage	$150mm \le D \le 200mm$
Moderate Damage	$200mm \le D \le 250mm$
Heavy Damage	$250mm \le D \le 300mm$
Structural Collapse	$D \ge 300mm$

4.1.2 Bearing damage definition

This research use displacement to define damage criterion of bearing, and use displacement ductility ratio to define the damage state of bearing[7]. The permissible displacement of movable bearing in this continuous bridge is 150mm. The definition of bearing damage state is shown in Fig.2.

4.2 Analysis of regression

Consider every seismic amplitude modulation as one working condition in this paper, extract the calculation results included curvature at bottom of piers, displacement at top of piers, put the same PGA conditions results together into a group, and average every conditions' maximum response in one group. The average value of every group is maximum average response in every PGA.

Through taking the log of seismic demand and the corresponding PGA, 10 discrete points can be found. And regression analysis is used to get the function described the relationship between seismic demand and PGA by theses discrete points. The function is shown below.

$$\ln(u) = A\ln(PGA) + B \qquad (1)$$

In the function, u is seismic demand, A and B are regression equation coefficient. By calculate the standard deviation of maximum responses, the relationship equation of logarithmic standard deviation and PGA can be established as below.

$$\beta_i = \sqrt{S_{ri}/(n-1)} \qquad (2)$$

Where: β_i ——log standard deviation of the i-th sets of data;

S_{ri} ——quadratic sum between nature logarithm value and average nature logarithm value of each point of the i-th sets, $S_{ri} = \sum_{j=1}^{n=20}[\ln(\mu_i^j) - \overline{\ln(\mu_i)}]^2$.

Formula (3) and (4) are found out to fit standard deviation of damage criterion. Formula (3) is used for curvature of bottom piers, and formula (4) is used for bearing displacement.

$$\beta_\phi = A(PGA)^2 + B(PGA) + C \qquad (3)$$

$$\beta_d = A(PGA)^3 + B(PGA)^2 + C(PGA) + D \qquad (4)$$

4.2.1 Piers Seismic Demand Regression Analysis

As stated above, in order to get the equation between piers seismic demand and PGA, regression analysis was employed. Table 3 shows the calculate results of logarithm and standard deviation of logarithm of curvatures at bottom of piers in each set of data. Through analyzing, the function is established as follow.

$$\ln(\phi_d) = 2.4027\ln(PGA) - 8.7651 \qquad (5)$$

$$\beta_\phi = 0.0013422(PGA)^3 - 0.046979PGA^2 + 0.33535PGA + 0.38088 \qquad (6)$$

Fig.4 and Fig.5 show the process of regression analysis of pier bottom demand and pier bottom demand standard deviation.

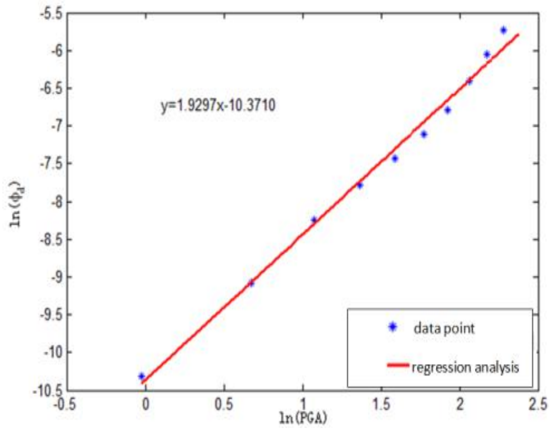


Fig.4 Regression analysis of pier bottom demand

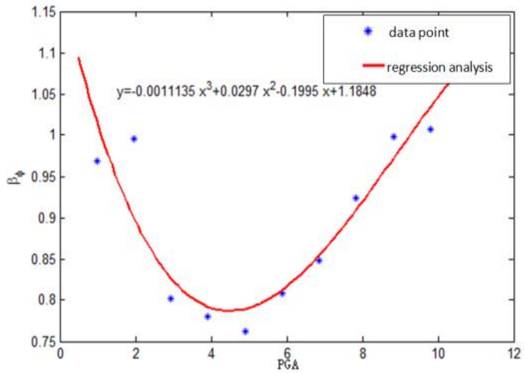


Fig.5 Regression analysis of pier bottom demand standard deviation

Table.3 Regression analysis data of pier curvature

PGA	0.1g	0.2g	0.3g	0.4g	0.5g	0.6g	0.7g	0.8g	0.9g	1.0g
$\ln(\phi_d)$	-8.52	-7.29	-6.41	-5.65	-5.04	-4.48	-4.09	-3.71	-3.41	-3.23
β_ϕ	0.78	0.69	0.92	1.15	1.14	0.99	0.92	0.70	0.53	0.48

Table.4 Regression analysis data of longitudinal earthquake displacement of the 3rd pier

PGA	0.1g	0.2g	0.3g	0.4g	0.5g	0.6g	0.7g	0.8g	0.9g	1.0g
$\ln D_d$	-3.52	-2.69	-2.16	-1.78	-1.50	-1.24	-1.05	-0.87	-0.70	-0.56
βd	0.52	0.46	0.52	0.53	0.49	0.43	0.43	0.43	0.42	0.42

4.2.2 Bearing Seismic Demand Regression Analysis

Through the regression analysis, the relationship between logarithm of average value of bearing displacement demand and PGA is shown in equation (7) below.

$$\ln(D_{\rm d}) = 1.29291\ln(PGA) - 3.5378$$

(7)

According to the distribution characteristics of standard deviation of samples, cubic polynomial is employed to fit bearing displacement standard deviation. The relationship between standard deviation of logarithm of bearing displacement and PGA is shown as below,

$$\beta_d = 0.00078(PGA)^3\text{-}0.0013319(PGA)^2\text{+}0.0511(PGA) + 0$$

(8)

Fig.6 and Fig.7 show the regression analysis process of bearing demand and bearing demand standard deviation.

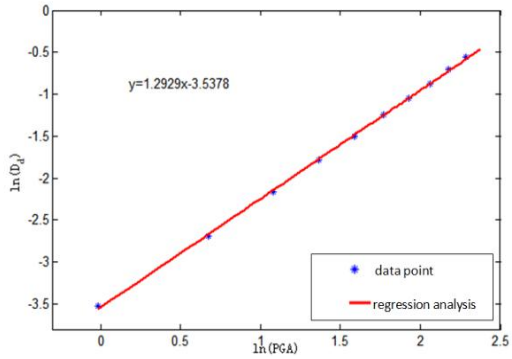


Fig.6 Regression analysis of movable bearing demand

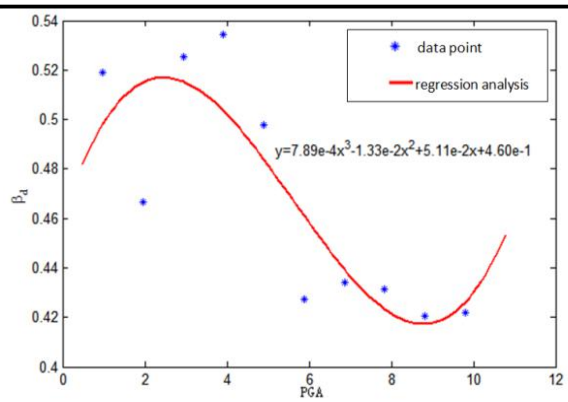


Fig.7 Regression analysis of movable bearing demand standard deviation

4 Vulnerability curve

4.1 Component Vulnerability

Vulnerability curves describe the probability which the damage state will reach under a certain level earthquake. The particular period failure probability p_f can be confirmed by the equation below.

$$p_f = p_r(\mu_d / \mu_c \geq 1) = \Phi(\frac{\lambda}{\sigma}) = \Phi\left[\frac{\ln(\overline{\mu_d} / \overline{\mu_c})}{\sqrt{\beta_d^2 + \beta_c^2}}\right]$$

(9)

Where, p_f is the particular period failure probability, μ_c、μ_d are the structural capacity and structural demand, $\overline{\mu_c}, \overline{\mu_d}$ are the average of structural capacity and structural demand, β_c、β_d are the logarithm standard deviation of structural capacity and structural demand.

The vulnerability curves on pier and bearing are displayed in Fig.7 and Fig.8.

It can be found that, in Fig.8, the vulnerability curves are almost coincident when accelerations are small under slight damage and moderate damage states for piers. When earthquake accelerations are between 0.09g to 0.19g, the probability, which slight damage and moderate damage states happen, increase sharply. After the accelerations grow to 0.19g, slight and moderate damage would happen in piers mostly. Furthermore heavy damage would happen in piers beyond 0.4g acceleration, however collapse would happen only acceleration reach 0.6g and more.

Bearing damage situation can be read in Fig.9.For bearing, the probability of different curve increase progressive accompany PGA enlarged. Obviously, a law can be found in results, probability of slight damage ＞ probability of moderate damage ＞ probability of heavy damage ＞ probability of structural collapse.

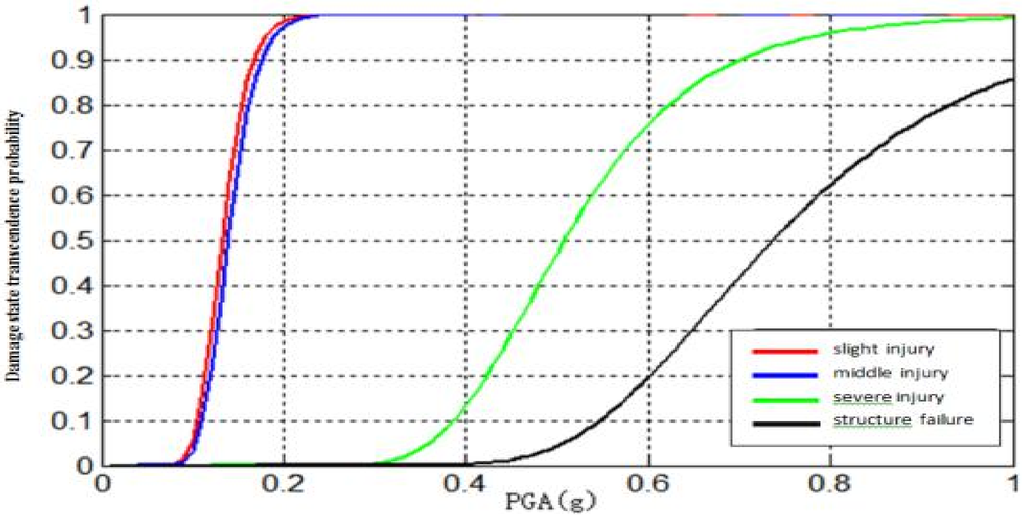


Fig.8 Vulnerability curve of pier

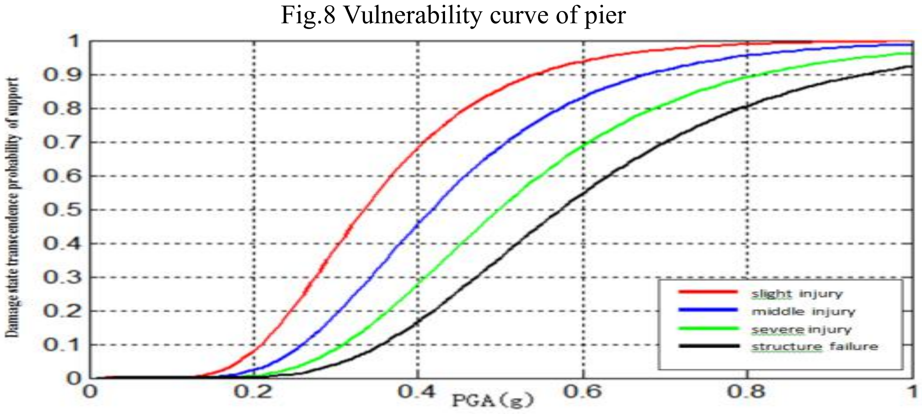


Fig.9 Vulnerability curve of bearing

4.2 Whole structure vulnerability

For the whole structure, the collapse of bridge piers and the destruction of the bearing both can cause the failure of bridge. Therefore each component should be considered in order to obtain the whole structure vulnerability. Reliability theory is be used to evaluate the probability of whole structure failure.

First order reliability method is employed to estimate structural failure probability during analysis process of whole structure vulnerability. For bridge, this research determine the system of structural reliability is serial system. Under this serial system, all the failure of members are mutual independence. Hence, system damage probability depend on components damage probability show as equation(10).

$$\max_{i=1}^{m}[P(F_i)] \le P_{sys} \le 1-\prod_{i=1}^{m}[1-P(F_i)]$$

(10)

The whole structural vulnerability curves can be draw based on equation(10), shown as Fig.10 to Fig.13

.

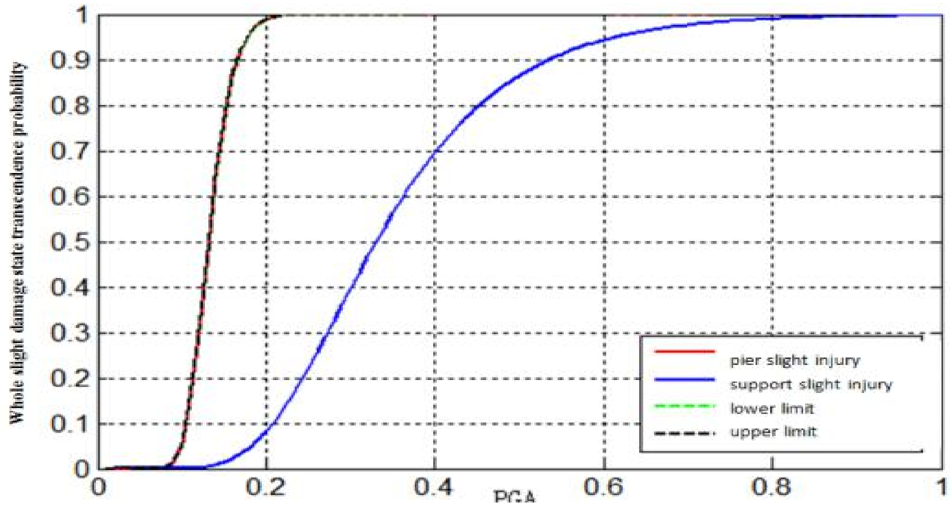


Fig.10 Integral vulnerability curve of slight damage

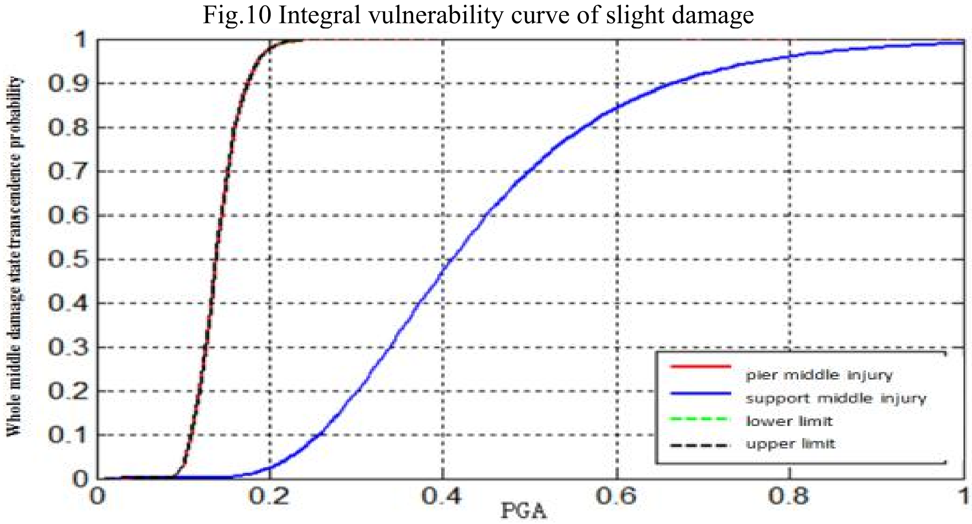


Fig.11 Integral vulnerability curve of medium damage

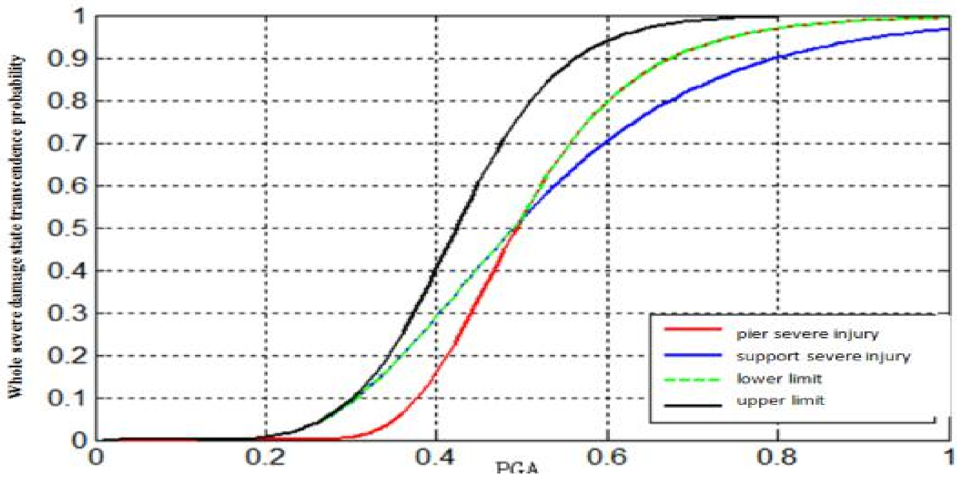


Fig.12 Integral vulnerability curve of severe damage

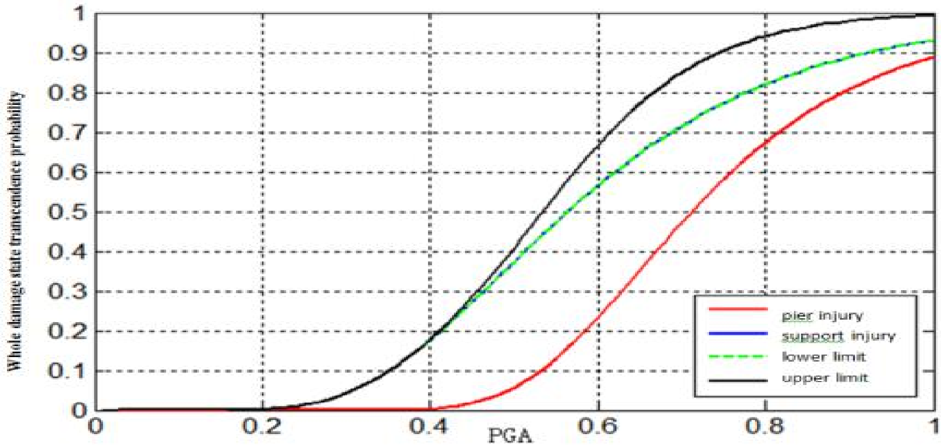


Fig.13 Integral vulnerability curve of structural failure

By analyzing Fig.11 and Fig.12, probability of slight damage and moderate damage of whole bridge system is under controlled by probability of pier damage, meanwhile the probability of heavy damage and collapse of whole bridge system is under controlled by probability of bearing damage.

5 Conclusion

In this paper, seismic vulnerability analysis of high speed railway continuous beam bridge is completed based on IDA and OpenSees. The vulnerability curves of pier and bearing are acquired after the definition of damage states and regression analysis. According to first order reliability method and vulnerability analysis, overall vulnerability curves are gained. The conclusions are as follow:

(1) The seismic vulnerability analysis of high speed railway is significant to the seismic risk analysis of this distinctive bridge type. And it is valuable for the seismic performance evaluation and maintenance strategies after earthquake.

(2) Computational efficiency and accuracy of seismic vulnerability analysis are improved by finite element modeling with OpenSees and data processing with numerical software.

(3) By comparison of component vulnerability curves and overall vulnerability curves, it is found that slight damage and moderate damage of high speed railway bridge system are controlled by the damage probability of pier, but severe damage and eventually failure are controlled by the damage probability of bearing.

(4) This paper conduct the seismic vulnerability analysis about a distinctive type of bridge, continuous beam bridge of high speed railway. The result is representative, therefore referable for future aseismic design of this type of bridge. The process of seismic vulnerability analysis in this paper is suitable for other bridges and valuable for scientific research.

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On Puritanism in Little Women

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Abstract :This paper mainly analyzes Puritanism in Little Women. It illustrates the view of labor vocation, the asceticism, the idea of original sins and atonement by studying the Marches' hard working and thrift, Mrs. March's education to her daughters and four sisters' deliberation in speech and action in the novel, thus further illustrating the influence that Puritanism had in American society.
Key words:Little Women; Puritanism; View of Labor Vocation; Asceticism

1. Introduction

Little Women is Louisa May Alcott's famous work. It described Marches' daily life on the background of the Civil War. There were four main characters: Meg, Jo, Beth and Amy. They were quite different from each other in characters. After being translated into Chinese, Little Women is popular to readers. And many researchers paid attention to it. They did research on it from many different aspects. Wen Zhaolian made a research in female consciousness and pointed out that female consciousness was the key to decipher it in The Deciphering of Female Consciousness in Little Women. Wen Zhaolian pointed out the reflection of female consciousness in Little Women reflected modeled the marriage based on love. The characters were independent and they required the equal status with men in marriage. At the same time, they had the traditional characters. Yangxuan pointed out that Louisa May Alcott's Little Women was a famous work which influenced Americans generation by generation, especially America women in the Analysis of Women's Freedom from Little Women. Li Qiaolin pointed out that Little Women was a novel which guided the young women to establish perfect women image in The Comment on Little Women. And it was different from other novels. It implicated the profound truth into the life story instead of boring sermon. Most critics study the Little Women from Feminist perspective. And most critics study Puritanism from different aspects. For example, The effect of Puritanism on America Society pointed out that as New England's first immigrates, Puritan and Puritanism had a deep effect on the politic, economic and culture even the mainstream culture and values of the colony of North America. On the Perspective of Puritanism Tradition in the Scarlet Letter studied the Puritanism tradition in the Scarlet Letter. The 20th— Century American Puritan Studies pointed out that the 20th—century Puritanism study positively holds that Puritan tradition functions in American politics, culture, society, life and the complex qualities which make up the "American Character". It also pointed out that Puritanism is closely related to moral, ethics, values and identities. But few of them touched upon Puritanism in Little Women. The Puritanism reflected in the novel is also the importance. The thesis will carries a study on the reflection of Puritanism in Little Women. It contains the view of labor vacation, asceticism and the original sins.

2 Chapter One The View of Labor Vocation of Puritanism

As Puritans, they regard the labor as the only content of the vocation. They also believe that working hard can make the God happy. So, they work hard and treated it as their happiness. Working hard is the core element of Puritanism working ethics, which was warmly advocated by Benjamin Franklin.

2.1 Meg's Hard Working

Hard working spirit is the most important thought in Puritanism. Working hard is a kind of virtue of Puritanism. In puritans' mind, working hard can make the God happy, which can make them be the God's chosen people. So, they take a very serious and careful attitude toward daily work and life and treat labor as their happiness.

Although the eldest sister Meg was was only sixteen. She was fond of luxuries and she was interested in entertainment. Also, she didn't want to stay at home everyday. She was interested in attending the parties. But her family was so poor. She had to work hard as a governess for a rich family to support her poor family. Therefore, there was a prologue at the beginning of the story: "It's so dreadful to be poor!" . And Meg said "I know I do ,teaching those tiresome children nearly all day, when I'm going to enjoy myself at home" . It was obvious that Meg didn't like her work. She wanted to enjoy herself. But, she was a Puritan, the idea of hard working was kept deeply in her mind. So, she persisted in working for the rich family. Between her personal idea and the Puritanism, she gave up her personal idea.

2.2 The Marches' Thrift

Puritanism rejects vanity and the waste caused by vanity. Puritanism stresses that thrift is the key to test one's loyalty to God. Benjamin Franklin pointed out that vanity is similar to desire. It is like a inextricable beggar. It is even rudder than beggar. It will make you be on debt for luxury.

At the beginning of the story, the Christmas was coming. The four sisters wanted to buy something they needed, but Mrs. March proposed not to have any presents, because it was going to be a hard winter for everyone. So they gave up to buying themselves something to celebrate the Christmas.They controlled their eager and need. Obviously, they keep the thrifty of working ethics in mind. Because, it is a way to be God’s chosen people.

Their thrift was reflected not only in Christmas gift but also in their dressing. When Meg and Jo got a regular note of invitation from Mrs. Drainer, they had no nice dress even a good pair of gloves.At last, they two, each wore a good one and carried a bad one. For Meg, a girl who cared so much about her dressing was willing to share a pair of gloves with Jo. The idea that forced her to do that was thrift. She knew she must be thrifty. Being thrifty was the core elements of Puritanism working ethics. They must be thrifty because of life and their belief.

3.Chapter Two The Asceticism of Puritanism

Puritanism thinks that the whole society should strictly conform to God's commandments. People should do everything according to the ethics of the Bible and the church services. Puritans think that they must try their best to live a simple life while they despised excessive pleasures. Asceticism rejects to own too much wealth and had a strict and simple way of living. Working hard and living a moral life are their ethics. So, facing with the temptation, people should be reasonable and be yourselves.

3.1 Mrs. March’s Education —Not to Be Vain

Frankly said that although asceticism doesn’t encourage people to get too much wealth, but it stresses more on personal accumulation of wealth through hard and honest work.

Jo worked for Aunt March who was a rich woman and had no children. There is no one heir to her large wealth. The childless old lady had offered to adopt one of the girls when the troubles came, and was much offended because her offer was declined”. And other friends told the Marches they had lost all chance of being remembered in the rich old lady’s will. In the earthly mindedness, they should accept Aunt March’s opinion, because it was really a good chance to be the heir to her large wealth. But, to their surprise, the unworldly Marches only said: “We can’t give up our girls for a dozen fortunes. Rich or poor, we will keep together and be happy in one another”. Between the earthly mindedness and the idea of Puritanism, the idea of Puritanism was more important for them. They were poor and they really needed money. But they didn’t want to be given by others. They would rather make money by their hard and honest work.

3.2 Mrs. March’s Attention to Inner Beauty

Puritanism rejects vanity and the waste caused by vanity not only of spiritual but also of material desire. Pursuing too much material satisfaction is a kind of vanity. So they pay more attention to inner beauty.

Meg was a girl who cared about dressing so much. She wanted to have much beautiful dress and many luxuries. She was invited to a party and stay two weeks at Sallie’s home.She was praised by many people because she looked so beautiful after being dressed up. She was a little vanity, but the idea of being thrifty was kept in Puritans mind. She realized she was wrong. She decided to tell her mother Mrs. March all about it. After listening her fussing Mrs. March taught her daughter that being modest was a better way to excite the admiration of excellent people. Keeping the heart pure and beautiful was more important than wearing beautiful dress.

4.Chapter Three The Idea of Original Sins and Atonement of Puritanism

Puritanism stresses the original sins and the limited atonement. It believes that human beings are born with sins. But the God can save them from the original sins. They believe that they can be saved by God. But they also believe that the atonement is limited. So, they must try their best to please God. They must be deliberate in speech and action. They must usually do self—improvement and they must try their best to be successful to be God’s chosen people to be saved by God.

4.1 The Sisters’ Deliberation in Speech and Action

American Puritanism gives the answers to the questions that how should people atone for their sin and how do they know they have been atoned. Being deliberation in speech and action is a way to get God’s grace to be atoned. So, Puritans remind themselves to be deliberation in speech and action in their daily life.

The concept of being deliberate in speech and action was rooted in the three sisters’ mind except for Jo. She was a tomboy in her sisters’ eyes. She always behaved like a boy. She even said it was bad enough to be a girl. She liked boy’s games and work and manners. She always said some poor words which were corrected by her sisters. After Mrs. March read their father’s letter for them. Jo said she would try to be what his father called her, “a little woman” and not be rough and wild. Although she liked behaving like a boy, when some one pointed out that was not like a lady she would realize she should behave like a little women. Because the idea of Puritanism manners have been kept in her mind. She knew diction was very important. If some reminded her she would pay attention to it. They were deliberate in speech and action in their daily life.They knew the importance of it. Because it was an important way to be God’s chosen people and to be atoned from the original sins.

4.2 Amy’s Self-improvement in Morality

In order to be the God's chosen people to get atonement, self-improvement is very important in Puritanism.

As the youngest sister of the family, Amy often was petted. She behaved in a spoiled way. But when the girls decided to play pilgrims, Amy tried her best to be selfless and to do better. When she stayed in Aunt March's home as a companion, she did her will and decided to give up all her important things to others who were important for her. She also prayed for her elder sister Beth when Beth was in illness. Sometimes, she was a little selfish, but as a little pilgrim, she did self-improvement in morality usually. Because Puritans believed self—improvement was a way to be atone from the sins by God.

4.3 Jo's Success

Besides being deliberation in speech and action and moral self-improvement, pursuing personal success is also an important way to be atoned. So, during their lifetime, they try their best to be successful.

Jo's success was reflected in many aspects. Her dream was to become a writer. She liked reading and writing. She spent several years in wring a book. She thought that would suit her and was her favorite dream. She left her two stories with a newspaperman. And the two stories were published. For her, it was her first step of her success in writing. Several years later, Beth died of scarlet fever, which made Jo deadly sad and reminded her their happy time. Then she decided to write down their story. At last, the novel was highly praised by the professor. And her novel was very popular to the readers. She became a real writer. Being successful was a way to be God's chosen people.

When Jo knew Laurie loved her, Jo chose to refuse him though he was rich. She persisted in waiting for her Mr. Right. When she left for New York she met a professor there. They had much common interest and were attracted by each other. Finally, she found herself fell in love the professor although he was very poor. At last, they got married. Puritanism stresses the idea of original sin and the concept of limited atonement. Puritanism think people are born with sin. So people must atone for their sin. But God's atonement is limited. So she tried her best to be successful in many aspects be to God's chosen people and to be atoned.

5. Conclusion

According to the discussion above, it is obvious that Puritanism played a important and significant role in the novel named Little Women written by Louisa May Alcott. It had a deep effect on the characters' life. The four main characters were sisters, but they were quiet different from each others. They had their own merits and demerits. So they constantly corrected their demerits under the guiding of Puritanism. In terms of their spiritual growth, they must correct their demerits in their characters and improve their personalities. And they pursued individual success. They believed in Puritanism. They thought hard working, selfless, thrift and success that were stressed by Puritanism were very important. So, the growth experience of the four sisters of March family was deeply influenced by the Puritanism. The four little women were influenced by Puritanism in their daily life. Besides, the merits that Puritan creed advocates can be easily pointed out in some other characters in the novel. In a world, it could easily be seen that much creed of Puritanism was reflected in the novel named Little Women written by Louisa May Alcott .

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The present situation and problems of urbanization construction in Xinjiang

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Abstract: Xinjiang is located in the northwest region, this paper analyzes the influence on the system of city space layout of Xinjiang by the national urbanization . Both the quantity and quality of the development scale and spatial layout have been greatly improved, which makes it on the national average level .however ,there are many problems in the development in Xinjiang Province,and this paper has listed the core issues of the new urbanization .
Key words: Xinjiang; urbanization construction ; issue

1. Introduction

Xinjiang is China's important territory, so people's living level in xinjiang has a profound impact on the living standards of our Chinese people, and urbanization is the main representative of the standard of living, in this article ,I will conduct a comprehensive analysis of the present situation in Xinjiang urban construction,where the problems will be stated .

2. Current situation and development tendency

2.1 comparative analysis

After 2013, the rapid economic and social development in Xinjiang Uygur Autonomous Region shows that by the end of 2013, the total population in xinjiang will reach twenty million people, among which are about ten million people in the city and another ten million people in rural areas , the level of urbanization will reach 44%, but according to the international classification standards, Xinjiang is still in the middle stage of city development, although it has a high speed of urbanization , but there is still a large gap from being improved when compared with any other cities in china , according to the data in the China Statistical Yearbook , in accordance with the calculation of geometric mean: the average annual growth rate in Xinjiang still has a large gap from being improved when compared with that in other provinces ,because it is relatively slower.

2.2 characteristics of urban development in Xinjiang

Due to the strict restriction to conditions, especially in the oasis in the city, cities in the northern slope of Tianshan Mountains were randomly distributed in Xinjiang , so the distribution characteristics of urbanization in Xinjiang is a regional . Tarim is the dominant market in Xinjiang, the motivation of city development mainly relies on the use of administrative measures to support and encourage the development, only in this way can our government play an important role in getting involved in it , now the city relies on the government resources and its community construction is based on new frontiers in the field ,the state can support its development and layout of the city, from 2002, According to the city Tumu Shuker ,Alar , Wujiaqu ,Shihezi and beitun . It shows that there is a new development in the town, which means that it is starting to have a good industrial base, resources and increased traffic conditions , the increased demographic dividend . Even some houses are built in the grassland,Gobi and also in the desert, where the administrative orders to build infrastructures are always not taken seriously, then according to different mechanisms, they strengthen the construction of the towns around the city. So The government should lead the development of the city.

3.Restrictive factors of urbanization development in Xinjiang

3.1. different levels of urbanization in different regions of Xinjiang

After calculation,according to the data , the level of every country, state, city is not balanced. the development of Xinjiang is very different, The highest degree of urbanization is still the city ,Karamay City, the level is higher than the average level, for the rest of the southern region, apart from the city ,Xinjiang ,bayinguoleng menggu Autonomous Prefecture ,all of their levels are lower than that in other regions especially in southern Xinjiang,like kashi and Hotan, because the urbanization rate was only 17.23 to 22.73%, the urbanization rate of Hami is twice higher than that in the central area of the city. .in the process of urbanization ,the differences between regional urbanization is very obvious . In short, from Chinese point of view, the urbanization level in Xinjiang is still lower than the national average; from the five provinces in the northwestern part of china,their urbanization rates are also lower than the average level of other five provinces, the development of urbanization in Xinjiang is followed by the increased process of urbanization , which lead to a imbalance between the North and South area . In general, Xinjiang urbanization is lagged . Secondly,the scale structure and the spatial distribution of xinjiang also restricts the development of the city. The city scale structure of Xinjiang is not only lower than the national average, what’s more ,when compared with the eastern provinces, the number of municipal cities and big cities is obviously insufficient, even when compared with other ethnic minority autonomous regions, (except Tibet) ,it is also very backward. for the number of municipal cities, Inner Mongolia occupies 9, the Ningxia Hui Autonomous Region does 5, and the Guangxi Zhuang Autonomous Region takes up 14, while only 2 in Xinjiang . 3 extra cities , 11 big cities, and 8 medium-sized and small cities , the rest are small cities (inclusive of municipalities).

3.2 spatial layout of Xinjiang

The situation of ecological environment in Xinjiang is not so optimistic, with oasis scattering and traffic closed, the road is often distributed in a linear traffic space, the city oasis should be taken into the consideration of ecological conditions , oasis is a ecological chain, which determines the importance of the capital position in Urumqi. Urumqi, Yining City, Kashi ,which are located in the north of the middle part of tianshan , are on the oasis that is in the west of Tarim Basin. Because the shape and the size of the city distribution is not homogeneous , so the large city only has low density distribution,which was found in Xinjiang.

4 the existing problems

4.1. The land extrusion problems

With the development of the city, requirement in xinjiang has also been correspondingly improved. The problem of land use planning is the serious waste of cultivated land , the utilization rate of the land is extremely low, which will affect the sustainable development of the city in Xinjiang. For example,planing the urbanization and industrial strategy in Urumqi ,adjusting the infrastructure constructions and the structure of agriculture, waste of arable land should be significantly reduced . According to the data , compared with 1996, the cultivated land area in the city has been reduced by thousands of hectares; only 0.023 hectares left ,which is far lower than the national average of 0.1 hectares. Arable land is irreplaceable factor in the economic development , but also the basis for survival, which must be taken seriously in the process of urbanization.

Environmental damage

Xinjiang which is under the urban construction , environmental problems have become increasingly prominent. The leading industry in Xinjiang is the use of resources, which will cause environmental pollution without doubt in Xinjiang. Xinjiang has participated in the water supply, sewage treatment, garbage disposal and facilities renovation and city infrastructure and community construction in some more developed provinces , in Xinjiang backward in industry , the ability of city sewage treatment,and garbage is poor, thus it is difficult to reach the national standard. So the city infrastructure should be strengthened and public facilities index should be updated, such as per ca pita area of paved roads, per ca pita of green area, average length of sewer, all the indicators in Xinjiang are significantly lower than the national average level. The lack of infrastructure has resulted in the inevitable failure of urbanization of Xinjiang , building houses and roads have occurred frequently . As we all know, Xinjiang is the place where water shortage is very serious for the vegetation and the ecological environment is very fragile ,what's worse ,it is often swallowed by the desert. The environment is the basis of survival, once there is no basis for this, we will not be able to to survive, thus it also does not make any sense to talk about the urbanization.

4.2. Binary structure problems

With the gap among the cities in xinjiang increasingly widened , before the Reform and Opening up, due to historical reasons, Xinjiang's per ca pita income is very low, the gap between city and countryside is not so obvious, but after the Reform and Opening up,with the development of the regional resources, environment, and the transportation production as well as the implementation of our government policies , the gap between city and countryside has been been increasingly widened , per ca pita disposable income of urban residents has also been increased. Although there have been similar figures, but they are totally different, the process of urbanization has been accelerated in recent years in xinjiang, while the economic development in rural and urban areas is relatively slower,which has led to the phenomena that the economic development in advanced cities falls After the rural economy, there is a classic binary structure, if the gap between urban and rural areas is still being expanded, there will be more prominent contradictions,which will undermine the healthy development of new urbanization

The central bank of china consist on the leadership of the urbanization of Xinjiang, only by enhancing strengthening the investment through financial institutions and city's construction can we support the financial demand. Commercial banks must take city's development and competition situation into consideration, which can solve mechanism layout problems, we can not provide blind service only for the purpose of economic benefits of the bank , instead we should keep the financial services in local areas to make it a part of the city , adapt to the positive potential of the city and provide comprehensive financial services. in the situation of constriction of the commercial bank, to strengthen the petty loan of rural credit cooperatives, city and state government need to promote the expansion of benefits and update Service concept, innovative services, to promote per ca pita income and reduce investment risk, which can make it a leader in the town and the financing of urban construction projects and a real financial service.

4.3. bank credit management system

Financial institutions should reform and create a good internal environment, which means using the development of the existing credit management system to make contributions to the urban projects in xinjiang . The credit management system mode should be flexibly conducted , corresponding applications should be enhanced in the case of the concentration of power to avoid the lack of credit and provide corresponding processes as well as appropriately extending the loan approval authority , developing the advantages of location and resources , some enterprises of a certain scale and strong ability of anti - should be chosen to improve the benefits of city's construction project , small and medium-sized enterprises should be treated as the key supporting targets to promote the direct foreign investment in the process of urbanization and promote the economic development.

4.4. Financial measures of public goods

the way of financing to accelerate urbanization is not only wide but also a comprehensively systematic engineering, the most important infrastructure to the city's construction ,to increase financial support, to speed up the city's infrastructure construction. According to the features, public, non-profit, progressive, correspondingly targeted financial measures should be implemented to Basically solve the financial supporting problems. With the development of urbanization in Xinjiang, urban infrastructure should be invested by the government in the cash flow of pure public goods and potential public goods,but there are some problems whose relationships between each other is not clear, certain institutional arrangements can be conducted to Set the property, according to the coverage area , statistically cost and the price to adjust the market function, with the purpose of allocating resources. Especially constructing the city's infrastructure and public facilities to improve the method of financing , international financial instruments, asset-backed securities and municipal debt mechanism.

4.5. the relationship between government and financial institutions

The demand for loans in the city in the financial industry is very high, which needs more financial supports, strengthening Xinjiang's urbanization construction needs good investment environment, projects and accordance with the principle of economy. Therefore, the government should use their power to provide guidance and policy coordination with those financial institutions who has excessive interventions in the economy oft, as the most important tool to strengthen the construction of good faith , maintenance of financial bonds, strengthen confidence in financial institutions, the government should strengthen the management to avoid interferences of blind urbanization in Xinjiang, improve economic efficiency, promote the financial institutions and the third party's benefit.

5. steady and orderly Urbanization

Emphasis the combination of city construction planning and industrial development planning, adjust and optimize the industrial layout, speed up the development of tourism, promote the rural economy, city economy and the development of the tourism industry. On this basis, food, housing, transportation travel, shopping and entertainment can be introduced to mainly develop agriculture and industry, strengthen logistics trade and city construction industry under the background of finance and urbanization , which can ensure the interactions and mutual promotion between the industry of the market ,products and projects and support the rapid development of industry, promote the healthy development of city industry ,Tourism can expand employment, promote economic development and enhance the economic strength of the city.

The positive development of the tourism industry. The construction of city characteristics, improving the city's cultural brand can promote the development of tourism industry. At present, the Silk Road is regarded as the main line and the focus of the tourism development model to provide border tourism, ice-snow tourism and rural tourism as well as the establishment of tourism brand. Therefore, the construction of new residential areas, the development of tourism. Shopping habits and other six major categories of tourism resources, construction of mainstream culture city resident, brand and reputation effect will be used as the superior resources to improve the process of urbanization.

6.closing remarks

Because of unfavorable factors in geographical and environmental conditions,xinjiang is very backward, to strengthen the city construction in xinjiang is very necessary. So the rapid development of urbanization should be accelerated from the economic, cultural, environmental and other aspects.

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The Embodiment and Expression of Aesthetics in Film and Television Animations

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Abstract Aesthetics influences people's aesthetic activities and plays a vital role in the creation of contemporary literature and film and television animations. It is not only an independent theoretical discipline, but adiscipline mutually integrating with other disciplines. In the process of the integration, aesthetics generates new meanings and exerts a significant impact on real life. Film aesthetics is a theoreticalfilm form in which aesthetics is used as the methodology and academic view to study films, while the importance of film aesthetics as a theoretical form of films and television lies in the combination of film and aesthetics. Film aesthetics is an important branch of filmology and art aesthetics, and meanwhile a new discipline established on the basis of filmology and aesthetics to study the aesthetics and aesthetic appreciation of film art.
Keywords: aesthetics, film and television animation, film aesthetics

1. INTRODUCTION

Aesthetics is a type of art expected to meet the enjoyment demands of human sensory organs. When human sensory organs receive positive stimulus information in visual sense, auditory sense, tactile sense, gustatory sense and so on, pleasant imagination conditions will be conveyed to the brain. Film and television artsare a combination of time art and space art, for it can not only be like time art, displaying pictures in the continuation of time so as to constitute a complete screen image, but also be like space art, expanding images in picture space so as to make works obtain the expressive force of various aspects.

As a kind of aesthetic form, film color is one of the elements of film art. Color is a visual art. According to the principle of reproduction aesthetics, visual art in nature should be the restoration of material reality, emphasizing visual authenticity; while according to the principle of aesthetic performance, the images of visual art place more stress on the function of manifesting and stimulating the soul, emphasizing visual performance. The colors in film art symbolically express emotion and theme, and the cooperation of colors constitutes a perfect artistic effect, promoting the development of film art towards cultural philosophy.

2. Aesthetics and Film Aesthetics

The purpose of studying filmaesthetics lies in aesthetically analyzing film works. Art analysis focuses more on the contribution of film works in terms of both specialization and creativity, while aesthetic analysis cares more about the formation rulesthat film works become the aesthetic object or an aesthetic form, or in other words, the analysis and application of the formation rules and mechanism of film works'aesthetic effect. Therefore, aesthetic analysis is more concerned with the complex composition of film works as a whole than art analysis. In the aesthetic analysis of film works, the film works can no longer be understood as a simple linear construct, but amulti-level ideographic system with complex structure. If we say what film art studies on is the "specialized" characteristics of film works, then what film aesthetics studies on will be the "generalized" rules of generating the effect of film works.

In aesthetically analyzing film works, film and television works appear as a complex system. The system has four fixed units, namely perceptual unit, story unit, idea unit andfeature unit. Among them, the composition of perceptual unitincludes video and audio, with the former consisted of character modeling, environmental modeling, text modeling and performance modeling and the latter consisted of discourses, music and sounds. And the composition of story unit is more flexible. The generally-called ontological researchmainly refers to the study of perceptual unit, while the research on story unitis generally attributed to the literary study of film works.

3. The Embodiment of Aesthetics in Film and Television Works

3.1. Beauty of Color in Film and Television Works

In the world of films and television, the thing that can best arouse the feelings of audience is the intersection and overlapping of lights and shadows. Bright and beautiful colors can make audience's visual sense be greatly impacted in enjoying the films, hence playing an indispensable role in promoting story development and manifesting the emotions and conflicts of film characters.

3.2Beauty of Life and Emotion in Film and Television Works

The process of appreciating beautyis accompanied by people's thinking and choice. With the progress of science and technology and the increasing needs of human life,film and television works have witnessed a constant growth in quantity. The so-called art undoubtedly comes from life but goes beyond it. Therefore, for the fictional film and television works whose plots are similar to those truly experienced by the audience in reality, or whose characters in the works can reflect audience's own desires, they will be easy to trigger the emotional resonance of audience. As said by Hegel, "People appreciate an artistic work with the emotions triggered by the work like pleasure, surprise, fear andsympathy".

3.3. Beauty of Change in Film and Television Works

The aesthetics of change is a point of film and television works that is the most worthy of appreciation, which is associated with different times, different aesthetes and even different versions. In aesthetic process, different life experiences willcreate aesthetes' different aesthetic point of view. Therefore,the samefilm ortelevision work may give rise to distinctly different echoes if played in different times or watched by the people of different ages.

3.4. Beauty of Moral in Film and Television Works

An excellent film or television work should not only have a certain artistic beauty, but contain a certain moral beauty, that is, possessing moral values and disseminating moral norms.In film and television animations, their moral factor to be specific is the pursuit of the true, the good and the beautiful, and their pursuit of moral beauty is particularly prominentin Chinese animation films, which meanwhile is also one of the aesthetic styles of Chinese animation film art.

3.5. Beauty of Form in Film and Television Works

Beauty of form is a relatively independent aesthetic characteristic, while form of beauty is a perceptual one focusing on the embodiment of human's natural force. The difference between them is that form of beauty and the object to be described are deterministic and specific, while beauty of form expresses the form itself and it is independent of the objects to be described, presenting a hazy beauty on its own. In addition, the existence form of them is also different, for form of beauty is the aesthetic appearance of beauty rather than an independent aesthetic object, while beauty of form is of independent aesthetic characteristics.

4. Feelings in Aesthetic Process

Aesthetic process begins with the moment when the heart and the object meet and then reaches a sensuous excitement, so that the aesthetic subject indulges in the perceptual appearance of the object and intuitively takes the object as a whole, showing some kind of implication. Therefore, the consciousness, imagination and perception of the subject are stimulated, making them in harmony and thus achieving a state of excitement, which is accompanied by strong emotional reactions.

The influence of cultural factors on the aesthetics of film and television works is particularly prominent. Excellent film and television works are always of unique artistic qualities, and such an innovation should be attributed to the unique aesthetic experience and artistic pursuit of directors. For example, opera has a long history in China, and facial makeup is particularly sought after by Chinese people. Hence, in many cases, facial makeup is no longer just a decoration, but more a symbol of culture, by which the true, the good, the evil and the bad of opera figures can be depicted. In Chinese traditional opera, the figures of "Sheng (male lead), Dan (female lead), Jing (supporting male lead) and Chou (jester)" have different facial makeups according to their differences in temperament, identity and status, so that their fates have long been expected by audience. Therefore, these characters tend to come into the sight of audience with the character modeling of "Jing".

5. Expression of Aesthetics in Film and Television Animations

Film and television animation is an important part of cultural industry, boasting a strong cultural communication function due to its aesthetic traits like moral beauty and artistic beauty and showing different cultural characteristicsaround the world. Exploring national culture characteristics and making use of advanced scientific and technological means based on deepening understanding of work style can promote the long-term development of film and television animation art.

5.1. Aesthetics in Film and Television Animation Themes

The theme of film and television animations is rich and colorful, so some surreal animation themes have won the unanimouspraise from audience. The themes of film and television animations are often tinted with imaginary colors, which meet people's aesthetic demands for imagination to a large extent. Animation art is a kind of art that can make the fictional characters consisting of lines, blocks, color and other objects without life transformed into real characters of flesh and blood with distinctive personality, flexible actions, exaggerated expression and vivid languages by art and technology processing. In layman's terms, although virtual art images are in a visual world, they correspond to the actors in the film and television art, depicting a fantasy but touching world with their professional performance according to the arrangement of story structure.

5.2. Visual Aesthetics in Film and Television Animation Design

Frames are the medium to convey the visual content offilm and television animations, so the most important factor for the animations with enjoyment as the fundamental purpose is nothing but frames. The production level of frames directly determines the quality of animation works. In animations, visual elements are not simply stacked, nor the simple pursuit for a special camera angle, an artful panning or a lazy arm lens, but the combination of “animated” and “frames” together out of the consideration over the overall visual value. Therefore, in animations, visual languages will directly affect the audio-visual effect, rhythm and metre, picture beauty and so on of final works.

5.3. Artistic Conception Aesthetics in Film and Television Animations

Artistic conception refers to the poetic space with lingering charm featured by the fusion of feelings with natural setting, supplementation of emptiness and concreteness as well as active life rhythm displayed in lyrical works. Artistic conception is a feeling shaped and expressed by artists in works of art. Animation creators, in making virtual animation arts, is to bring human mood and awareness into a special aesthetic scenario with fictional dynamic images and exaggerated narrative scenes and ultimately produce the spiritual artistic conception featured by the supplementation of emptiness and concreteness as well as the fusion of feelings with natural setting.

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Network communication and information processing measuresin intelligent power system

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Abstract: In our country, with the development of intelligent power system, computer networks communication with other power systems and information processing technology plays a more and more important role in the security and stability of power system. Therefore, this paper focuses on the basic structure of network communication and information processing in smart power system, the commonly used device communication protocol and interface in communication networks of intelligent power system and the method of communication and information processing in intelligent power system network. The specific measures of network communication and information processing in intelligent power system are analyzed and explored in detail in this paper.

Key words: Intelligent power system; Networks communication; Information processing

1 Network communication and information processing measures in intelligent power system

In the past, the technology and measures of network communication and information processing of intelligent power system in our country have been relatively backward compared with foreign countries, which result in the incompleteness and uncertainty of network communication and information of power system. With the constant reform and development of our power system, intelligent power system has advanced network communication and information processing technology. It make the basic structure, communication interface, communication protocol and information processing technology of the smart power system different from the traditional one used in the traditional power system through access the embedded and other intelligent terminal device. At the same time, it uses lower energy consumption, more accurate communication methods, more secure data packet processing and so on to avoid power costs and economic losses caused by a variety of failures of power system. Therefore, the establishment of intelligent power system based on electronic, computer, communication and network technology is imminent. The technology and measures of modern intelligent power system network communication and information processing in our country should persist in the continuous innovation of the network communication and information technology in the intelligent power system, strengthen the input of the intelligent power system technology, and ensure the effective operation of our power system at all times.

With the rapid development of social economy, science and technology. There are more and more requests for network communication and information processing in intelligent power system. Through the research on the network communication and information processing technology and measures, it not only can help better implementation of intelligent power system in our country, but also can promote the construction and planning of power grid in China, providing more efficient and stable electricity service for the people.

Basic structure of network communication and information processing in intelligent power system

Now, the network communication and information processing technology of intelligent power system in our country mainly adopts the basic structure of standard EC61850 as the core. It is the only global standard for intelligent power systems, network communications and information processing technologies which can make smart power systems standardized, unified and transparent through the engineering implementation of intelligent power systems to realize the standardization of the operation of the intelligent power system engineering. Arguably, it plays an extremely important role for intelligent power system, network communication and information processing technology.

In the case of remote communication, the remote communication in the station control layer interacts with the intelligent module, then network communication protocol such as SNTP or MMS in station control layer exchange configuration with interlayer and upload alarm signal. At same time, it generates communication processing such as the analog, real-time and other control information interaction and real-time data upload. Meanwhile, the spacer layer also plays a role in protecting and controlling communication. Data, signal information, status information and action information should be transmitted through SV/GOOSE/1588 and other fast message transmission mechanisms, network communication is carried out at the process layer of the process interface and it is controlled by electronic transformer and intelligent switch. In addition, the problem of the two cable connection in the power system is greatly simplified through the use of network signals to replace the hard wired communication between the conventional power systems which is now an important and effective measure for intelligent power system, network communication and information processing [1].

Commonly used communication protocol of device in network communication of intelligent power system

The commonly used device communication protocol in network communication of intelligent power system mainly contains Modbus, TCP/IP protocol and TCP/UDP protocol. The network topology diagram is shown below in Fig.1.

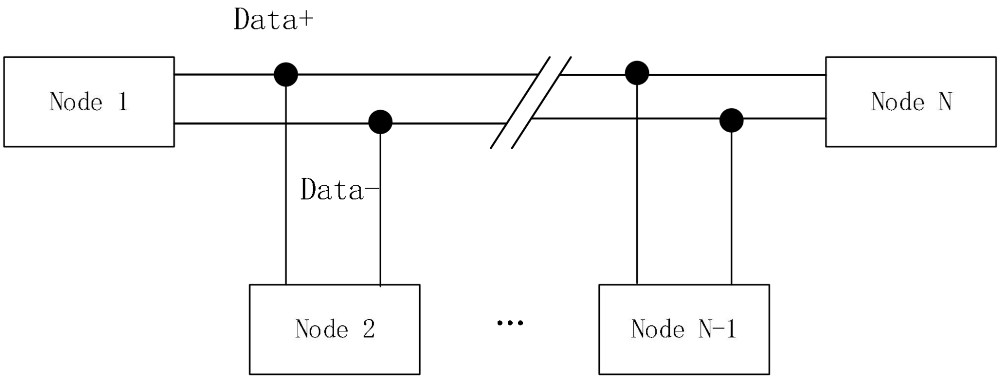

Fig.1 The network topology diagram commonly used in network communication of intelligent power system

(1)Modbus is one of the most commonly used device communication protocols in intelligent power system network communication, which was first put forward by Schneider Electric Company. As a bus protocol, it mainly connected by a circuit composed of a programmable controller with an intelligent terminal device and a computer.

(2)TCP/IP Protocol (Transmission Control Protocol/Internet Protocol) is the most commonly and frequently used communication protocol in the intelligent power system network communication. It is mainly composed of the IP protocol of the network layer and the TCP protocol of the transport layer in the intelligent power system. The TCP/IP protocol can found processing transmission problems in communication and information of the intelligent power system and will re-transmit a signal once found a problem so that all data can be safe and complete transmit to destination in the intelligent power system.

(3)TCP/UDP Protocol（Transmission Control /User Datagram Protocol) as one of the most common protocols in the device communication of intelligent power system can provide reliable data transmission in the communication and information processing of the intelligent power system. It has many advantages, such as data stream transmission, reliability, effective flow control, and so on which can set up a good communication channel in the communication and information processing of the intelligent power system. So as to realize the high efficiency and reliability of data transmission [2].

Common communication interface of network communication in intelligent power system

There are so many commonly used communication interfaces in intelligent power system network communication. But in recent years, the main communication interface is RS485 because of it has the highest transmission rate which can reach 10Mbps and the two wire of RS485 is mostly shielded twisted pair transmission. This kind of point to point communication method can solve the problems of mode interference and electromagnetic compatibility of network communication in intelligent power system. At the same time, it can output analog signals to a simple amount of process which is very effective for network communication and information processing in intelligent power system since the good noise immunity.

The method of network communication and information processing in intelligent power system

In network communication and information processing technology of intelligent power system, the network communication and information processing technology adopted are different according to the transmission medium and the different media. But it mainly connects the data terminal and the computer through the transmission channel of the network communication. Thus the data terminal between the two places or between different locations is communicated which realize the sharing of software, hardware and information resources of three parties of network communication and information processing in intelligent power system. The entire process of processing, receiving, perceiving, identifying, and acquiring data packets that need to be transmitted through a communication device of information processing in intelligent power system. In this process, the data information can be processed by the comprehensive classification, calculation, analysis, retrieval, information processing mainly in information processing of intelligent power system includes a data grid current, voltage and so on to make the information more complete and stable output.

2 Conclusion

Intelligent power system has the functions of data acquisition, processing, transmission, storage and so on. At the same time, it can effectively realize the integrity and timeliness of data in the transmission process. All of these, it can avoid data loss caused by various communication failures in the process of network communication and information processing in intelligent power system. Its powerful function and flexible configuration makes the use of intelligent power system more and more popular. To research of network communication and information processing in intelligent power system will be very important for the establishment and planning of power system in our country.

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Research on Curriculum Setting of Medical Information Management at the Era of the Big Data in China

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Abstract: In order to form a standardized curriculum system for medical informatics education in China based on the background of the era of big data, the author discussed and analyzed deeply the course type, number of periods, courses offered and other aspects what be in seven medical universities at home. The research finds that there is big differences existing in medical universities at home in medical information management professional education, and the opening of the domestic medical information management professional universities has no relative unified standard in the curriculum, medical and informatics courses are much less, computer science course is much more in domestic curriculum arrangement. Domestic medical universities should pay more attention to the curriculum arrangement to informatics, medical data processing and data mining aspects based on the background of the era of big data. At the same time, it also should reformulate the training programme, such as flexible training scheme, the innovative ability training, strengthening cooperation and so on.

Key words: Medical Informatics ; Medical Information Management；Curriculum Arrangement；Big Data

1. INTRODUCTION

In the new medical reform situation, the National Health and Family Planning Commission in 12th Five-Year Plan of the "health information construction" points out clearly that health information is an important task to deepen medical reform. Since 2011, some documents, such as “Long - term talent development plan in medical and health(2011-2020) [1], has put forward clearly to strengthen the training of health information personnel to provide the favorable guarantee for the development of the medical and health information industry. China's medical information is in the crucial stage, the government attaches great importance to the implementation of the pharmaceutical industry and the training of medical information management personnel. Therefore, the country's medical and health industry information has been thriving.

However, after emergence of the Internet and cloud computing, "big data" has become a hot topic for every walk of life in modern times. With the advent of the big data era, information has become an important resource for businesses, economy, research, health and government. Big data has also developed rapidly in the medical industry, mobile healthcare and telemedicine in the application of the Internet produce a lot of medical data. How to use machine learning and data mining based advanced data analysis technology to collection, management, analysis these medical data and the transformation of medical data to knowledge are the most urgent problems in the development of medical information. At the era of big data, the talent shortages are worrying. Medical information management, as a new major, cultivates compound people who obtain knowledge of medical, information, computer science and management science. So it not only is necessary to cultivate medical information management professionals, but also provides an opportunity for the development of medical information management professional education. In order to form a standardized curriculum system for medical informatics education in China based on the background of the era of big data to change the current medical information management professional education situation with "no uniform standard", and also accelerate the process of curriculum setting of medical information management to meet the demand of medical information management professional in contemporary society is value for this research.

2. REVIEW

2.1. Conception of medical information management major

Medical informatics is an interdisciplinary subject which belongs to information science with the application of computer technology in the field of biomedicine. Foreign scholars believe that information science is the subject of information generation, collection, organization, interpretation, storage, retrieval, dissemination and utilization, and especially emphasis on the application of modern technology in these fields [2].Domestic scholars believe that information science is a new interdisciplinary subject that treats the information as the main research object and use computer or other technologies to deal with information. The strict definition of medical informatics [3] is an interdisciplinary field that makes up with medicine, computer science, technology, informatics and management, it includes system theory and computer science, technology as the theoretical basis, medical information management as the goal to cover medical information collection, storage and transmission, biomedical signal processing, medical imaging and image processing, medical knowledge system and intelligent system, computer simulation and medical information engineering, etc. All in all, medical informatics is the application of information and computer science in the medical field.

2.2. Development of medical information management major

Medical information management [4] is a subject studying the information of biomedical information, the storage, retrieval and utilization of data knowledge. Its original symbol was IFIP (International Federation for Information Processing) which was established by Technical Committee 4 in 1967, IFIP had put forward the term "medical informatics "for the first time in the early 1970s [5].In the 1990s, medical information management education developed rapidly. For example, the foreign medical information management education originated from the Dutch and German medical informatics education program in the 1970s. Then, in the middle of the 20th century, American medical informatics education developed along with the use of computer technology in medicine. In the domestic, our medical information education started from "Library and Information Studies in Medical". At first, the four old well-known universities including Norman Bethune Medical University(Jilin University)、China Medical University、Tongji Medical University(Tongji Medical College of HUST) and Hunan Medical University(XiangYa School of Medicine,CSU)in China had set up medical information education related content during the period of 1985 to1987[6]. Then the "Library and Information Studies in Medical ", "Medical Informatics" and other related concepts gradually became familiar. In 2013, the GMDS [7] launched the latest version of the initiative of medical informatics education curriculum system, its purpose is how to promote development of undergraduate medical education of medical informatics based on their ability.

2.3. Social demand analysis of medical information management major

Reform and opening up takes place for a long time, the application of information technology in various fields of our country has been deepening. In the medical and health industry, information technology has become an important means of deepening the reform of the medical system and improve the quality of medical services. Information technology has also become an important part of modern medicine. The National Health and Family Planning Commission in 13th Five-Year Plan of the "National Population Health Information Development" [8] points out clearly that building a population health information and health care large data application service system which includes public health, family planning, medical services, medical security, drug supply, industry management, health services, large data mining, technology innovation and so on. It also points out that improving the multi-channel talent training mechanism, strengthening the organizational structure and personnel training, accelerating the training of high-end professionals, meeting the actual needs of professional and technical personnel. Therefore, medical information management professionals will be essential to promote the national health information construction and information management personnel with medical background will meet needs of the information construction and development needs in the major medical and health department.

3. ANALYSIS

3.1. Data object

This paper will accord to medical information professional management curriculum plan of the domestic university from the institutions of the official website, and choose seven medical universities which be based on geographical distribution, institutions, establishment of major time, the level of the school and other criterion as the data object. It specifically includes Shandong University of Traditional Chinese Medicine, Fujian University of Traditional Chinese Medicine, Hubei University of Chinese Medicine, Shanxi Medical University, Ningxia Medical University, Chongqing Medical University and Liaoning University of Traditional Chinese Medicine.

3.2. Data analysis

Table 1 Period Module of Seven Medical Universities

University	Educational System	Compulsory Courses				Optional Course	Total Periods
		Public Basic Courses	Discipline Basic Courses	Discipline Core Courses	Summary	Summary	
Shandong University of Traditional Chinese Medicine	4	632（20.4）	992（32.1）	1192（38.4）	2816（90.9）	282（9.1）	3098

Fujian University of Traditional Chinese Medicine	4	848（32.8）	980（37.9）	624（24.1）	2452（95.0）	128（5）	2580
Hubei University of Chinese Medicine	4	896（34.2）	694（26.5）	798（30.4）	2388（91.2）	230（8.8）	2618
Shanxi Medical University	4	856（32.9）	1032（39.6）	522（20.1）	2410（92.6）	190（7.4）	2600
Ningxia Medical University	4	958（31.7）	804（26.5）	1070（35.3）	2832（93.6）	192（6.4）	3024
Chongqing Medical University	4	696（25.6）	831（30.6）	1040（38.3）	2567（94.5）	147（5.5）	2714
Liaoning University of Traditional Chinese Medicine	4	810（27）	938（31.2）	1070（35.7）	2818（93.9）	182（6.1）	3000

Note: 1.Figures in brackets indicate the proportion of the courses to the total periods

2. According to personnel training program of Central South University, 1 credit =16 periods

According to the teaching schedule implemented by ordinary universities, this paper divides all courses into compulsory courses and optional courses. In the table 1, all college students of seven medical universities spend 4 years major in medical information management, and the average per academic year of total periods is 701.Compulsory courses account for more than 90 percent of all the courses in the seven medical universities, the average proportion of public courses and discipline courses is about 29.2 % and 63.9% in compulsory courses. However, only Shandong University of Traditional Chinese Medicine accounted for a relatively small proportion in public basic courses, just 20.4%, the public basic courses of this university, apart from the courses such as ideological and political courses, English and sports, does not provide courses for college students on employment, professional knowledge and social sciences by looking at their teaching schedules. In the most medical universities, the number of discipline core courses is larger than the discipline basic courses. Only in Fujian University of Traditional Chinese Medicine and Shanxi Medical University, their basic courses of discipline exceeds the discipline core courses, it shows that two medical universities attach importance to the cultivation of college students' discipline basic knowledge, but on the other hand, as for the discipline core courses is small, it is not conducive to learn for college students in the senior professional knowledge, especially Shanxi Medical University, accounting for only 20.1%, the lowest for the seven medical universities. In the optional courses, the proportion is less than 10 percent in seven medical universities. Only Shandong University of Traditional Chinese Medicine accounted for a higher proportion, just 9.1%. It can be seen that this university offers a variety of course options for students, increases the students' autonomy of elective courses, helps students to fully explore their personal hobbies and studies happily according to their own interests.

As can be seen from the collected data, there are a wide variety of specialized courses in addition to medical courses. It can be divided into four categories: management, informatics, computer science, and other specialized courses. According to the different course titles, the classification lists are shown in the table 2.In the table 2, there are many common courses of seven medical universities what be offered. Such as principle of management, management information systems, medical record of information management, information retrieval, introductory medical informatics, medical statistics, specialized English, C language programming, data structure, database principles and computer operation. From these common courses show that these courses are not only at the core of the medical information management professional course system and it should be taken seriously in the curriculum setting. Moreover, the medical information management major courses of seven medical universities have some unity. At the same time, there are many differences for training talents in seven medical universities where are based on a certain discipline to open a variety of courses for students to choose. On the one hand, it can increase the comprehensiveness of students' knowledge. On the other hand, it also causes some level of professional knowledge to be not deep and the curriculum is more scattered.

Table 2　Course category statistics of Seven Medical Universities

Management	Informatics	Computer Science	Other Specialized Courses
Principle of Management（7）	Information Retrieval（7）	C language Programming（7）	Medical Statistics（7）
Management	Introductory Medical	Data Structure（7）	Specialized English（7）

Information Systems（7）	Informatics（7）		
Introduction to Information Management（6）	Information Organization（6）	Database Principles（7）	Medical E-COMERCE（5）
Medical Record of Information Management（7）	Medical Information Analysis and Research（5）	Computer Operation（7）	Information Economics（5）
Health Information Management（6）	Information Metro-logical（6）	Computer Networks（6）	Probability Theory and Mathematical Statistics（5）
Hospital Administration Science（6）	Subject Indexing（5）	Object-oriented Programming（6）	Social Medicine（4）
Hospital Information System（6）	Electronic Medical Record（5）	Design and Construction of Website（5）	Health Economics（4）
Management Operational Research（3）	Information Service and User Study（5）	Java Programme（6）	Accounting（4）
Decision Support System（4）	Network Resource and Utilization（4）	Information System Analysis and Design（4）	Micro-Economics（2）
Pharmaceutical Enterprises Association（3）	Traditional Chinese Medicine Informatics（3）	Data Mining（4）	Macro-Economics（2）
Hospital Finance Management（2）	Traditional Chinese Medicine Informatics Engineering（1）	Multimedia Technology（5）	Financial Management（2）
Management for Medical Logistics（1）		Operating System（4）	Editing and Writing of Medical Technology（2）
Human Resource Management（1）		Delphi Programme（2）	Intellectual Property（2）
		Systems Engineering（2）	Evidence-based Medicine（1）
		Markup Languages（2）	Game Theory（1）
		Visual Program Design（1）	Public Relations（1）
		XML and Electronic Medical Record（1）	Occupational Safety and Health（1）

Note: Number in brackets indicates the number of schools opening this course

As shown in Figure 1, in general, the computer science periods of all courses in seven medical universities is the highest, the highest number is 728, and the lowest number is 408, it indicates that the various medical universities of medical information management professionals to focus on computer-oriented training and especially the needs of information management personnel with computer skills at the era of big data. The informatics periods of all courses in seven medical universities is the lowest, the minimum period is 128 in Fujian university of traditional Chinese medicine and Liaoning university of traditional Chinese medicine at 348 periods is the highest, in the present era, information is the most valuable factor, the informatics of medical information management curriculum setting should not be ignored in the training of medical information management professionals. As for medicine course, there are also differences in the setting of medical curricula of seven medical universities, the highest period is 486 in Shanxi medical university, and the lowest period is 231in Chongqing medical university. Medicine course is also various and there is no uniform standard for the establishment of medicine courses in seven medical universities. But most medicine courses of medical universities are based on basic medical comprehensive and introduction of clinical medical.

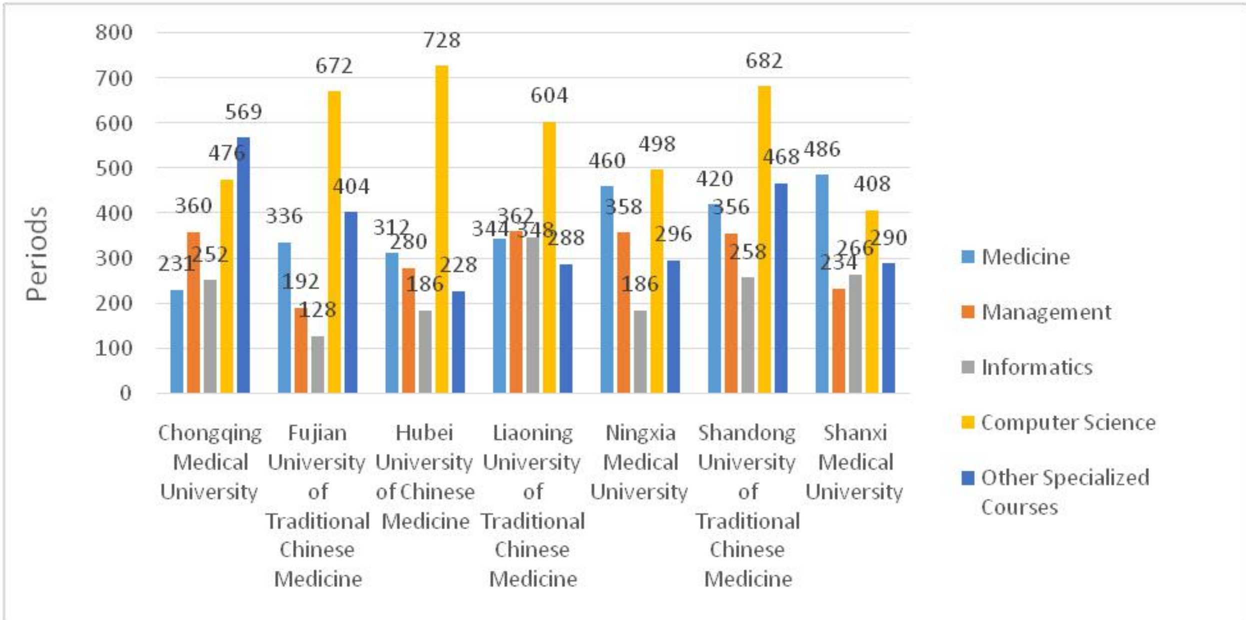

Figure 1 Periods statistics of various courses in seven medical universities

4. CONCLUSION

Through the comparison and analysis of seven medical universities in domestic from the course type, number of periods, courses offered and other aspects, it shows that there is big differences for the domestic medical universities in medical information management professional education, and in terms of curriculum setting, the main courses are compulsory courses, and optional courses are complementary. At the same time, there is no uniform standard for the establishment of medical information management courses in seven medical universities, the number of informatics course is much less, the number of computer science course is much more in domestic curriculum arrangement. As for medical courses, it offers a small proportion of the whole course system and it should be paid more attention to the medical curriculum in the future.

In order to better adapt to the demand of medical information management professional training at the era of big data and form a standardized curriculum system for medical informatics education in China, the following are suggestions for medical information management curriculum setting.

a) Reforming the curriculum system.

The interdisciplinary courses of medicine, information management and computer science should be set up under the big data environment. For example, the curriculum system should include some examples of medical data analysis, medical data mining and medical data visualization, and in the course of teaching, the teachers can help students of medical information management deep understanding the purpose of big data in medicine---"information sharing and resource exchanged ".At the same time, increasing the strength of optional courses. It not only increases the student's optional course autonomy to fully explore their personal interests easily, but also broaden the students' knowledge to know the new trends of the major and understand the needs of career.

b) Reformulating the training programme.

The training program of medical information management professionals needs to be reformulated in the coming of big data. In the processing of reformulating the training programme, some principles should be followed: firstly, training unit should design flexible training scheme to meet the market demand; secondly, training unit should strengthen the cooperation with enterprises and research institutes to build practical platforms for students and expand practical channels; thirdly, training unit should develop students' ability to innovate, this ability is not only necessary for society, but also the development of students themselves.

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Research on Vocational Education and Anti-poverty Under the Concept of Sharing development

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Abstract: The United Nations Millennium Development Goals (MDGs) is the largest action on poverty reduction in human history. Sharing development is the justice idea of the Millennium Development of human society, the anti-poverty is the proper meaning of realizing the sharing development, and the vocational education is an effective means to realize the sharing development of anti-poverty. Under the concept of sharing development, the anti-poverty of vocational education has the advantages of hematopoietic anti poverty, targeted anti-poverty, and timeliness anti-poverty. The sharing development path of vocational education and anti-poverty: to exert the advantages of social science think-tank, to examine and plan the path of anti-poverty strategy, to develop the advantages of strong skills, to connect with the poverty-stricken industries, to develop the advantages of professional talents and to help the poor people to fight against poverty; Optimizing the cultural path of anti-poverty in scientific and technological environment.
Keywords: sharing development; vocational education; anti-poverty

1.INTRODUCTION

The United Nations Millennium Development Goal (MDGs) is "the most comprehensive, authoritative and clear target system of the international community in the development arena today, an important indicator of the level of development and guidance for international development cooperation" [1], which has proved to be the most successful global anti-poverty driver in history. In this context, the September 2015 United Nations Summit on Sustainable Development adopted the "Sustainable development Agenda 2030", shifting from poverty reduction at the core of MDGs to the SDGs (Sustainable development goal), which is centred on the coordinated development of the economy, society and the environment, to promote the world in the next 15 years to eradicate extreme poverty, overcoming inequality and injustice and curbing climate change 3 unprecedented extraordinary initiatives [2]. The Millennium Development Goals is the largest action on poverty reduction in human history, and the 2030 Sustainable development agenda, based on the Millennium Development Goals, proposes the ambitious goal of combating poverty worldwide [3]. From the means of anti-poverty, education is the most effective way to block the intergenerational transmission of poverty. Whether it is international organizations such as the World Bank, the United States and other developed countries, such as Bangladesh, have been or are exploring similar issues, and accumulated a lot of successful experience. The core strategy of anti-poverty is education, and vocational education is an effective means to realize the development of the Society against Poverty.

2.THE MAIN LINE LOGIC OF SHARING DEVELOPENT, VOCATIONAL EDUCATION AND ANTI-POVERTY

(1)Sharing development is the justice idea of the Millennium Development of human society

The development of human society is accompanied by the unbalanced distribution of social wealth, which leads to the problems of disease, war and natural destruction. The founders of Marx and other communist theories have expounded the distribution of social wealth sharing as the best way to solve these problems, and sharing development has become one of the basic characteristics of communist society. Marxist historical materialism holds that "the people are the creators of history, the main body of social practice", and that the people are the creators of social material wealth and spiritual wealth, which determines that the fruits of social development should be shared by the masses. Especially in China, General Secretary Xi Jinping combined with the new stage of the development of the characteristics of the times, once again elaborated the sharing development idea, and pointed out: "Living in our great motherland and the great times of the Chinese people, together enjoy the opportunity of life, together enjoy the opportunity of dream come true, together enjoy the opportunity of growth and progress together with the motherland and the Times." [4] In the final stage of China's overall well-off society, the most important evolution of the concept of development lies in the inclusion of" sharing "in the" China Road "as the fundamental strategy of economic and social development. As the development justice idea of the new historical starting point, the sharing development embodies the realistic role of "appearing anxiety" and "present problem" in the process of deepening the reform of contemporary China [5]. At the same time, the concept of sharing development is fully grasped and sublimated to the law of socialist Development, the rule of governance, the rule of ruling of the Communist Party, the law of the development of human society and the Socialist modernization construction of Chinese characteristics. At this point, the concept of sharing development is sublimated from theory to practice, from imaginary sublimation to reality, and from goal sublimation to result.

(2)Anti-poverty is the proper meaning to realize sharing development

First, anti-poverty is the intrinsic requirement of building a shared society. Anti-poverty is a macroscopic project which needs the common participation of the whole society, and it should not only reduce the mental poverty of the next generation, but also include the poverty alleviation for the professional skills of the contemporary social productive body. The focus of anti-poverty work in rural areas, the most difficult task of achieving shared social goals in rural poor areas, the theory of anti-poverty provides an important theoretical basis for poverty alleviation in poor areas, and is also an intrinsic requirement for the overall construction of shared society. Second, anti-poverty is the fundamental condition for activating economic vitality. Anti-poverty is not only to solve the problem of food, clothing, housing and livelihood of the poor, but also to solve the problem of sustainable development of the local population. Economic vigor is the key to solve the whole economic development of the region, and the economic vigor depends on the scientific and technological ability of the producer and the professional quality. The development of regional economic vitality is inseparable from the support of human resources, especially in underdeveloped areas, and should support the cultivation and introduction of talents. Anti-poverty in vocational education can provide sufficient practical human resources for short time in underdeveloped areas, provide intellectual guarantee and human resources support for regional economic development in underdeveloped areas, and become one of the fundamental conditions of activating regional economic vitality. Third, anti-poverty is the human resource base of industrial upgrading. At present, the world is faced with the real problems of industrial restructuring and upgrading, but also facing the plight of industrial transfer. The change of external environment causes the chaos of different industrial resources allocation, and the restrictive factors of multiple constraints must be upgraded by the reconfiguration of labor resources, the upgrading of science and technology, and the replacement and reorganization of industrial structure. Poverty alleviation, the two development of labor resources is an important element to promote the regional competitiveness and industrial competitiveness of impoverished areas, and the anti-poverty can provide human resource base for the transformation and upgrading of industrial structure. Forth, anti-poverty is the intrinsic impetus to improve the population literacy. Some scholars have found that the poor population, to a certain extent, gradually form a poverty-stricken culture adapted to the situation, or poor subculture. On the one hand, "poor subculture" may strengthen the existing poverty state, on the other hand, it may form intergenerational reproduction and inheritance. Therefore, in addition to giving aid to the economic material level, anti-poverty is equally important at the spiritual and cultural level. To change the mental outlook, behavior and psychological needs of the impoverished population to shape the ideological value, mental outlook and psychological quality that can meet the needs of the development of modern society, and provide a powerful spiritual impetus for the poverty-stricken people.

(3)Vocational education is an effective means to realize the sharing development of anti-poverty

Vocational education is to meet the needs of economic transformation and social development, the development of human professional ability, the establishment of national human resources advantages, to receive a certain number of years of education for the professional ability and professional quality training and training for this part of the population to establish a professional skills to carry out the necessary practical training. In order to adapt to the specific position of the professional needs of an educational activities, macro-level mainly includes non-academic and academic type two categories. According to the intension of vocational education and the educational goal, vocational education has the following basic characteristics: (1) Low level of cultural requirement. The requirements of vocational education to the educational object are relatively low, as long as the cultural level can meet the needs of skill learning and work practice. (2) Strong technical practice. The vocational education has the learning activity of rationality, practicality, skill and experiential, pay attention to the training of method, technique and experience, pay attention to the economic benefit and social benefit of the object of education. (3) Short teaching time. The educational cycle of vocational education activities is generally short, often a year or even a few months of theoretical study time, and practice training as the fundamental, to train a certain basic skills and meet the needs of the community of professional and technical personnel. (4) Result of training is easy to achieve and the return on investment is high. A small amount of time cost, a slight tuition input, more professional choice, can be in a relatively short time through the induction work to obtain economic benefits, faster to achieve economic poverty.

In the annual report of the United Nations Development and globalization: facts and figures, it was noted that, as of 2015, there were still 836 million people living in extreme poverty around the world, mainly in sub-Saharan Africa and Western Asia, where the pace of poverty was uneven in different countries and regions [6]. Taking China as an example, China's poverty-stricken population was more than 50 million in 2015, mainly distributed in the remote mountainous areas in the southwest region and the general tendency of total poverty in the area. This part of the age-appropriate labor force often has a low level of cultural education, lack of production skills, high unemployment rate and other notable characteristics. From the cultural level, most of the poor people accept new technology, the ability of new ideas is poor, whether in the way of thinking, mode of production, or way of life can not keep up with the overall development momentum of modern society construction, from the production skills, because of the lack of means, some poor people even exist more serious "waiting for, relying on, asking for" thought, Lack of self-reliance, hard work, from the heart of the enterprising, not to get rid of poverty; from the concept of employment, because they are in poor areas of most spiritual education poor, daily habits of gathering cards, drinking, gossiping root, there is a weak production consciousness, employment atmosphere is not strong, rich enthusiasm is not high issues, enveloped in the "poor subculture , unemployment rate is higher. The lack of culture, lack of production skills, and the avoidance of the psychological characteristics of employment, the poverty-stricken age of the labor force education against poverty should have a lower level of cultural requirements, simple and understandable skills, short learning cycle and economic returns, the characteristics of vocational education is clearly more appropriate.

3.SUPERIORITY CHARACTERISTICS OF VOCATIONAL EDUCTION ANTI-POVERTY UNDER THE CONCEPT OF SHARING DEVELOPMENT

"The need to give a fish, three meals, a person to fish, for life." "Vocational education as an important help against poverty, in the fight against poverty, poverty-stricken objects, and three levels of poverty, there is an unique advantage characteristics."

(1)From the input material to poverty alleviation to the hematopoietic type of intelligence

Anti-poverty lies in "helping the poor first" and "helping the poor to help the needy", which focuses on "people's help" rather than "material help". Based on the connotation of "man-help", we need to break through the leading position of material poverty alleviation, realize the transformation from material poverty to people's poverty alleviation, position it in the "Intelligence poverty alleviation", "skills poverty alleviation", "industry poverty alleviation" and "intelligence poverty alleviation". First, anti-poverty is the "wisdom". The poverty alleviation is mainly aimed at rural areas, and poverty alleviation targets the children of rural poor families, mainly young workers, to promote their families to seek poverty by helping them to study and obtain employment. Second, anti-poverty is a heavy "skill". In view of the backwardness of the educational development level in impoverished areas, the poor people's agricultural production skills and the low skills of the migrant workers, we should formulate the corresponding countermeasures, and give skills training and identification to the poor family-age workers through the skills training function of vocational education. Once again, anti-poverty is the "productive". The hematopoietic poverty alleviation must be based on the help of the specific situation, pay attention to the industrial poverty alleviation and financial poverty alleviation means, so that the object of helping to master the road and technology, to achieve from "blood transfusion" to "hematopoietic" organic transformation. Finally, anti-poverty is the "ambition". Strengthening "mental poverty alleviation" (ie, wisdom, help the knowledge, help the technology) and "intelligence Poverty alleviation" (ie, help the spirit, help the train of thought), strengthen the ideological and cognitive education of the poor people involved in production, through the education workers to the poor people to carry out a full range of ideological guidance, to stimulate poverty alleviation initiative, improve the technical skills of poor people and the ambition of poverty alleviation.

(2) From extensive national support to targeted labor force support

Anti-poverty is precise and accurate, and the goal of support is clear. In the light of the actual situation of the poor people, the anti-poverty should break through the limitation of education and poverty alleviation, and realize the transformation of the target of poverty alleviation, from the basic education for the minors to poverty alleviation. First of all, vocational skills and cultural support. Coordinate training institutions and labor insurance and other relevant departments to carry out skills training, contact the coordination of agriculture, agricultural technology promotion, science, culture, sports and poverty alleviation, etc., and gradually organize the "Send Books", "Send training" to the countryside activities, to improve the skills and cultural needs of poor people and poverty alleviation ambition Second, vocational skills training support. In accordance with the local characteristics of economic activities, according to the needs of production development, the organization of the poor population of the age of the skills of the workforce training courses, the development of vegetables, camellia oleifera, fruit cultivation and livestock, livestock breeding and other cultivation techniques to improve the economic production and development benefits of poor people. Finally, academic education support. To coordinate vocational education training and guarantee departments to improve the enrollment ratio of anti-poverty target, to ensure that junior high school graduates can accept academic education after they have not been admitted to high school and university, so that the potential labor force of poor families can master the solid professional theory and professional skills, transform in situ or go out to do business.

(3) From the long-term basic education to the timeliness of the skills of education

Anti-poverty work, expensive in the aging. The 2030 was the time node established by the United Nations to achieve the eradication of global extreme poverty. How to accomplish the task of eradicating extreme poverty in the next more than 10 years is obviously insufficient, relying solely on long-term basic education, only by adopting vocational education with short education cycle, quick skill display and quick feedback of economic income to realize the hematopoietic poverty alleviation required by anti-poverty. In the short term, to achieve the goal of accurate poverty alleviation, it is necessary to break through the inertia constraint of education anti-poverty, which can realize "hematopoietic" poverty alleviation and eradicate extreme poverty in a short time through vocational education against poverty.

4.THE SHARING DEVELOPMENT PATH OF VOCATIONAL EDUCATION AND ANTI-POVERTY

Vocational education as a high-quality personnel, the resources such as skill training and science and technology innovation should make full use of the advantageous resources such as talent energy, advantageous subject, scientific research condition and modern idea, so as to provide intellectual support, productivity support, manpower support and cultural support for poverty-stricken areas under the sharing development concept.

(1) Give full play to the advantages of social science think-tank, examine and plan anti-poverty strategies

The construction of the intellectual Library of Vocational education will give full play to the features such as the complete discipline of the vocational training, the talent-intensive and so on, and provide the guidance and support for the promotion of the anti-poverty effect in the aspects of consultation, theory and talent cultivation. Therefore, the vocational education think-tank will provide decision-making advice for poverty-stricken areas, give full play to the role of the "think tank" and "brain" of the science and technology services, and actively contribute to pro-poor development planning and poverty alleviation policies. On the one hand, science & technology libraries and experts in the vocational education institutes are involved in the fight against poverty, realizing the full coverage of science and technology services in poor areas.On the other hand, directing the resources and services of high quality resources to the grassroots, and greatly improving the scientific quality and scientific production skills of the impoverished areas

(2) Develop advantages of strong skills and butt-joint the anti-poverty industry path in poor areas

The Vocational education Institute should pay attention to the relevant skills innovation achievements in all areas of society, give full play to the advantages of skills development, vigorously carry out technical training and demonstration and promotion of new technologies, organized, planned and step to develop skills to help the poor, effectively improve the poor areas of the agricultural technology, industry development and the ability to get rid of poverty. First, One is to do a good job of poverty-stricken industrial science and technology in the top-level design, the science and technology industry to identify key areas, key directions, key projects, and focus on the promotion, and truly achieve the goal of poverty alleviation. Second, we should use the advantages of science and technology to aid poor areas to do industrial planning. Give full play to the characteristics of vocational education and technical advantages, to help poor areas to do a good job in industrial development planning and transformation and upgrading, to help speed up the development of distinctive industries, to help counterparts in the region to introduce, build and promote poverty alleviation key projects. Third, we should make use of scientific and technological innovation resources to build a base of skill research and development, so that the innovation achievement can be transformed into real productivity and benefit the people, so that the challenge will be changed to the opportunity and the contribution of scientific and technological innovation ability and the service of economic and social development. Four，it is to make the key specialized docking to create the characteristic industry of impoverished area. As the key work of poverty alleviation in vocational education, the poor training of characteristic industries is the new requirement of vocational education to fulfill the basic duty of social service.

(3) Develop the advantage of professional talents and help the poor people to fight against poverty

The majority of the anti-poverty objects are farmers, and the foundation of the anti-poverty is the upgrading of the farmers ' skills, because they are the ultimate carrier of the skills promotion. The quality of farmers ' skills directly determines the degree of acceptance of their skills, the development of agriculture depends on the farmers, the development of skills, the construction of a higher level of skills of the peasant team is the current anti-poverty work of the most important. The integration of teaching and education in vocational colleges should be guided by the actual demand of regional economic development, adjust and optimize the professional structure of disciplines, continuously strengthen the professional construction and local industry, industry development and the degree of dependence, at all times with industry integration, and gradually establish and improve the vocational education and enterprise, vocational education and local government cooperation and exchange mechanism.The establishment of a government-led, Vocational Education Institute initiative, industrial service agencies, enterprises to participate in the "four-in-one" industrial talent training system, to achieve high efficiency of scientific and technological personnel training to help poverty-stricken areas against poverty.

(4) Develop the modern cultural concept of vocational education and optimize the cultural path of anti-poverty in scientific＆technological environment

To help the poor, first to cure poverty. Mental poverty is one of the main reasons why "origin" cannot be pulled out. Therefore, in the process of anti-poverty of vocational education, we should pay more attention to the poor people in spirit, and actively guide them to face difficulties, change their ideas, self-reliance and self-improvement, and constantly through the technology of poverty alleviation, skills training, enhance scientific skills, cut off intergenerational transmission of poverty. At the same time, the target of poverty alleviation is also a poor ambition, muster confidence, get rid of "pessimistic, fear, laziness" and other unhealthy mentality, change "waiting for, relying on, asking for" bad ideas, correctly handle the relationship between self-reliance, hard work and state support, boost the spirit of God, mobilize enthusiasm, change "Want me to get out of poverty" as "I want to get out of poverty", rather hard, unwilling to languish , home does not get rid of poverty, and strive to get rid of poverty wealth. According to experience, in the implementation of vocational education anti-poverty project, the most difficult is not to visit the impoverished areas and in-depth life, but through the anti-poverty project, so that people in poor areas fully realize that knowledge can change the fate of the scientific concept of poverty, strengthen its scientific self-reliance consciousness. For example, the practice activities of the students of vocational education will instill the concept of science and technology, scientific and technological consciousness as well as modern science and technology application ideas and cultural ideas into the masses of impoverished areas, and open the path of cultural dissemination of vocational education against poverty.

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The Exploration of the Coaching Skills' Application in Ideological and Political Education of the Colleges and Universities

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Abstract: Ideological and political education can be internalized values and externalized behavior through students' choosing and acceptance.The traditional "cramming" ideological education approach is lack of attractive and effectiveness. However, experiential coaching technology can let the students constantly see the new hope, set the new goal, and find the new method through continuous incentive pathway, and at last stimulate the potential of college's students, which is very important to improve the efficiency and effect of ideological and political education.
Key words: the ideological and political education the coaching skills effectiveness the colleges and universities

1 The connotation and core principle of the coaching skills

1.1 The connotation of the coaching skills

Since 1980s the United States AT&T company to Timothy Gall way tennis coach coaching experience into the company management, coaching training gradually was practiced in Boeing, apple, Ford, TOYOTA, University of Southern California, and other organizations.

The skills of coaching have been integrated into the methodological essence of many disciplines (such as psychology and behavioral science). It includes coaching tools, coaching models and so on. It is said to be a comprehensive coaching science, and it has a scientific, systematic, logical, and rational methodology. The coaching technology is not to provide a set of ready-made methodology, but with continuous motivation, constantly given new hope and inspiration that training through the role of demonstration and successful ideas, and actively explore the methods and solutions. In the process, the coach takes on the function of "guider". They build their own clear goals, roles, positions and values by helping their trainers. And then They stimulate the trainees to tap their potential, achieve their goals through reasonable adjustment means with the help of coaches.

1.2 The core principle of the coaching skills

Although the coaching skills have a distinctive personal style of coaching, there is a central principle that there is a logical correlation between perceptions, behaviors, and outcomes. It must first change the concept of the trainee, and then influence his behavior, and promote the change of behavior, and then will create good training effect. MIT professor Peter wrote in "the fifth discipline" in the book mentioned, self transcendence, and improving mental models, and building shared vision, and team learning, and system thinking are the five kinds of practice training is a must. The central point is that the mental model has a profound impact on the growth and development of trainees. The focus of the belief determines the direction of the trainee's behavior, and the width of the belief influences the acquisition of the trainee's achievements. The coach takes on the role of "neutral" in the training process. They often explore the mental characteristics and mental patterns of the trainees by listening, asking questions, or designing a series of experience activities such as coaching techniques. The purpose is to judge the behavior of teaching effect, and give the trainees a direct or indirect action feedback, enable the trainees to understand their goals such as modified by attitude adjustment , releasing potential and other series of activities, fully mobilize their initiative and create positive results.

2 The necessity of introducing coaching skills into Ideological and Political Education

The application of coaching skills in enterprise management and human resource development has been introduced into our country since the beginning of this century, and has been widely used in some large enterprises. The Ministry of education in the faculty [2015]6 text clearly pointed out: "strengthening the teachers' professional skills, practice teaching, the application of information technology and teaching research ability to enhance the training, improving the quality of the double division of professional teachers in proportion, cultivate a group of" coach "teaching teachers and professional leaders." The superiority of coaching skills in Ideological and political education in Colleges and universities lies in:

2.1 From the point of view of education, changing emphasizing theory into emphasizing experience sharing

For colleges and universities, especially for application-oriented universities, the general profession is more emphasis on hands-on practice, so students are not enthusiastic about theoretical learning, little interest. Therefore, the traditional model of Ideological and political education which emphasizes on knowledge and theory is difficult to arouse their interest in educational content. The coach is used in experiential education, and pay attention to through the interactive teaching, and guide students to explore their own emotions, thoughts and actions in the training, and arouse students' cognitive and emotional resonance, so that they can not only obtain from theoretical knowledge and intuitive perception. And these results can be applied to daily life and learning. It is characterized by the need to actively participate in, and get practical hands-on experience can be mastered, but once mastered, it has a strong memory, it is very popular with students.

2.2 From the point of view of communication, changing simple one-way into vivid interactive communication

Ye Shengtao, the master of education, believes that the educated are the subjects of study accomplishment and moral practice. Moral education is not the activity of instilling ideas and exerting influence on the educated one by one, but the interaction and interaction between the teacher and the learner. The introduction of coaching skills into Ideological and political education fully meets this requirement. In the teaching process, this model is very focused on "student - coach students" and "students - students" and "interactive" exchanges, let each student become active participants from passive listener. "Coach" to make full use of 3F, 5R, listen to the permeability character, double 4P model matrix and other special coaching tools, coaching skills, guiding students to participate in a series of educational activities, to improve the effectiveness of Ideological and political education through interaction, exchange and sharing. The education method compared to the past blunt "Teacher - student" one-way indoctrination, coach technology pays more attention to students' sense of participation and feedback, and to improve the students' Ideological and political education in the acceptance, and help to improve the effectiveness of Ideological and political education.

2.3 From the point of view of acceptance , changing passive participation into active interactivity

The educational practice which can give full play to the subjective initiative of the educated plays a decisive role in the formation of the ideological and political education in Colleges and universities. But in the actual operation of the ideological and political education at present, many educators are still used in the past the traditional mode of education, only think of the ideological and political education is a kind of idea, thought or theory, and then through the blunt preaching, one-way transmission to the majority of students. They do not really consider their acceptance, so that the students in the learning process often participate in a passive state, lack of initiative and enthusiasm, the effect as can be imagined. Thus, in order to effectively implement the ideological and political education, the education should be based on the full consideration of students' psychological and social needs, establish a clear education target, and then targeted implementation of the ideological and political education. By adopting a series of experiential activities of infiltration coaching skills, students can actively analyze themselves, explore themselves and understand themselves. In order to help them dig their own social needs, so that students take the initiative will require self social demand and goal of Ideological and political education for docking, adaptation, and selectively social ethics and values of "Internalization" for individual needs, and consciously "outside" for individual behavior, such as to meet the social needs of the educated, and reach the goal of Ideological and political education requirements

3 The Application of coaching skills in Ideological and political education of the Colleges and Universities

First, seize the key period of students' growth, and carry out ideological and political education through the implementation of "breaking ice".

Students usually have several critical periods of growth, such as new students, professional practice before the time node. If we seize these critical periods, we can achieve a multiplier effect by carrying out ideological and political education on the students' "coaching skills". As a matter of fact, after the freshmen enter the school, they can organize the implementation of "ice breaking" coaching program, and organize a series of experiential activities based on coaching skills, so that students can quickly eliminate strangeness. At the same time, we through the selection of student cadres, the establishment of student organization prototype, a prototype of consensus team core values, abide by the provisions of a clear class, student organizations and tasks and so on, make the students to establish the rules consciousness at the beginning of school. The students in professional practice, the students generally feel about the future status of occupation puzzled and confused, can organize team simulation work "ice breaking" activities, such as setting up business plan team, win in the project team, and the use of coaching guidance and counseling, communication, mutual cooperation and win-win future workplace essential the spirit of the students, cultivate their enterprising consciousness and ability to overcome setbacks, to help them establish a correct concept of occupation. The key is how to deal with individual and collective, individual and social relations of the college students to strengthen education, to accelerate their pace of integration with the society, and help them to quickly understand the society, familiar with society and society.

Second, make full use of campus activities platform and carry out ideological and political education through the implementation of various "coaching" activities.

The Campus activities are interesting and participatory, which can be regarded as an important aspect of students' campus life and an important carrier of Ideological and political education by using coaching skills. In campus activities, ideological and political education can be pursued through them.

In the process of using the technology of coach training, there are a large number of team cooperation, cooperation, sharing, debriefing and other projects, the implementation of these projects, which can help college students establish a strong sense of teamwork, have very strong sense of belonging and sense of honor, at the same time that they desire to show self has also been strengthened, so that many students in the coach training activities can quickly identify their roles, responsibilities, rights and obligations. Thus, in order to quickly complete the task team, to achieve the overall goal of the team, participation of students can actively carry out team division of labor and cooperation, even in the face of contradictions, difficulties and problems, they can learn to support others, or seek support team in support, so as to analyze and solve the problems of society, interpersonal relationship management, to adapt to the training of students' ability to.

Third, rely on ideological and political education courses, through the implementation of various "coach style" teaching to carry out ideological and political education.

The school curriculum, especially the ideological and political education course, occupies an irreplaceable position in the whole ideological and political education system. The integration of coaching skills into the ideological and political education course can not only meet the requirements of Ideological and political education, but also better reflect the interaction of Ideological and political education. The teaching method based on the technology of coaches pay more attention on how to stimulate and release of human potential, they are used in the ideological and political course, fully mobilize the students' enthusiasm and initiative, the ideological and political education in school is no longer the "superior didactic theory", but by focusing on the students' real life

Specifically, from the state and society is a pressing matter of the moment, school and individual level to work, then developed to coach technology as the main teaching methods of Ideological and political education courses, and formulate the corresponding curriculum standards. Through the establishment of "Ideological and political practice course" based on coaching skills, a variety of "coaching" activities are designed to simulate training. For example, by setting a number of team tasks and scenarios, organizing various teaching experiential activities, regular or irregular organization team debriefing, to guide the students in the "coach" under the guidance of teachers, learning, life and social experience, the whole process through team task analysis, summarize the various problems encountered in the process of Ideological and political education the discussion and Reflection on, and give full play to the initiative, cooperation to analyze and solve these problems, get the experience and lessons from it, and finally achieve the practice, to teach in the invisible.

Last, carry out ideological and political education through the implementation of coaching skills.

It is one of the main ways to carry out the team quality development activities. The ideological and political education in Colleges and universities is one of the effective ways to meet the needs of students, enterprises and society. Specifically, to expand the quality of the University, currently there are three possible ways: the first method is through the implementation of coach education and quality development projects into the new military training activities, to strengthen college students' hardship consciousness, team consciousness, hone their character and the purpose of the will. The second one is to develop special expansion plan, the implementation of coaching style education. According to the university teaching and practice time arrangement, design special development training to achieve the established purpose.The third method is to develop practical development plan, the implementation of coaching style education. The workplace psychological development projects, innovation projects, design practice type expansion project, help students establish good occupation occupation concept, role play, and better social running and standards, establish the social consciousness, for others, for the collective contribution, which is the ultimate goal of the ideological and political education.

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Research on creativity and innovation strategies

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Abstract: Medical attention "right", because only after the target is very clear, and formulate appropriate strategies, treatment will be effective. Creative, only we could face a series of problems in the process of dissemination of information, and creative solutions on these issues, we create truly valuable, creative to contribute to the effective dissemination of information, to achieve the desired social effects.
Therefore, we in the creative process must address the following questions for reflection.
Keywords: strategies, creative, policies

1.Information: facing different audiences have different policies

Age, gender, occupation, education, social status, and have different understanding psychological characteristics, abilities, interests and hobbies. First of all express our design is that the only person level and scope of message audiences, then they can and are willing to accept the language and create their favorite visual form can be effectively disseminated the information. For example, commercial or cultural diffusion of knowledge for children, we should first consider how to shape the creative atmosphere close to, how to inject their most attractive content. Accordingly efforts should be pursued on the screen is required to handle a young fun and lively and cheerful ambience, information content demands only suitable for straightforward, easy to understand, even taking into account the psychological reactions of parents to gain their support and help convey information.

For example, advertisements targeting the rural market and culture cannot and urban communication using the same forms and styles. Remember once the author as a livestock feed production company for advertising and design, before that their plan was to print a feed color product brochure. I immediately pointed out that this does not adapt to the psychological characteristics of advertising means and form of dissemination of product information is likely to bring a significant obstacle, for three reasons: (1) this form of advertising on many farmers who don't have much culture to be too complex, reading and decoding can be a difficult, Even they have no interest in reading. (2) this album forms of advertising in advertising investment cost is not low, we want to see farmers who make up the majority of China's population information dissemination, its advertising investment is obvious. (3) the publication of an advertisement is to give the album ? Or sales ? If it is a gift, each book costs ten Yuan, and how much does it cost to make them radiation to a very wide geographical distribution ? If it is a sale, a farmer for more than 10 Yuan to buy a copy of "exquisite" ads, is it possible ? In particular and in shaping the corporate image and the one they have in mind ? Later on, we will change for the advertising content of the forms of advertising stickers, pictures and feeding guide calendar and other cultures, daily necessities. Design style combines folk need and folk art features later this way brings an incredible level of advertising effectiveness. First ad appears as a cultural product can avoid ads on psychological instincts of people suspected and subtle rebellion, making it more intimate, its usefulness and make it impossible to be aside. Meanwhile, a pair of doors stick or a painting pictures with 100 grams of letterpress papers 6 open printing, just put a few cents of the cost, can be printed to offer advertising and picture posting advertising content to their neighbors again spread radiation. Also to pay to farmers in the form presented in the annual Spring Festival pictures, not only to achieve a good effect, creating a good corporate image.

Second, different categories of information should be using different strategies

Complex information contents can be divided into two categories, one is business information for market purposes; it is also used in social studies of science and technology information and current affairs information. Social effects of different categories of information needed to achieve very different, so it is not exactly the same in terms of strategy. Former permit a proper subject for commercial purposes of exaggeration and package modification, in shaping the "sharp", "outstanding", "bright" and the temptation to boost consumption, audiences "must" accept, sometimes you should respect the audience's choice, and often focus on accurate, objective, detailed, complete, has presence and depth and illuminating.

Three, for different age and social environment should be using different strategies

Different ages have different propagation conditions, social environment, including politics, culture, customs, human ways, producing economic, scientific, cultural and other factors, we must fully take into account these factors and take advantage of information dissemination, where favorable conditions, opportunities, avoiding its limitations for creative design, or limitations to their advantage, Transmission has effect. Advertising media such as some cities in prime locations, its expensive, and some of the public environment and doors were years of neglect, eyesore. If we were in a public place, the facility, such as the highway along the ridge or on a surface of walls of old buildings produced murals, murals and inserts business advertising ads, this environmental public welfare activities, itself is not only great news effect can also shape the corporate image. Meanwhile, the result of spectacular and inject the advertising content of the benefits of advertising should not be underestimated, and cost are not necessarily expensive than buying a prime advertising media. But if we have a specific design of this conception, operations, advertising design must incorporate environmental design aesthetic principles, excellent environment created through the dissemination of information. Obviously, different social environments, background and other factors that directly influence the design, design must make a strategic response in order to effectively carry out the dissemination of information.

Four different, in the face of competition should adopt different strategies

Before the idea should be to research our competitors, achieve mutual understanding and adopting corresponding measures to make our designs stand out in the competition. Competitors here refers to two aspects: one is the same and similar disseminators of information; the second is tied with our information media may get along with other specific information media. Only to understand the others, means of expression, consistent advertising strategy, our design work around those research other designs that might compete, then the policy differences, we design may come to the fore and are very attractive. For example, design peers such as widespread use of some form of modern language, maybe you are more ingenious forms of primeval. Also, design a painting signs advertising we have to inspect and study the information the site adjacent to other advertising media, if their designs are delicate, complex, we may be simple win; if their expression is realism of photography forms We use the abstract form or Doodle charm of Freehand drawing style to make the design stand out. Opponents, this is a research and study on its own analysis, Yang has long, hit his short, creating difference is a major decision.

Five, using different media and materials should also be different design strategies

Any information designed to be turned into a media materials on, or attached to some form of media, different media materials, media forms each have their strengths and weaknesses in performance. Creative must think about how to give full play to its advantages and process characteristics, to avoid its limitations. Designed with rigid material cutting, pasting, cutting die batch spray system of graphic signs, maybe the manufacturing process is forcing us to shape, color must be concise and summarize only implementation feasibility, but can also give full play to its material beauty and the specificity of the process. And as television advertising graphic design, probably should make full use of light effects and montage effects, motion and video, only losing the advantages and characteristics of this form of media.

Six, time is our design ideas should be an important factor to consider, wasted no time is a strategy

Different time periods, popular psychology and aesthetic needs are not the same, particularly changes in fashion, will directly affect the public's interests and hobbies. For example, at a time when colour photography there is not a widespread, you use color photography image information form gives the impression of being advanced, innovative, and today, black and white images sometimes appear to have more flavor. Same thing, different time of connotation, implied meaning is not the same. As the great criticism of the cultural revolution posters, its form reflects the seriousness of political at the time, but now its design style, form or schematic symbols into advertising works, shows clearly is the teasing, joking.

In addition, the dissemination of information is and the overall planning of communication activities need to focus on content. Step is strategy, creative must into consideration of this content. For example, a business or product advertising, it is listed at the beginning of focus brands recognize the need to promote, then detailed quality information, and finally the specific content marketing promotion. Different stages have different demand, should design that uses different means and forms, using a different image for the picture. Sure step, timely dissemination of information is one of creative tasks.

Seven different topics should use different strategies

2.Policy, you can enable ideas to be fully displayed.

Behind a subject involved in the many related factors. Creative must be comprehensive and integrated analysis of these factors, using suitable forms and methods, complete, accurate, and effective way to convey information. Such as the design of the goods must be used with the product market positioning, manufacturers, industry features, product attributes, personality factors such as consistent behavior. Design of public welfare and cultural information should reflect the position, attitude consistent with the needs of social development. Therefore, if we are to design a poster for relief to victims in Africa, cannot be theme with teasing, playful language demands, otherwise it will destroy its seriousness and its role in society. And for a subject of appeal can apply ridicule, teasing way, should strictly control what use of well-intentioned humor ? Is sarcasm and ridicule, criticism ? And adopt clear attitudes, to decide the appropriate language.

BA information design, for use in different settings have different policies

Many information media has become a part of our living environments and different public places also have varying degrees of impact on propagation effects, creative must consider these factors and corresponding countermeasures. For example, designing billboard advertising next to the highway, in the creative design should take into account how people can clearly and accurately in a high speed mobile access to information; to advertising in places of leisure and entertainment design, advertising and the coordination of environment must be considered, Can't be as damaged good mood and atmosphere of resentment and exclusion accept wart.

In short, creative strategic thinking must be combined with a wealth of content and design, can be successful.

Strategy process is a process of Association, analyzed, all the things to be avoided by our experience to imagine ideas: If this is the case, what effects will be produced; if that is so, it will have much of an effect. All wish to achieve results and by our design experience to judge: If you want to achieve this effect, what should we do; if you want to achieve that effect, how can we.

Strategy is based on the audience, many factors in the marketing and communications activities. Principle of the strategy is: the policy must be clear and accurate design. Strategy mainly in the form of "difference" and "reverse". Differences in strategy is: according to different objects have different means of expression and form, should be treated differently, and different, open differences with others. Reverse policy as against conventional thinking and moving. As a picture of poster design, in order to get everyone's attention, not necessarily must use the title visible, color contrasts in the form of, perhaps the whole picture is all the small print, thumbnails, taking advantage of people's curiosity, forcing it to go into close reading and form a lasting memory of the completion strategy.

Strategy itself is a unique creative created the message.

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On the Shaping of the Character Images in Dramatic Performances-Discussion Based on the Relationship Between Character Personality and Costume Modeling

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Abstract: Dramatic performances place emphasis on reproducing "human" life on the stage, showing characters' thoughts and feelings, and shaping character images via actions. Herein, the character personality and costume modeling are the indispensable and critical factors in shaping a complete character image. The former helps actors from the internal level to create stage actions and establish concrete psychological actions, physical actions and speech actions according to specific characters personalities, while the latter helps actors from the external level to establish intuitive character visual impressions and strengthen the roles' identity characteristics and personalities. Through the analysis of the character personality and costume modeling in dramatic performances, this paper explores their significance to, function for, and influences on the character image shaping in dramatic performances based on the interactive relationship therebetween.

Key words: dramatic performances; character image shaping; character personalities; and costume modeling

1. Personalization - the Grasp of Character Keynote

The so-called "personality" in psychology refers to the relatively stable attitudes towards reality and the corresponding and habitual behavior patterns formed by individuals in the particular social relations and environment. It is one of the important factors that determine a person's inner mental activities and external behavior logic. The main task of dramatic performing arts lies in the shaping of lifelike and vivid character images, and its key is the creation and expression of typical personalities.

Creating the "personalized" character image is the core of performing artistic creation, and only by creating the character image with personality traits, can the performance possess aesthetic value and aesthetic significance. As a specific term in western dramatic performing arts, personalization is closely related to but different from personalities,. "Personalization", first proposed by the former Soviet drama director Stanislavsky and serving as an important component of his drama-performing system, refers to a type of technique and method when an actor shapes a character. He defines himself as a personalized actor and argues that all actors are supposed to focus on "personalization". In his view, an actor should create uniquely personalized character images on the stage instead of simply showing himself to audiences. The characters appearing on the stage, whether primary or secondary, should undoubtedly have more prominent, distinctive and typical personality traits than people in real life.

Character personalities determine the way and method of character actions, dominate the logic and order of character actions and act as a decisive factor in directing character actions. Consequently, actors must understand, deepen and build roles through the analysis of roles' personalities so as to better organize and create stage actions. If actors fail to find clear and accurate external personality traits of roles, it is impossible for them to convey the convincing inner spiritual life of characters. Hence, the art realm that actors should reach while shaping character images is exactly the creation of the typical personalities in a typical environment. Distinctive personalities can ensure vivid images.

2. Costume Modeling - the Visualization of Character Personalities

Costume modeling is a kind of "character packaging art" that takes the basic principle of conforming to artistic modeling as the prerequisite, adopts the hypothetical, intuitive and staged image vocabularies as creating means, is presented in front of audiences through the actors' interpretation of the roles and can make audiences' visual and aesthetic enjoyment resonant with their emotions. It's the artistic refining and sublimation of life clothing, as well as the individualized artistic modeling creation derived from life but higher than life. Apart from the reproduction of the environment and identity, revealing character personalities and inner world is also a substantial part of the reproduction function of costume modeling. The different combinations of style structures and pattern colors can show a variety of distinctive character personalities. Therefore, costume modeling is always in the service of the assumed situations and personality traits of roles, packages based on characters' emotion fluctuations and the ups and downs of characters' fates, thereby granting audiences the reverie of extended drama space and drama plot hints in order to reach certain authentic life artistic effects.

As one of the means to change an actor’s image from the outside, costume modeling makes an actor first close to the role he is going to play in appearance and arouses his conviction that "the role is me and I am the role". The transformation of the appearance can make the actor's psychological emotional experience for a role start to turn inside from the outside and gradually enter into the role’s ideological realm. According to experience, many actors often cannot find feeling when rehearsing and find it hard to enter into the role at once, but it’s easy to stimulate his strong sense of the role and creative passion after his make-up and putting on the clothing of the role, which is the catalysis result of costume modeling. Through the design of and the changes in colors, shapes and styles, costume modeling can help actors to quickly enter into the roles, realize the external conversion of identity and personalities from "I" to the "character", better help actors with character "personalization" shaping, build roles’ external images and reveal roles’ personality traits in an intuitive form of language, so that character images are distinctive and forceful as a unity of appearance and spirit.

3. From Personalization to Costume Modeling - the Shaping of Character Images

In the process of shaping character images, there is a mutually-affecting positive interactive relationship between personalization and costume modeling. The former helps actors from the internal level to create corresponding stage actions (including psychological actions, physical actions and speech actions) through specific characters personalities, while the latter helps actors from the external level to build intuitive visual images and establish the roles’ identity characteristics and personalities by means of distinctive modeling elements. Different character personalities determine diverse costume modeling styles, and in turn, costume modeling as the role’s attire helps actors to highlight the roles’ personalities. The two sides always interact with each other and support each other.

In terms of the internal level, an actor must focus on having a deep understanding and feeling of the role all the time and make his "personalized" performance creation based thereon. The more deepgoing and meticulous an actor’s analysis, understanding and recognition of a character are, the more profound and real his feelings and experience for the character are. With this premise, it can be regarded as the "personalized" creation made on the character. On the one hand, the role’ inherent personality and temperament need to be grasped; and on the other hand, an actor should also be adept at seizing the external typical action that can best reflect the character’s personality traits and throw himself into the image with his authentic feelings, emotions and instincts. In the process of shaping character images, it is necessary for an actor to reflect the role’s charm in the self and also show his self-charm in the role.

In terms of the external level, the creation of characters’ costume modeling should be made on the basis of clarifying character personalities. Both actors and costume designers first need to carry out in-depth and meticulous analysis and research on the script content and explore the role’s spiritual temperament, thoughts and feelings so as to determine the character’s basic personality traits and perfect the initial setting of the character image. At the same time, they should not only grasp the role’s personality keynote, but also pay attention to the complexity and versatility of personalities, so that there are changes in the design of costume modeling. Costume modeling can better assist an actor to find the role’s feeling and reflect the role’s internal emotional state from his external image. Just as the German dramatist Lessing said in Hamburgische Dramaturgie, as a means of "external manifestation" (appearance), costume stimulates an actor's role experience and emotional input through "turning inside from outside".

In dramatic performances, the character personality and costume modeling are indispensable and critical factors in shaping a complete character image. Via the analysis on role’s personalities and the possible orientation of character actions, actors can better organize and create stage actions and shape a "personalized" character image. Meanwhile, costume modeling helps actors to establish intuitive and vivid character visual impressions and strengthen the roles’ identity characteristics and personalities through external means. Both sides complement each other and co-accomplish the shaping of the drama character images with vitality from the internal and external levels.

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Water-saving solar greenhouse agriculture and farmers' response to policy changes in the severely degraded Minqin Oasis, northwestern China

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ABSTRACT: Minqin is located in the lower reaches of Shiyang River. In recent years, the local government has made progress, such as offer money for building, strengthening technical guidance, to increase use of greenhouse, but use of the technology by farmers is minimal. This study examines the reasons for this by investigating the development level of solar greenhouse in Minqin county Gansu province, as well as farmers' perspectives, from a social and economic viewpoint.
The results show that local farmers support the environmental and water conservation policy of government. The main problem is that farmers are worried about the theft of their agricultural products and their lack of technical knowledge of greenhouse technology. As a result, farmers are hesitant, and take a 'wait-and-see' approach toward solar greenhouse technology.
Conclusion: the government should stimulate the economy prior to implementing the water-saving policy, improve the training and technical service system, establish farmer training school in the county, strengthen technical guidance, and establish and perfect the marketing system and network.
Key words: solar greenhouse technology, farmer

1 Introduction

Shiyang River, one of the most densely populated inland river basins, is one region of this kind. The water resources there are highly developed, and conflicts over ecological and environmental problems are very serious (Hu et al. 2004; Liu et al., 2009). Minqin is located in the lower reaches of Shiyang River. At present, the exploitation of basin water resources is beyond the capacity of Shiyang River, resulting in deterioration of the ecological environment of the river basin, water resources in Minqin face a serious shortage In order to enhance water resource, shut-in well, immigration, forestation and greenhouse technology are also employed in this region (Chai et al., 2010).

Many researches have shown that solar greenhouse technology is a technology of sustainable development that can lower the pressure on surrounding environment (Wang et al. 2006). With rapid urbanization and the deterioration of the ecological environment, people in Minqin have begun to build solar greenhouses. In recent years, the local government has been widely promoting this technology. Despite its proven efficiency and government support, solar greenhouse technology has very low acceptance among the local farmers.

This research intends to analyze the reasons for the unsuccessful promotion of solar greenhouse technology from the perspective of farmers, society and the economy through the investigation of local farmers in Minqin.

2 Study area and data collection

2.1 Study area

Minqin county has a total population of 274,300 people, 241,300 of which are residents in 2010. The food production of the whole county prioritizes high quality wheat, corn, beer and barley with an annual production of 150 million kilograms.

2.2 Data source and analytical models

According to population statistics of Minqin County, the maximum sample size is 520 people under the condition of 95% of confidence coefficient, 3.5% of sampling error and 2‰ of the principle of population sampling. 521 questionnaires were collected and 500 of them are valid with a 96.2% efficacy rate.

The description of these variables specified in the empirical logistics model is presented in Table 1. A binary logistic regression model was used to evaluate farmers' decisions regarding adoption of solar greenhouse technology by maximum likelihood methods (Asfawa and Admassie 2004; Zhang et al., 2012). We assume that the responses of farmers in the study region are consistent with utility maximizing.

Table 1 Definition of variables used in the analysis of empirical econometric model

Acronym	Description	Type of measure
ADOP	Whether a farmer has adopted or not	Dummy (1 if yes, 0 if no)
GENDER	Gender of the head of the family	1, Male; 0, female
AGE	Age of the head	Years

	of the family	
EDU	Educational level of the head of the family	1, No formal education; 2, Primary school; 3, Junior secondary school; 4, Senior secondary school; 5 Junior colleges; 6 Undergraduate and above;
FSIZ	The number of people in the family	Numbers
LABE	Active labor force members	Numbers
CLSIZ	Total area of farmland	Mu (a Chinese unit of area)
ECATTI	The attitude of farmers to the severity of minqin ecological problems	1, Very serious; 2, Serious 3, More or less serious; 4, No serious;
FUTU	Future about hometown in mind	1, Very serious; 2, Serious; 3, More or less serious; 4, No serious;
GVPL	Attitudes of farmer towards government policy	1, Very important; 2, important 3, do not know 4, No important;
LOPL	The implementation of government policy	1, Could be performed with no doubt; 2,Could be performed; 3, Do not know; 4, Could be not performed； 5, Could be not performed with no doubt；
EFFE	The relationship between policy and the interests of farmers	1, Never pay attention to the interests of farmers; 2, Do not know; 3, Pay attention to the interests of farmers in some aspects; 4, Pay attention to the interests of farmers;
ACPT	Attitudes of farmer towards solar greenhouse technology	1, Very willing; 2, Willing; 3, Willing or unwillingness; 4, Unwillingness； 5,Very unwillingness；
AFFE	The communication between farmers	1, Never communication; 2, Little communication; 3, Communication sometime ; 4, Communication； 5, Often communication；
MAKE	Distance from farmland to market	1, Less than 2 km; 2, 2-5km; 3, 5-10km ; 4, 10-20km； 5, More than 20；
ORD	The attitude to order agriculture	1, Very willing; 2, Willing; 3, Willing or unwillingness; 4, Unwillingness； 5, Very unwillingness.
ATINF	aspects in farmer opinion to limit the adoption of solar greenhouse technology	1, No easy to sell; 2, Plant diseases and insect pests; 3, Technical staff guidance does not reach the designated position; 4, The prices of products were too low; 5, Risk of investment is too big; 6, Used to field planting.

3 Results and discussion

The relationship between farmers' economic and social background and their use of solar greenhouse technology

The model shows that gender played a significant role by statistical significance test (p=0.05) and the coefficient was positive (Table 2). It means other things being equal, male farmers are more willing to adopt solar greenhouse technology, which is in accord with the researcher's initial expectation. Male farmers are more able to withstand various risks brought by natural conditions, market situations, economic policies and other factors than female farmers (He et al. 2007). Secondly, farmers' educational background plays an important influence on their adoption of solar greenhouse technology. There are significantly positive correlations between these two factors (in statistical significance test 0.05). The results shows that the greater farmers' educational level is, the more likely it is that they will use solar greenhouse technology, which is consistent with previous research (Chianu and Tsujii 2004; He et al. 2007). That is to say, if farmers' education level is higher, their demands for agricultural technology will be stronger. Conversely, if their educational level is relatively low, they will tend to be more hesitant toward new agricultural technology. Thirdly, there is a positive correlation between LABE and farmers' adoption of solar greenhouse technology (in statistical significance test 0.05). It also reaffirms the previous studies (Chianu and Tsujii 2004; He et al. 2007). The data presents that the larger family labor force, the higher acceptability of sunlight greenhouse.

Table 2 Parameter estimates of the binary logistic regression model for factors influencing adoption to solar greenhouse technology

	S.E.	Sig.	Exp(B)
GENDER	.418	.020*	2.651
AGE	.020	.963	.999
EDU	.211	.036*	1.139
FSIZ	.127	.182	.844
LABE	.294	.006**	1.834
FESIZ	.038	.494	1.026
ECATTI	.290	.022*	.513
FUTU	.190	.009*	1.639
GVPL	.226	.000***	.351
LOPL	.205	.653	1.097
EFFE	.212	.017*	1.605
ACPT	.161	.807	1.040
AFFE	.198	.204	1.286
MAKE	.156	.031*	.713
ORD	.191	.000***	.358
ATINF	.120	.047*	1.091
Constant	2.065	.027*	95.577

***$P<0.05$, ***$P<0.005$, ***$P<0.001$.

The relationship between farmers' knowledge of the ecological environment and government policies to the adoption of solar greenhouse technology

There are significantly negative correlation between ECATTI and farmers' use of solar greenhouse technology (Table 3). Farmers, who think that the ecological environment in Minqin County is severely bad, can easily use sunlight greenhouse than that having the opposite opinion. Besides, FUTU the cognition towards the future ecological issues in homeland also affects evidently farmers' planting behavior in using sunlight greenhouse and these two factors are negatively correlated. It means farmers concerned about the ecology in Minqin are more likely to favor solar greenhouse technology in the future than they would otherwise. GVPL can significantly influence farmers' planting behavior (from the statistical significance test) and they are negatively correlated. That is to say, farmers thinking government policies pay more attention to Minqin will hold a positive attitude towards solar greenhouse technology. Hence, the government should strengthen farmers' awareness of environmental protection. EFFE are positively correlated with the adoption of solar greenhouse technology, thus, the interests of farmers about government policies directly relate with farmers' attitudes to solar greenhouse technology. However, LOPL did not pass the statistical test, which means farmers' cognition toward the efficiency of governmental policies has no direct relation with their use of solar greenhouse technology.

Table 3 The correlation of the behavior of sunlight greenhouse planting and its variables

		ADOP
SEX	Pearson Correlation	.032*
	Sig. (2-tailed)	.047
	N	499
AGE	Pearson Correlation	.014
	Sig. (2-tailed)	.748
	N	498
EDU	Pearson Correlation	.025*
	Sig. (2-tailed)	.049
	N	498
FSIZ	Pearson Correlation	-.024
	Sig. (2-tailed)	.596
	N	492
LABE	Pearson Correlation	-.099*
	Sig. (2-tailed)	.030
	N	483
CLSIZ	Pearson Correlation	.144**
	Sig. (2-tailed)	.002
	N	477
ECATTI	Pearson Correlation	-.143**
	Sig. (2-tailed)	.003
	N	420
	Sig. (2-tailed)	.000
	N	420
FUTU	Pearson Correlation	.025*
	Sig. (2-tailed)	.046
	N	420

The relationship between economic benefit and other social factors to farmers' adoption of solar greenhouse technology

The relationship between MAKE and farmers' attitudes toward solar greenhouse technology is negatively correlated. The closer the distance between the market and farmland, the more acceptable it is for farmers to adopt solar greenhouse technology. There is a significant negative correlation between ORD and farmers' adoption of solar greenhouse technology, as it is more possible for farmers to adopt solar greenhouse technology, if there was order agriculture. ATINF evidently correlates with farmers' adoption of solar greenhouse technology, that is, farmers' ideas about solar greenhouse technology. At last, the degree of acceptance and interaction between farmers does not significantly correlate with their use of solar greenhouse technology.

Government decision and farmers' choice

In order to benefit local sustainable development, the government introduces technological solutions that may increase farmers' incomes. From the investigation above (Fig. 1), it can be seen that the local farmers do not hold a positive attitude toward new greenhouse technologies. Although they approve of the proposed water-saving policy, farmers have to face certain unpredictable risks in adopting new technology. In such a situation, the government should offer economic stimulus to eencourage the adoption of solar greenhouse technology. It is a kind of ecological compensation in which solar greenhouse technology is an ecological compensation mechanism made by the government.

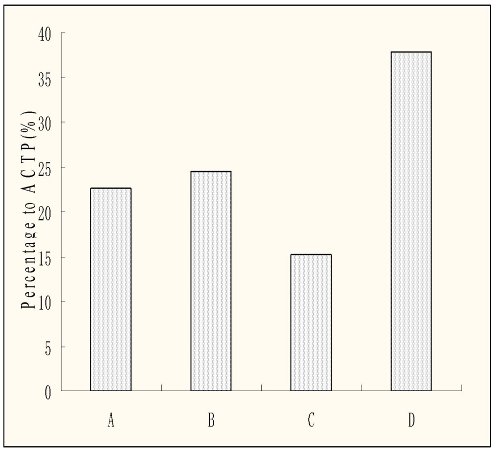

Fig 1.Attitudes of farmer towards solar greenhouse technology (%, valid n=474). A is very willing and willing; B is unwillingness; C is very unwillingness; D is willing or unwillingness.

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[8].Zhang Wan-Shou, Feng-Min Li, You-Cai Xiong, Qing Xia Econometric analysis of the determinants of adoption of raising sheep in folds by farmers in the semiarid Loess Plateau of

Research on precision poverty alleviation in ethnic backward areas——Take Jinyang County of Liangshan as an example

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Abstract: Precision poverty alleviation is the strategic direction of poverty alleviation and development in the new era. It is a concept of poverty alleviationofaccurate identification, accurate help and accurate management. This paper through on-the-spot investigation，for the analysis of poverty in Jinyang County in Liangshan, found that the region's precision poverty alleviation process has the following problems: Identifying information is Inaccurate, precision aid lack of diversity, industrial poverty alleviation and assistance efficiency is low, single industry poverty alleviation, medical service capacity is frail. So In view of these problems, the paper puts forward some countermeasures for poverty alleviation, hoping to play a certain reference role for the precision poverty alleviation.
Keywords: Jinyang County, Poverty alleviation, Lasting poverty alleviation

1. INTRODUCTION

After decades of poverty alleviation and development, China's poverty control work has achieved great success. The number of poor people has not only decreased, but also narrowed, but the remaining poverty management has become increasingly difficult. Ethnic minority areas due to the bad geographic environment, poor infrastructure, social cultural complex and policy factors, resulting in poverty alleviation compared to the general poor areas have greater challenges. Changing the concept of poverty alleviation and governance in minority areas、Perfect the poverty alleviation system, Linking the poverty alleviation work of minority nationalities with the unique resources advantages in minority areas, utilizing the advantages of ethnic resources to get rid of poverty and achieve a comfortable standard of living will become an important train of thought for poverty alleviation in minority areas.

Our research group was founded in December 2016 the on Jinyang county poverty alleviation precise were concentrated on the topic of study, through visits to farmers, called village cadres, representatives of the masses and the masses to carry out special seminars, listen to opinions and suggestions from all aspects, the formation of this article.

2.Precision poverty alleviation mechanism

Precision poverty alleviation mechanism is to achieve accurate poverty alleviation for the purpose of poverty alleviation targets to implement precise support, and then realize self development as content, various elements of the mechanism in the process of poverty alleviation, that is, accurate identification mechanism, accurate help mechanism, precision management mechanism and precision assessment mechanism of interdependence and interaction. In the mechanism of precision poverty alleviation, each specific component of the mechanism has relations with each other, but has a definite function. The precise recognition mechanism which is the measure of the extent of poverty and poverty alleviation on the basis of object identification (participatory), it is a key prerequisite to carry out precise poverty work overall mechanism, only based on accurate identification on the basis of poverty alleviation can be reached to the final goal of poverty alleviation. After the establishment of the premise, is to implement the precise helping mechanism, precise helping mechanism is different from the previous traditional Chinese poverty relief mechanism, which is designed for the way of helping flood irrigation. Accurate help mechanism focuses on the embodiment of different targets for the implementation of specific measures, it will give full consideration to the actual causes of poverty in poor villages and poor households, on this basis, the design of targeted measures and means of assistance, so as to achieve a targeted. The precise management mechanism is the key step to ensure the smooth and efficient development of poverty alleviation, and plays a central role in the overall poverty alleviation mechanism. The precise poverty alleviation management mechanism has a fundamental guiding significance for the overall planning of poverty alleviation and assistance, the formulation of poverty alleviation measures, and the operation and deployment of poverty alleviation resources. In order to achieve true poverty alleviation, the work mechanism in the three areas should be complementary and healthy, and the actual effect of poverty alleviation will be ensured.

3 .The problems existing in the process of accurate

poverty alleviation

In recent years, Jinyang county has followed the national policy, actively adhere to the policy of precision poverty alleviation, give full play to the enthusiasm of the masses, and work in accordance with local conditions and innovate the working mechanism, and achieved great success. In the course of the investigation, the people of Jinyang county have basically realized off poverty, and have reached the standard of poverty alleviation. But we should find this Shake off poverty and Shake off poverty is not a real sense, the per capita income of the majority of farmers out of poverty has just reached the standard, or more likely return to poverty, but poverty standard is too low, the per capita income of 3100 yuan, the average annual income of the low release and can not achieve the un. The following are some of the problems we found in the practice of poverty alleviation in Jinyang County, mainly:

(1)Accurate identification information is inaccurate

The first step in accurate poverty alleviation is precise identification, and accurate identification is the basic work of poverty alleviation,only by accurately identifying the object of poverty alleviation can we avoid the input of poverty alleviation resources waste, so as to achieve our goal of poverty alleviation. However, in the real poverty alleviation process, because the villagers' cultural quality is not high, the research work is not enough to understand, and the enthusiasm of the investigation is not high, resulting in accurate identification results are not accurate enough. In the course of the investigation, some farmers are afraid that they will not get the poverty subsidies in the coming year. When they are inquired about the annual net income of the family, they will always conceal their income and make it difficult to carry out dynamic management of their information. But in fact, the average annual net income index can not completely reflect the actual situation of the respondents,the only criterion to regard income as a poor is to be divorced from reality, and we have no way to know the implicit income and bank deposits of the peasants. Moreover, in our current research work, the evaluation index used by Jinyang county is "net income per capita". it not mean per capita disposable income of the villagers, the per capita net income not deduct the villagers' basic necessities of life spending, while in the countryside life, the basic necessities of life spending has accounted for a large part of the consumer spending, led to the evaluation we can not achieve effective.

(2) accurate help lack of diversity

The cause of the poverty of the farmers is not a single one, but a result of the interaction of many factors, there are some factors of illness, poverty, some natural environment law leads to poverty and so on. Different causes of poverty result the way of help are also different. In carrying out the work of poverty alleviation, we should not only adopt comprehensive measures to help the poor, but also have a long-term perspective. We should carefully analyze the short-term and long-term factors that lead to poverty among the farmers. In the accurate helping, the "one family one policy" and "one village one policy" concept of poverty alleviation is of great value, only the "right remedy" can achieve the desired goal. But in reality, it is difficult for helper to do so, the people want to understand and adopt specific measures on the causes of poverty need to pay a lot of manpower, material and financial resources, resulting in this concept of accurate aid can only be shelved.

(3) Industrial poverty alleviation and assistance efficiency is low

Industrial poverty alleviation should be an important approach to poverty alleviation in minority areas, but in the current economic environment, there are few leading competitive industries in poor areas of China or have a leading industry, but no funds, technology support, resulting in industrial development is not smooth. Jinyang county has a long history of pepper cultivation, since twenty-first Century, Jinyang county Party committee and county government have planted green pepper as a pillar industry for poverty alleviation in Jinyang. Jinyang county's existing green pepper mainly in seedling sales, dry pepper packaging sales,the products of green pepper are only some primary products, and the products of green pepper have not been developed and utilized. There are no deep processing products such as blue pepper, fresh keeping, edible oil and so on. There is no chain of production, processing, sales as one of the industrial chain, also not have corresponding to the wholesale market of pepper.Green pepper trading mainly concentrated in the local village market, currently only Beijing, Chengdu has direct sales point, mostly retail business, resulting pepper sales weakness.

(4) Single choice of poverty alleviation in industry

Industrial poverty alleviation in Jinyang is mainly based on the cultivation of green pepper, by the end of 2014, pepper farmers per capita economic income of 1954 yuan, accounting for 45.3% of the county's net income per capita, the cultivation of pepper has made great contributions to the development of Jinyang county. But because of the influence of many factors, such as climate, insect pest and so on, the quality of green pepper is different greatly, the yield is low, farmers' annual income uncertainty is high, vulnerability and instability has been out of poverty population, the phenomenon of returning to poverty is more prominent. The important reason is that it has not formed diversified industrial poverty alleviation mechanisms and played a supporting role in the follow-up. For the poverty alleviation of minority nationalities, the function orientation of industrial poverty alleviation should be defined.

(5) The capacity of medical services is fragile

In the true sense, poverty alleviation does not simply mean that income levels exceed poverty alleviation standards, but should also mean poverty alleviation in life and spirit. Because the income level of local residents in Jinyang is not high, medical professionals have lower levels of medical skills, lack of public health services related to disease control and immunization, and the major diseases of the reimbursement ratio is low, leading to local residents of the "difficulty" and "expensive" and "poverty" and "illness" phenomenon are more prominent in Jinyang county.

4、Sustainable poverty alleviation countermeasures

Through this investigation, we found that the sustained large-scale poverty alleviation work has greatly changed the local poverty and backwardness in Jinyang, and the problem of food and clothing has been basically solved. However, there is still the fact that, on the one hand, the peasants who have solved the problem of food and clothing are still on the food and clothing line for a long time. They can get out of poverty ishard become rich; On the other hand, with the poverty alleviation efforts continue to increase the rate of falling back to poverty is rising. Therefore, it is our ultimate aim to propose a lasting poverty alleviation strategy. The following are some countermeasures and suggestions for Jinyang county to eliminate poverty for a long time:

(1)Improve the poverty identification mechanism

On the macro level, precision poverty alleviation is a systematic project, involving all aspects of poverty alleviation and development,although the current methods of poverty identification have certain advantages. However, due to technical and cost problems, Its feasibility and accuracy are not high, and the only criterion to treat economic income as the poverty of farmers is undoubtedly a little divorced from reality. The structural features of poverty require precise poverty alleviation to change traditional thinking, interpreting and defining poverty in an all round way, in this regard, we can consider the adoption of Multidimensional Poverty standards to identify poor farmers, we should take into account the income, consumption, assets, health, education and other dimensions of the poor farmers, based on the complete filing cards work, avoid the use of national standard and basic standard disconnection, Based on the complete filing cards work, avoid the use of national standard and basic standard disconnection, ensure that the poverty alleviation funds are fully implemented to the farmers who really need poverty alleviation,ensure that the poverty alleviation funds are fully implemented to the farmers who really need poverty alleviation. Secondly, improve the construction of poverty alleviation information network, establish a poverty alleviation information system covering the whole county, dynamic management and tracking of poverty alleviation information,realize the sharing of resources and improve the efficiency of information resources utilization.

(1)Develop Jinyang pepper market, grasp the deep processing of pepper products

There are more than 20 provinces and municipalities producing pepper in china, but the quality of Jinyang County green pepper products is higher than other areas, we should open the market of blue pepper in Jinyang County, and promote the sustainable development of Jinyang County blue pepper industry. Make full use of all kinds of agricultural products fairs and other opportunities, organize a strong lineup, and make full efforts to promote Jinyang green pepper, and explore domestic and foreign consumer markets. Multi organizational experts, invited enterprises to visit, inspection, researchpepper production, expand the influence of Jinyang pepper. At the same time, actively attract investment, the establishment of deep-processing enterprises, to provide skills training and technical support for villagers, Such as scientific cultivation, breeding and other aspects of technical support to avoid farmers blind planting, farming and economic losses, at the same time, increase the added value of products, extend the industrial chain, and promote the development of green pepper industry.

(2) Diversified industry poverty alleviation model

For the minority areas, especially the agriculture and forestry industries, the income level of farmers is greatly affected by the weather, uncertainty is high, in view of this, minority areas should set up a diversified industry poverty alleviation system with large social poverty alleviation.Through the introduction of the market, so that enterprises into the precise poverty alleviation, the establishment of enterprises or companies to promote cooperatives + farmers model, the government should change its role and change from decision maker to participant and coordinator, truly get rid of poverty and become rich.

(3)Increasing medical and health subsidies and expanding the scope of medical insurance

Under the existing medical and health system in Jinyang county, the government should increase investment in medical and health care in poor areas, overall consideration of the health care resources stocks and increments in poor areas, through financial transfer payments, accurate targeted support. We should give moderate policies and raise the level of medical treatment and subsidies for medical personnel in ethnic areas and poverty-stricken areas, at the same time, we should improve the counterpart support policy and strengthen the training of health technical personnel. Secondly, Poverty in Jinyang county poverty households, which are closely related and eating habits and health status of the villagers, to prevent the occurrence of major diseases, we must first improve the sanitary conditions, do clean and tidy village, to eliminate the phenomenon of poverty or Poverty-returning.

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A Study on the Cohesion of Course Content between College English and Maritime English at the Vocational College in China

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Abstract: ESP (English for Specific Purposes) and EGP (English for General Purposes) teaching in maritime vocational colleges are new varieties of English teaching in this age. An urgent need to foster better Maritime English learners, coupled with the deep-rooted theory of ESP and needs analysis, has made the importance of the bridging course between College English and Maritime English unprecedentedly emphasized. Hence, this research aims to explore an appropriate design of the bridging course content for maritime majors at vocational college by carrying out an empirical experiment. To test the effectiveness of the bridging course design, the pre-experiment and the post-experiment were done on 49 first-year maritime majors in Jiangsu Maritime Institute by adopting the bridging course. The results of the experiment data revealed that before the experiment was conducted, there was not much difference in the English level between the experimental class and the control class. However, after the experiment, it was found that the bridging course had a positive influence on the English academic achievement of the experimental class, which was superior to that of the control class. Finally, designing a bridging course between College English and Maritime English can covered the following three perspectives: choosing language content, compiling suitable ESP materials and teaching the bridging course on the basis of Needs Analysis. All mentioned above by the author were effective in enhancing students' awareness of ESP study and College English study efficiency but needed to be further explored.

Key words: cohesion; course content; College English; Maritime English; vocational college

1 RESEARCH OBJECTIVES

This chapter will present two research questions and then introduce the questionnaire and the interview used as measurement of the teaching content of the bridging course. Reasons for the adoption of the questionnaire and the interview will be listed to justify the validity of the research. The basic information on the subjects in the present study including their educational background, present study situation and so on will be explained in detail. Specific information about the research procedure and data analysis procedure will also be described.

The study was conducted concerning the cohesion of teaching content in reading and writing between College English and Maritime English courses at the maritime vocational college. The teaching content was directed at arousing students' interest in college English, making good preparations for the highly efficient teaching and study of Maritime English in order to help maritime majors pass National Qualifications Examination for Seafarers successfully.

2 RESEARCH QUESTIONS

Due to the insufficiency of the previous studies, the present research would choose vocational college students as subjects and attempt to answer the following two questions:

i. Is it necessary to have a bridging course between College English and Maritime English at the end of the College English study (in the second term in Grade One)?

ii. What is the teaching content of the bridging course? How can teachers identify the teaching content? Is the teaching effective in enhancing maritime majors' efficiency and effectiveness in studying both College English and Maritime English?

3 SUBJECTS

The subjects of this empirical research were 97 maritime majors, who enrolled in the Navigation Department at Jiangsu Maritime Institute in China in 2011, from two different classes: one was the control class and the other was the experimental class. Those students just began their College English study and about one year later, they were going to study ESP, i.e. Maritime English.

4 RESEARCH INSTRUMENTS

The study was conducted through both a qualitative approach and a quantitative approach.

4.1 Pre-test

The final examination of the autumn term, held on January 17, 2016, was used as the pre-test. The examination paper was designed and corrected by all College English teachers responsible for the same class of students. According to the similar average score of classes, the author selected two classes among 15 in the same grade as the test takers. There were 49 students in the experimental class, and 48 in the control class.

The components of the pre-test covered reading and writing, including the following objective and subjective parts: Multiple Choice (15%); Blank filling with the proper form of given words (10%); Reading Comprehension (30%); Translation（25%); Writing (20%). In order to ensure the validity and efficiency of examination scoring, all the scorers gathered together to score all the test papers.

4.2 Post-test

The final examination of the spring term, held on June 25, 2016, was used as the post-test. The whole procedure of the post-test was similar to that of the pre-test, including paper designing and scoring. The test-takers were all the students coming from the control class and the experimental class. The components of the paper were the same as those of the pre-test.

5 DATA COLLECTION AND ANALYSIS PROCEDURES

For the pre-test and the post-test, 97 papers were handed out, which were all taken back and none of them were invalid. According to the rule, if the rate of recovery was higher than 60%, the statistics and the sample would be meaningful, so the investigation was effective. All the answers were inputted onto the computer. Then the data were analyzed by SPSS 11.5.

6 RESULTS AND DISCUSSIONS

As illustrated in the introduction, the purpose of the research was to discover the effect of the bridging course between College English and Maritime English for the maritime majors. In other words, the author tried to examine how effectively the teaching content of the bridging course would improve students' English studying effectiveness and interest. Consequently, the research was designed to get the proposed hypotheses tested and to find some significant results, which might provide implications and inspiration for College English teaching in China. Research results will be presented in this chapter and discussion will follow each data analysis.

6.1 Data Analysis of Pre-test

This part mainly describes the results of the pre-test by SPSS.11 and further analyzes the pre-test results.

6.1.1 Descriptive Results of Pre-test

There were 49 students in the experimental class and 48 students in the control class. The subjects were all male students. The ages of the participants ranged from 18 to 21 at the time of data collection. The response rate was 100%.

The statistical description of students' English scores of the pre-test in the experimental class and the control class is shown in Tables 1 and 2.

Table 1 Group Statistics

	class	N	Mean	Std. Deviation	Std. Error Mean
scores of pre-test	experimental	49	72.78	11.915	1.702
	control	48	74.17	11.222	1.620

Table 2 Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
score of pre-test	Equal variances assumed	.077	.782	-.592	95	.555	-1.391	2.351	-6.059	3.276
	Equal variances not assumed			-.592	94.855	.555	-1.391	2.350	-6.056	3.274

According to the above two tables, because P- in the first table is more than 0.05, two total variances can be considered unequal. Therefore, the result of T-test in equal variances assumed in the second table should become the most important and valuable information. The data show that P- is 0.555, which means that there was no obvious distinction in the mean of English scores of the pre-test between the experimental class and the control class. That is to say, there was little difference between the two classes in English study before the research.

6.1.2 Results Analysis of Pre-test

From the above analysis, it is easily found that the current teaching and teaching material, to some degree, can meet the needs of the students and requirements of the related education administration department. However, the present overall English teaching environment could not offer students a satisfying atmosphere. The cause can be analyzed from the perspective of famous second language learning (SLL) theories. Firstly, the difficulty degree of the textbook employed in Jiangsu Maritime Institute could not reflect the content of Krashen's i+1 theory. Secondly, the teaching material could not satisfy the learners' needs to obtain some basic maritime knowledge.

Hope English (Book 1) includes eight units and its language material all relate to the authentic English environment, close to the students' life and reflecting hot social topics. The series course is designed on the basis of "Requirements for Vocational College English Education Syllabus" and there are about 450 words in every text, covering such topics as college, family, sports, pets, food, travel, happiness, and fashion. As the whole series of Hope English is in the category of EGP, its content has nothing to do with ESP or maritime English. Therefore, the topics listed in the book often can be viewed as out-of-date ones, which can not catch students' attention and arouse their interest. As the questionnaire results show, the language learners have a strong desire or needs to learn some general and basic knowledge about maritime and navigation in English. On the other hand, some words of the book seem relatively easy because most of the vocabulary items have been learned in the senior middle school, such as "stress", "challenge" and so on. Lastly, the series of the textbook is comparatively easy and simple though it is designed only for the freshmen in the vocational colleges, partly because the students enrolled in Jiangsu Maritime Institute are far better in English study than other students as they have higher scores in the National College Entrance English Examination. To some extent, the textbook used now is not suitable for the college students' current level of English study; that is to say, according to Kranshen's Input Hypothesis, the present textbook can not arouse the students' interest.

Therefore, it is badly needed to conduct a certain research and reform to change the current teaching material.

6.2 Data Analysis of Post-test

6.2.2 Descriptive Results of Post-test

Table 3 Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Experi-mental class	Scores of pre-test	72.78	49	11.915	1.702
	Scores of post-test	77.16	49	9.670	1.381

Table 4 Paired Samples Test

		Paired Differences					t	df	Sig.
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Experi-mental class	Scores of pre-test: Scores of post-test	-4.388	12.043	1.720	-7.847	-.929	-2.550	48	.014

Tables 3 and 4 show that the means of samples between scores of the pre-test and the post-test are apparently different. As to the experimental class, the mean of the post-test score is obviously higher than that of the pre-test score.

Table 5 Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Control class	Scores of pre-test	74.17	48	11.222	1.620
	Scores of post-test	75.27	48	10.852	1.566

Table 6 Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Control class	Scores of pre-test: Scores of post-test	-1.104	17.242	2.489	-6.111	3.902	-.444	47	.659

According to tables 5 and 6, the means of samples between scores of the pre-test and the post-test are not apparently different. As for the control class, the mean of post-test score is just a little higher than that of the pre-test score.

6.2.3 Results Analysis of Post-test

According to tables 5 and 6, the total score of the experimental class is obviously higher than that of the control class. The improvement in course design caused the academic performance of the experimental class to be superior to that of the control class.

The whole procedure of the experiment will be presented more specifically here. The author was still responsible for English teaching in the experimental class and the control class in the second term of the college study. The bridging course between College English and Maritime English was only for the experimental class, while the course of College English was still taught to the control class. Additionally, the bridging course is definitely a necessary part of College English, and taught at the end of college English teaching. The total amount of teaching in the second term was 84 hours with 4 hours per week. At the end of the second term, these two classes were arranged to take the same examination at the same time.

The guideline for content design was to provide maritime majors in Grade One with some general and basic maritime knowledge, such as knowledge of ships, ports, ship transportation and ship-building, by using simple and practical English. At the same time, the author intended to balance the students' needs between learning fundamental ESP and offering some help in passing CET-4. The difficulty degree of the course was above PROTCO level A and below CET-4. The course design will be illustrated further in the following part.

7 CONCLUSION

In this chapter， the research questions will be answered, and the pedagogical implications of the study will be presented together with the limitations and suggestions for future research.

7.1 Research Findings

As for Question 1 "Is it necessary to have a bridging course between College English and Maritime English at the end of the College English study?", this research has confirmed that such a bridging course is really needed, which is shown by the research data of the questionnaire, especially in the maritime majors' future study and qualification of examination of ESP.

When it comes to Question 2 "What is the teaching content of the bridging course and how to identify it? Is it effective in enhancing maritime major students' efficiency and effectiveness in studying College English and Maritime English?", both of these two questions have been showed by the research and data analysis. Based on the theory of EGP and ESP, Needs Analysis and the Comprehensible Input theory, the teaching content concerning the general background information of maritime has covered the following aspects: subject words, important grammar items and basic reading materials. Study of the bridging course is definitely instructive for maritime majors, which is proved true by the data analysis in the research.

7.2 Implications for College English Teaching

The study has confirmed that the course cohesion between College English and Maritime English does have a positive influence on students' interest arousal, study efficiency improvement and knowledge preparation for study of Maritime English. The following pedagogical implications can be generated. So far there have been some articles about the cohesion between College English and ESP teaching, but the descriptions of and solutions to the problems and suggestions in these articles remain superficial. Fewer books and researchers have made a thorough analysis of maritime learner's needs in English study. Compared with the previous papers concerning problems and reform in College English teaching, this thesis may shed light on the following aspects:

First, teachers can make use of the end of College English teaching and arrange the bridging course in order to arouse the students' interest in the current English study. To some degree, the teaching reform in College English will generate learners' motivation to study English more efficiently.

Second, this research may help people concerned recognize the importance of needs analysis and may also help English teachers discover the problems existing in College English teaching. Moreover, on the basis of needs analysis, the author has tried to give some suggestions about the bridging course between EGP and ESP teaching.

Third, the research has confirmed the students' roles and the market needs, and the reform of College English teaching based on needs analysis will no doubt help the students more in the study of their disciplines and in their future career. This also makes College English teaching more practical and more meaningful.

Fourth, the thesis has demonstrated the detailed syllabus of the bridging course based on the syllabus of College English and Maritime English, which can be viewed as a good attempt and an instructive reference for other EGP or ESP teachers.

7.3 Limitations and Suggestions for Further Study

Apart from the research findings, there are some limitations of the present study. Although lots of time and energy were spent working on the whole project and every step in this study was conducted with great care, this could not guarantee that the study had no defect.

First, due to the limited time and availability of participants, the sample size of this study was relatively small. Therefore, the results achieved could not be absolutely conclusive. If a larger population was tested, the results would be more convincing. For further study, students with various kinds of majors might be selected.

Second, the questionnaire was designed only by the author without referring to the other questionnaires which might not be very appropriate to the vocational college context in some areas. Adaptation and improvement of questionnaires might be necessary for future study.

Third, the ESP learning ability, one important qualification for maritime majors, was not proved and discussed completely in this research. It may be included in further study.

Fourth, the results mainly depended on the subjects' responses. Questionnaires are convenient for statistical analysis, yet the researcher also encountered a risk that students might not be honest in answering the questions. If possible, more research methods should be used. Quantitative and qualitative methods have their respective strengths and weaknesses, so both are necessary if researchers are to develop multifaceted insights.

Lastly, there might be variable interference in the study. The teaching experiment was affected by different factors, such as age, learning tasks, individual styles, and different cultural backgrounds. Although some variables like age and teaching content were carefully controlled in this study, factors of individual learning styles and the total level of the class were not controlled by the researcher. This might give rise to intervention and affect the findings of the study. So further study should consider more relevant factors.

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Graphic innovation and creative thinking

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Abstract: The so-called creative, that is to create new ideas , seeking some sort of new, unique ideas, idea or concept.Creativity in the "innovation", "create......", "original......" explains. But no matter how understanding, creativity is at its core, indicating that creative is a creative activity, its action must be "original and innovative". Graphic design, Visual communication is seeking creative ideas, ideas.
Graphic design is not simply a process of seeking new Visual forms, it was always around the theme of dissemination of information to expand creative activity, is its purpose to disseminate information. Therefore, the complete interpretation of graphic creation should be: to disseminate information as a fundamental principle, to creative thinking as the pilot, seeking unique, innovative way to express his ideas and form, to make it unique and clearly explain the way that content, originality and novelty of the picture interesting, interested, produce infection and impressing , So that the viewer has to accept the information. Meanwhile, should be based on the unique performance and show the new understanding of things in order to give ideas and wisdom of enlightenment, detached mood and unique aesthetic appeal for people to America's influence and guidance.
Keywords: Innovation and creativity

1.innovation and creativity
Creative is a creative activity. Nature and methodology of creating a certain degree of similarity. So here also devoted some space innovation for some common sense. Every creative process without exception is a method of using the same thought process of deduction.
Innovation and creatively put forward the problems and solve problems creatively. Innovation is according to certain goals and tasks, using all known conditions, produce new and valuable achievements (spiritual, social, material achievements) the cognitive and behavioral activities. Obviously, innovation must be "novel" and "value". What innovation? Innovative methodology has been a continual exploration of human problems. In recent years, there have been many theories turned out, which is, after all, millions of people, many experts concluded in increasing research, although they do not become a format that can be applied, but their way of thinking is worthwhile here, we conducted some exploration of innovative thinking.
Second, the characteristics of innovative thinking
Divergence: creative thinking is divergent, opening, open, blasting, like nuclear fission reaction time, continues to produce many results.
New: creative thinking necessary for new, strange , different from the existing new approach.
The ultimate in: there is no best, only better. The "new" for new, because it created a degree, a comparison at this stage represents the most extreme, the most in the top of the milestone.
More extreme than the existing, that is advancing in the direction of the existing infrastructure, the existing, sublimation, into a whole new realm, which is unusual, "new".
2.Third, innovative thinking
Thinking: Lenovo
Ideas, because we know things have made new discoveries. Only to find a new point of view, to a new understanding of things, finds new meaning in the things that people take for granted, we will have a new perspective, in order to create a unique expression. Only found links between distant things, metonymy and characterization will inspire us to find new ways, or be combined to achieve creative results. In short, new perspectives, new awareness and understanding is not thrown out of the ordinary, break through a constant pattern of performance, so that we have the plain for the magic of creativity. However, to have "discovered", first of all we need from point to divergent thinking, thinking "eye" perspective on things from point and area, inside, look at from here. In order to be innovative, we need multiple perspectives, finds new perspectives; in a multi-directional pattern developed; from the review and analysis process, discovers things assigned new meanings and new ways; from here, find difficult to find connections between things, to new combinations of them. It needs to associate as the pilot opens, through analysis, select the most novel perspective, ways and methods of expression.
So, Lenovo is creative thinking and analysis based, rich in associations and scientific analysis is pregnant with great ideas.
Association is the source of creativity, human is in the Association continue to make new discoveries, so as to continuously invent. Creative, is also based on this at the beginning, to expand our ideas, ascending to our understanding, and creates inspiration to final approval. Wei Xiwu, a famous advertisement says: "creativity is a new combination, creating new combinations of this, can be connected to things can be improved. "It actually illustrates the importance of associative thinking for creative.
Association, to many distant objects and concepts, or even unrelated elements to connect, to encounter poetry produced, intercourse, impact of burning. That

is, the Association itself is in some ways a combination creates, is a combination of ideas, is a poetic creation.

As associative thinking connected performance so that when we think of the presentation of information find informative, inspiring, and thereby sending a Valentine to mass or take figurative thing, Yu Li, communication becomes more meaningful and creative or bring things into reality in our hearts are full of personal understanding, a kind of synthesis of the will, aspirations, ideals, The infusion of spiritual value and meaning. "Drop three dry feet, suspected the Galaxy fell down", that is, associations make Lushan falls majestic momentum is transformed into reality by poet and the unique mood of sentences handed down.

Lenovo, is plain for the magical story is our art, transport of new ideas, creation of artistic thinking.

Is associative, can some of the intangible, abstract ideas and mental state into a specific image. "The great cloud flies when, translated by Xu yuanchong overseas come home", that is, Liu Bang by Association was high-spirited, ambitious mind transformed into the image of wind, clouds and to express, and also so that we can through the wind, clouds, majestic momentum to his unseen mental activity and heart. "Only the South old acquaintance, driving gateway shuffle", is equally invisible wind in associative ways into anthropomorphic beings, there are dynamics of "shape". Lenovo is the physico-chemical processes, design is extremely important.

In short, extension of associative thinking that we know things get more updates in viewpoint and understanding manner, which gave birth to new forms of expression and was raised thinking of creative results, therefore, creative is inseparable from Lenovo.

3.How to use Lenovo in the creative process?

Four forms of association that is to be our development thinking and perspectives of four extended orientation, these four forms are: similar to Lenovo, Lenovo, Lenovo instead and causal associations.

Similar Association: refers to the external structure, form or some kind of a thing with another similar, nearly caused by extensions and connections. Such as "Crescent silver hooks, curved hanging worry" is the result of similar associations found the month with silver hook in shapes and colors on the approximate and cleverly put it "hang" month as infinite nostalgia of a wanderer's shelter.

Lenovo: refers to one thing and another thing there is in close proximity and inevitably caused by the combination of extension and connection. For example we see cigarette ashtray, see saddle horse, this is the result.

Instead associative: contrary to what is right and there is a connection, the corresponding face, extension and connection of opposites. For example we see that night thinking day, saw war, think of peace, this is the opposite of the result. Contrary associative contains the inverse thinking it can enlighten us completely different from conventional thinking. "Smoking is harmful", converse thinking might lead us to think: smoking is harmful germs in the body?

Causal Association: are we development the result of experience, judgment and imagination. Like silkworm moths, eggs chicks. This imagination is a causal Association.

These four associations form our thoughts more extended, broad recovery in pairs or find inspiration for creating a new path. Creative, inseparable from the Association.

However, the Association and our own culture is closely related to knowledge, accumulated a wealth of knowledge to really fully associative, serving ideas.

Thinking two: questions

Great doubt spirit is both the starting point and all innovation is starting point, all the creative result is caused due to doubts about the reality. Doubt entice us unknown, flying into the future.

Anything in any possible development and solve problems in the process of development. But a problem and are due to appear to seek a way out; another who will take the initiative of vision problems, vision problems solutions or ways to avoid problems.

Active raised questions and doubts the reality of course is the creative process.

Questions on things of body, challenged the law, from the ontology of things "is? Why? "By extension, which is now often referred to"6W "or"5W2H".

6W Law (six-sided body):

Who Who? (Means)

What What? (Required)

When And when? (Time)

How How to? (Method)

Why Why? (Reason)

Where Where? (Space)

First suspected, and later asked, further inquiry and reflection, there is a way, that creates results.

Thinking three: ideal

Conclusions of the ideal creative causes.

4.This includes two aspects:

Ideal first of all is the desire of innovation, is one of the most perfect (ideal) the desire realm.

Perfectionist nature of human beings. This is an ideal, the ideal is to pursue the process of creative results.

Ideal is the reason people are different from animals, mainly because they have the urge to create, desire and ability. Innovations the vision and desire for innovation, innovation when you desire and can result in positive action, positive thinking, and innovation.

So, whether you are a planner, or a designer, you want to achieve creative results, to get a creative planning ideas and a creative design, first of all, you have to be a perfect suitor, and desire for innovation. Creative solutions and ideas to take the initiative to be near you.

Four, creative way of thinking

Innovative idea slip by, in a sense, is rare, but not impossible, but its way of thinking is to have rules to follow. To seize the opportunities of innovation, thinking can be done in several ways, innovative results are obtained.

Ways of thinking: in depth

Depth is made a point to a line, by the table, directional well thought out and detailed scrutiny of the linear way of thinking.

Thought two: macro

Macro-thinking is a point to a plane, from the point to the stereo, based on an integrated, comprehensive, and full manner, analogies, generalization, induction, refined way of stereo-type and Rotary-type thinking.

Thinking mode: reverse

Reverse thinking is to proceed from the facts or the opposite of the traditional theory, a thing with opposite things, from a condition opposite condition, result from reasons to explore new things and new ways of thinking.

Of thinking, thinking, thinking subversive thought the conclusions in the opposite direction, often new findings.

Reverse thinking can be summed up in the following three ways:

(1) under certain conditions to produce a certain result, thinking the opposite condition will go to get results.

(2) things to function, think about things-things.

(3) instead of something from the process thinking process.

Thinking of four: variation

Jumping from one extension to another thing.

Thinking five: deconstruction

Deconstruction through questions, analyzes the essence of things, or anatomy is a complex thing, cut into the inner system to study. Deconstruction method of decomposition, scattered, dispersed and thinning.

Way of thinking six: portfolio

Combination of ways of thinking, inspiration, concept, merge, stack, and so on.

For example, in a portrait sculpture of three high on the cover glass, make a table, three sculptures from the "sculpture" and "man" into the concept of "coffee table legs + sculpture", "coffee table legs = sculptures", "people = coffee table legs," " Top coffee table "and a series of new concepts and means.

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The Accurate Injecting and Communication for Advertisement in Internet Plus Time

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Abstract:With the development of times, the progress of human science is getting faster and faster, under this background, the speed of visual communication is also increasing gradually, whose manifestations tend to be diversified and whose content and means have added new characteristics of the times. Internet technology has become an indispensable element in people's life, which marks the "information age" has entered a new historical stage. In the realistic background, the new situation of Internet plus has gradually changed people's traditional job model, digital technology has played a crucial role and great changes have taken place in people's lives. Based on the perspective of advertising to analyze, it promotes the perfect transformation of modern design which will help it develop in an integrated and dynamic way successfully cross the vicious circle of traditional media. Under this background, advertising design is gradually developing towards a variety of media integration, whose direction of propagation has also gradually widened and shifted to the direction of virtual information dissemination. In order to make clear the development direction of advertising in Internet plus time, this study listed a series of practical cases for analysis and treatment and then summed up the future trend of advertising communication development in Internet plus time, and on this basis, constructive suggestions were put forward.
Keywords: Internet plus; design creativity; advertising communication;

1 Development Situation Analysis of Advertisement in Internet Plus Time

By definition, Internet plus refers to the combination of Internet and traditional industries, but one thing that needs to be emphasized is that the combination is not a simple and random combination but combines the Internet with a traditional industry and produces great changes to the traditional development pattern relying on the Internet. Therefore, it can be determined that the "Internet plus" refers to the directional delivery of the Internet to various service industries and also be an inevitable outcome of the integration of the two industries into a specific stage, whose visual result are "the Internet plus advertising industry" and other new development patterns.

In recent years, the modern information technology has been developing like a raging fire, people's lives have changed, which step into the new digital media space, under this background, the human real life is integrated with the virtual space constructed by the digital network, which has greatly influenced and changed people's life styles and mode of thinking. Objectively speaking, contemporary human beings are already in the new media space, and a great deal of digital information is flooding people's lives, such as mobile phone information, website information, social platform information, electronic business platform information, etc. It can be said that in modern society, The Internet has become an indispensable tool in people's life and has a great influence on people's life, people's online activities have evolved from simple virtual meaning to real life, and the integration of virtual space and real society increases day by day. Based on this background, in the process of brand design, enterprises must take full account of the power of network communication and give full consideration to its influence on human beings, it can be found that a new media environment is emerging, the forms of advertising communication in the Internet Environment also adds more realistic significance, which have a greater inclusiveness and influence. The focus of traditional advertising communication and the advertising communication in the Internet + Environment are different, the former only emphasis on single and two-way linear interaction, while the later gives the affirmation and emphasis to the plural interactive relation.

2.The Advertisement Injecting of New Media

In the Internet plus time, various kinds of advertisements have a great influence on the lives of consumers. But at the same time, The waste of resources is also gradually highlighted, which is mainly because that the development rhythm in contemporary society has quickened and it is difficult for consumers to digest a large amount of advertising timely. Based on this background, it is necessary to pay attention to the accuracy and purposiveness of new media advertising to avoid waste of resources and give full play to the value of new media advertising. After applying the big data technology in the Internet and mobile Internet platform, the trajectory of the target consumer can be effectively obtained and tracked, the role of correlation analysis and data mining are given full play to preform an accurate positioning of target consumers, then, providing guidance for the advertising of our unit, based on the analysis and statistical results of demographic attributes, the basic situation of target consumers is determined, then, according to the analysis results of web browsing history, we can obtain the social attributes of target consumers, the location data and time data are determined based on their use of mobile terminals, then, performing a targeted advertising to ensure that advertising practices fit in with the actual characteristics of the target group. Objectively speaking, the media and advertisers show a certain ambiguity when they allocate advertising budgets and judge media values which are mainly relied on the prediction model to operate, and it is difficult to pinpoint the target population. In view of this phenomenon, Scholars at home and abroad have also made active researches and explorations, and the reason was summarized as unable to obtain more comprehensive consumer information. After entering the era of big data, with the continuous development of Internet technology, advertisers and the media have a powerful weapon in getting consumer information, which can successfully complete the consumer positioning and consumer situation judgment. Next, we will give a concentrated explanation of the term "consumption situation", as its name implies, it represents the environmental factors in the process of consumer behavior, which contain purpose, time environment, social influence, mentality before purchase, geographical environment and so on. The geographical location, interpersonal relationship, purchase purpose and emotional state of the target consumer can be obtained through the internet, specifically, it is based on the target consumer's network information and completed through the big data analysis. From the point of an advertiser, the rapid development of the Internet provides more space for operation, which can help him pinpoint the target consumer and advertise quickly and accurately. When the consumer demand and consumer situation are grasped, the matching and pertinence of advertising can be rapidly increased, thus, the advertising effect will also be greatly improved.

3. Advertising Communication in the Internet Plus Background

Traditional media advertising has gradually faded out of people's lives, whose role in the contemporary network society is becoming weaker and weaker and difficult to meet the requirements of marketing communication. Fundamentally speaking, the content of advertising information on the Internet tends to be diversified, in this context, the influence of traditional advertising model on consumers is gradually weakening, the one who can't change as soon as possible will inevitably be eliminated by the market. In the "Internet plus" background, the boundaries of various mediums are gradually broken, which are moving towards the direction of integration and transition, meanwhile, media terminals are also diversifying. In this context, people's attention to creativity is improving day by day, this concept has gradually risen to become the core vocabulary of marketing communication. In terms of the advertising industry, the influence of creativity on its production and management has gradually dominated the strategy, which has a gradual expansion of influence, and creative communication has become another high ground for contemporary enterprises to seize. The core content of Internet plus advertising is a combination of new media and advertising communication. In recent years, internet advertising has sprung up like mushrooms, whose forms and contents are developing in a complicated and diversified way and the influence on people is gradually increasing. In the early stage of Internet development, internet advertising is mainly based on Web pages and take spot ads, buttons, banners, and Web sites as the main form. When the Internet develops to a certain stage, the network advertisement carrier is also more diverse, its form is also more diverse, implantable game advertising, blog advertising, E-mail advertising, BBS advertising, search engine advertising, MSN/QQ advertising are the typical of them. For an advertiser, he has a bigger choice. For an advertising designer, he also broadens his horizons and the limitations of thinking are broken. Based on the above background, the core of contemporary advertising design and communication lies in the full support of the internet, advances gradually toward the direction Internet plus and strengthens the importance of creative factors to achieve a new leap and transformation smoothly.

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Different levels of new students satisfaction survey and the contrastive analysis in a new application-oriented university

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Abstract Purpose to focus on the new students satisfaction survey of one new application-oriented university in Yunnan, thus, to provide decision basis for colleges and universities on improving students' satisfaction. Method take 8118 new students from the students group in one application-oriented university in Kunming, Yunnan to do satisfaction and mental health status anonymous questionnaire survey. Result junior college students and undergraduates show obvious difference on the aspects of appearance, parental rearing pattern, family environment, school, teacher and satisfaction score（$P<0.01$）, and the junior college students have higher satisfaction score（36.806±4.694）. the satisfaction has significant negative correlation with length of schooling, anxiety, depression and addiction in the online games（$P<0.01$）, the influential factor equation of satisfaction multiple linear regression analysis: satisfaction score=39.866-0.306(depression)-0.110(anxiety)- 0.020(addition in online games), R2=0.206. Conclusion satisfaction of junior college students is higher than undergraduates, launching psychological health education for college students and aiming at reducing internet addiction rate is good for improving college students' satisfaction.

Keywords: application-oriented university; satisfaction; depression; anxiety; online game addition

1. INTRODUCTION

The prime minister Mr. Li Keqiang emphasized inside "the State Council government work report" that we must comprehensively promote modern vocational education system, guide some local undergraduate course colleges and universities to transform to application-oriented universities, support the development of higher education in the Midwest through counterpart support and other methods and improve the college entrance examination enrollment rate in Midwestern area and most populous provinces. "National educational career development statistical bulletin in 2014" released by the Ministry of Education on the official website shows there are 1202 universities among the regular institutions of higher learning in the year 2014, compared to 2013, 10 universities are newly established; besides, 6 higher vocational colleges are established, which makes the number of higher vocational colleges increase to 1327. 10 Private higher learning institution joined in the big family and the number increased to 728. Recruit students 1,729,600, which shows an increase of 1,277,000 compared to last year. Besides, compared with last year, students at school increased 2,963,000 and increased to 58,715,000, the increasing rate is 3.08%. Regular higher education schools recruit 72,140,000 undergraduates and junior college student, which shows an increasing of 2,157,000 and the increasing rate is 3.08%. Meanwhile, students at school increased 7,963,000 compared to last year, under the increasing rate of 3.23%, there are 254,770,000 students at school now. The graduates increased 2,065,000 to a number of 65,937,000, the increasing rate is 3.23%.

2 Objects and methods

2.1 Object take the whole group of 8200 new students inside one application-oriented university
in Yunnan, take back 8118 pieces of effective test papers with efficiency of 99%, among them, 3654（45%）are male, 4464（55%）are female, 7356（90.6%）are junior college students, 762（9.4%）are undergraduates, their age is between 17.6 and 19.6

2.2 Methods ① after Mr. Zhang Xinggui and others' analysis of exploratory factor and confirmatory factor on life satisfaction spreadsheet, they find out that life satisfaction is the second order six factors structure model, which includes 2 gradation and 6 dimensionality. This survey depends heavily on the gradation and dimensionality of this spreadsheet, the surveyors made "students satisfaction survey spreadsheet", which includes 10 subjective attitude quiz that covers self, family, school and environment. There are five options from the most unsatisfied to most satisfied, the scoring rule is 1-5 point, αcoefficient of this spreadsheet is 0.822, which has higher reliability; ② the CES-D made by Radloff focuses mainly on depressive emotion or mood and tries to use it to do different point of survey results comparison. There are 20 clauses and subclauses inside CER-D, which represents the main aspects of depressive symptom, which are extracted by Radloff from a large amount of clinical literature and existing scale factor analysis. The clauses and subclauses reflect 6 sides of depression status, including depressed mood, sense of guilt, unworthy feeling, helpless, hopeless, psychomotor retardation, appetite loss and sleep disorders. The α coefficient is 0.918. ③ (SAS) [8] made by Zung is similar with （SDS） on both structure of the scale form and the evaluation method, it is also a self-rating depression scale that contains 20 clauses and belong to 4-grade score, which can be used to evaluate the subjective feeling of anxious patients, the αcoefficient of it is 0.721. ④ the undergraduate online game acknowledgement addiction scale made by Miss Li Huanhuan contains 5 dimensionality, they are game benefit, game cognitive, abstinence symptom, impulse control and functional lesion. To name two factors respectively, one is called adaptability of cognitive games, to be detailing, serious individual positive evaluation on online game can get profits from the world of online game, while his reality school work and interpersonal relationship are very bad. The other one is online game addiction behavior, which shows through the impulsive online game behavior, the player cannot control his behavior effectively and has withdrawal symptoms. That is to say, he has certain problems in character. This paper chooses this spreadsheet to identify private vocational students' online game addition through cognition and behavior. This spreadsheet contains 16 clauses and subclauses, which match up with the quiz number of 1, 4, 5, 7, 10, 12, 14, 15 and 16, while the games' non cognitive dimension quiz number is 2, 3, 6, 8, 9, 11 and 13. From the number 1 to number 5 represents from completely out of line to completely in line, the corresponding score is from 1 to 5, the gained scale includes final score, game adaptive cognitive dimension scores and game addition behavior dimensionality score. If the testee gets 26 scores or higher score on the non adaptive cognitive factors, while his addicted behavior factor gets 16 scores or higher or his final score equals to 41 or be higher, if the result matches up with any of the situation, then it can be proved that the testee meets the standard of online game addiction. This scale has positive correlation on weight measurement level（$r=0.76$，$p<0.01$）, diverse dimensionality and the final scale α coefficient from 0.901 to 0.943, diverse dimensionality and Young's addiction scale final score. The αcoefficient of the scale is 0.936. The survey proceeded on the basis of each member's knowing and under guidance of surveyor after training, as long as the questionnaire is finished, all questionnaires will be taken away.

3 result

3.1 different levels of new students satisfaction comparison and analysis

Sheet 1 different levels of new students satisfaction, anxiety, depression and internet addition situation

factor	Level: Junior college（n=7356）	Level: undergraduate course（n=762）	t	P
Appearance satisfaction	3.552±0.697	3.438±0.573	5.093	0.000**
Figure satisfaction	3.268±0.864	3.213±0.755	1.909	0.057
Athletic ability satisfaction	3.238±0.893	3.247±0.769	-0.292	0.770
Father's parenting style satisfaction	3.955±0.850	3.741±0.550	9.587	0.000**
Mother's parenting style satisfaction	4.095±0.753	3.818±0.434	15.370	0.000**
Family environment satisfaction	4.078±0.768	3.810±0.449	14.453	0.000**
School satisfaction	3.599±0.704	3.508±0.581	4.047	0.000**
Society satisfaction	3.387±0.704	3.415±0.603	-1.168	0.243
Teachers satisfaction	3.833±0.665	3.715±0.517	5.803	0.000**
Classmates satisfaction	3.801±0.604	3.776±0.439	1.436	0.151
Satisfaction score	36.806±4.694	35.680±3.395	8.368	0.000**
Anxiety	40.286±7.039	38.060±6.897	8.462	0.000**
Depression	10.685±6.587	28.696±6.788	-21.012	0.000**
Online game addiction	24.019±10.078	22.710±8.227	4.087	0.000**

**P<0.01 *P<0.05（the same below）

From the sheet 1 we can know during the satisfaction survey, junior college students and undergraduates have obvious difference on appearance, parental rearing pattern, family environment, school, teacher and satisfaction score（$P<0.01$）, besides, junior college students get higher satisfaction score of 36.806±4.694. In the psychological health and online game addiction survey, junior college students and undergraduates have obvious difference on anxiety, depression and online game addiction（$P<0.01$）, junior college students get higher score on anxiety and online game addiction, while undergraduates have higher score on depression.

3.2 application-oriented university new students satisfaction analysis

Sheet 2 application-oriented university new students satisfaction analysis

Factor	Length of schooling	Satisfaction score	Anxiety	Depression
Satisfaction score	-0.071**			
Anxiety	-0.092**	-0.130**		
Depression	0.230**	-0.451**	0.348**	
Online game addiction	-0.038**	-0.143**	0.033**	0.222**

From the sheet 2 we can know application-oriented university new students satisfaction show negative correlation with length of schooling, anxiety, depression and online game addiction（P<0.01）, online game addiction has seriously positive correlation with anxiety and depression, has obviously negative correlation with length of schooling, while anxiety and depression have obviously positive correlation（P<0.01）.

4.3 risk factor analysis on higher vocational students drugs trying

4.3.1 college students anxiety, depression, online game addiction and satisfaction multiple linear regression model.

Take anxiety, depression and online game addiction as independent variable and take satisfaction as dependent variable to do multiple linear regression analysis, and make satisfaction influential factor equation: satisfaction score=39.866-0.306(depression) -0.110(anxiety) -0.020(online game addiction). Model through the variance test, F= 702.593， P<0.001,R2=0.206,that means introduced variables of the model can explain 20.6% of the satisfaction, which can be shown in sheet 3.

Sheet 3 anxiety、depression、online game addiction and satisfaction multiple linear regression analysis

Entered factor	Partial regression coefficient	Standard error	Standard regression coefficient	t	P
Constant	39.866	0.284		140.424	0.000
Depression	-0.306	0.007	-0.451	-41.702	0.000
Anxiety	-0.110	0.007	-0.067	-11.777	0.000
Online game addiction	-0.020	0.005	-0.044	-4.291	0.000

5 Discussion

The survey shows junior college students and undergraduates have obvious difference on appearance, parental rearing pattern, family environment, school, teacher and satisfaction score（P<0.01）, besides, junior college students get higher satisfaction score, the result is the same with Mr. Zhang Xing（2009）[10]

Maybe because of different bachelor degree gaining time, big difference can be seen in teachers' transformation, management service, hardware condition when compared with historical university. Besides, if the school has higher popularity among technical colleges, then students most fill in their first and second aspiration, while most students enter the undergraduate course through their second and third aspiration or due to factor of choosing major or adjusting, since they cannot meet their parents' expectation, they enter the university with attitude of passiveness, which results in lower satisfaction.

During the psychological health and online game addiction survey, junior college students and undergraduates have obvious difference on anxiety, depression and online game addiction（P<0.01）, junior college students get higher score on anxiety and online game addiction. Some literatures show that junior college students are more addicted in internet and they have longer internet time than undergraduates. But online game addiction has obviously positive correlation with anxiety and depression （P<0.01）, which tested the previous study again.

Undergraduates get higher depression score, which is similar to Miss Zhu Wenjuan's research result. Satisfaction has obviously negative correlation（P<0.01）with satisfaction and anxiety（r=-0.130）and depression（r=-0.451）this shows need to improve students satisfaction on software, besides, psychological health is also an important factor that influences students satisfaction. When set up psychological health course, more attention should be paid to specialized subject education for different levels of competency, more depression prevention and cure courses should be given to undergraduates, while more online game addiction and anxiety courses should be given to junior college students. Besides, satisfaction and online game addiction has obviously negative correlation（P<0.01）, cultivating students' good online habits and their way of using Internet is beneficial to improve their satisfaction.

Regression analysis proves depression, anxiety and online game addiction have forecast effect on satisfaction, which can explain 20.6% of satisfaction. The more scores new students get on depression, anxiety and online game addiction, the more they are addicted in online games, the easier satisfaction can be lowered. Above all, after some vocational college are transformed to universities, especially when they want to transform to application-oriented university, then they must launch psychological health education with purpose, thus, to reduce internet addiction rate, improve educational level and teachers' teaching ability, all these are good for improving undergraduates satisfaction.

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An Analysis of the Dialogues in Alice's Adventures in Wonderland from the Perspective of Speech Act Theory

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Abstract:Since the emergence of SAT (speech act theory), fundamental changes have taken place in understanding speech act. People are inclined to study the influence of speech act on our daily communications instead of studying words logically and systematically. Dialogue is a speech form which is embellished by art with its colloquial characteristics. However, by means of speech act theory, we can see the underlying acts behind the speech which are formed by simple words. Therefore, the underlying meaning from both sides can be realized to solve the conflict in daily communications.

This thesis focuses on studying the typical dialogues in the famous English novel Alice's Adventures in Wonderland from the perspective of Austin's SAT to study the speech acts in this novel, attempting to exemplify the influence of SAT on communication, which reveals that SAT can help us to precisely comprehend dialogues to avoid communication conflicts.

This thesis consists of five parts. The first part is introduction which is a brief overview of this thesis including the background, significance and research questions. The second part is literature review which includes the previous studies on dialogue and the achievements on SAT. The third part is the theoretical framework for the study. The fourth part is the body of this thesis incorporating the actual process of analyzing the dialogues selected from Alice's Adventures in Wonderland by using SAT. At last, research questions will be answered and new findings will be discovered. The limitations of this study will be pointed out and some suggestions will be put forward for the future study.

Key words: communication; dialogues; SAT;

Introduction

Dialogue, as one of the most important parts of a literary work, plays a very crucial role in transmitting information, which makes the studies on dialogue in it become more and more important to analyze the ways by which the information is transmitted by speech. Dialogues between characters help to develop the whole story and also contribute to causing conflicts. Besides, successful communications also contribute to exchanging feelings, revealing backgrounds and expressing the inner world of characters. It is necessary to analyze the dialogues in the literary work Alice's Adventures in Wonderland which is well acknowledged because of its importance of reflecting the Britain culture, society, and people's confusions during the industrial age with the sense of humor and arrogance. It is significant to analyze the dialogues in this work from the perspective of SAT to justify the indispensability of SAT in analyzing dialogues so as to understand the underlying intentions of producing speech and solve the conflicts in daily communications. This thesis focuses on studying the typical dialogues in this novel from the perspective of Austin's SAT, attempting to exemplify the influence of SAT on communications.

This thesis deals with the application of SAT to the dialogues in Alice's Adventures in Wonderland to answer the following questions:

How is Austin's SAT applied to the dialogues analysis of Alice's Adventures in Wonderland?

What are the contributions of Austin's SAT to dialogue analysis?

Literature review

Since the birth of SAT, qualitative changes have taken place in the understanding speech, which draws more attention to the influence of speech on people's daily communications. Understanding dialogues in English movies is a kind of communicative behavior and SAT can exactly helps us see the underlying acts behind utterances so as to the underlying meanings can be realized to solve the conflicts in daily communications. This part will discuss the development of Austin's SAT in general and then review the previous studies on dialogues in literary work.

2.1 Austin's speech act theory

SAT is one of the most important theory in pragmatics and has exerted enormous influences on both philosophy and linguistics. This theory is first proposed by the Oxford philosopher John Langshaw Austin. According to him, speakers do many things when uttering speeches, which is an important theory studying the languages in use. The first expression he mentioned in his lecture at Harvard in 1952 is that language can be used to perform actions according to the distinction between performatives and constatives. Constative sentences describe the state of things and reveal the events in the world, which can be justified to be true or false. As for the performative utterances:

(a) they do not "describe" or "report" or constate anything at all, are not "true" or "false"; and (b) the uttering of the sentence is, or is a part of , the doing of an action, which again would not normally be described as, or as 'just', saying something (Austin 5).

Table 1. The forms of perlocutionary act

Forms	Conditions	Results
Realization—Cooperation	The intention is realized and the hearer follows it.	Expected perlocutionary act is produced.
Realization—Non-cooperation	The intention is or partially is realized but the hearer does not follow it.	Perlocutionary act is not produced or unexpected perlocutionary act is produced.
Non-realization—Non-cooperation	The intention is not realized and the hearer does not follow it.	Perlocutionary act is not produced.
Non-realization—Cooperation	The intention is not realized by the hearer but realized by the neighbors.	Expected perlocutionary act is produced.

However, in the latter part of "How to Do Things with Words", the distinction between performatives and constatives was modified by Austin himself because of the ambiguous boundaries between them. Some new expressions were provided by him to solve the problem and to discuss to what extent to say something is to do something. According to him, there are three senses: Locutionary Act, Illocutionary Act, and Perlocutionary Act.

Locutionary Act is the basic act of producing utterances. They are (i) a phonic act of producing an utterance inscription, (ii) a phatic act of composing a particular linguistic expression in a particular language, (iii) a rhetic act of contextualizing the utterance inscription (Austin and Lyons 177). For example, when you say "Hi!", it is just a signal producing an utterance, which means what you did instead what you said. This kind of act performed like this is a locutionary act.

An illocutionary act means that when performing an action the speaker tends to accomplish his aims through the process of making a sound. "When we speak, we not only produce some units of language with certain meanings, but also make clear our purpose in producing them, the way we intend to be understood, or they also have certain forces as what Austin says" (Hu Zhuanglin 175). We can say that "Hi!" performs the force of greeting.

Perlocutionary act involves the consequential effects of producing utterance upon the hearer. That is by telling somebody something the speaker may change the opinion of the hearer on something, or surprise him, or induce him to do something, etc (Hu Zhuanglin 175). We can say that "Hi!" has a particular meaning when it is used to keep a good relationship with someone who broke up with you, which may have an effect on you. From the perspective of communication, perlocutionary act is a process triggered by illocutionary act and involved in the speaker and the hearer who participate and complete the process together. In the process, illocutionary act and perlocutionary act do not correspond with each other, but the illocutionary act is the preposition of the perlocutionary act. So whether the perlocutionary act can be realized or not is determined by whether or not the hearer can realize the illocutionary act of the speaker. And the results and effects of perlocutionary act are also influenced by the realization of the speaker to the illocutionary act of the hearer.

Therefore, based on the nature and characteristics of perlocutionary act, perlocutionary acts can be classified into four forms in accordance with the degree of the mutual understanding and cooperation between the speaker and the hearer. We can take a view from the following table.

2.2 Previous studies on dialogues

In previous studies, the dialogue is always simply regarded as a part of the literary genre to engage in appreciation and understanding. With the continuous development of pragmatics, it is increasingly applied to many fields. Linguists continuously managed to apply pragmatics theory into the analysis of dialogue. There have been many scholars who did their researches on movie dialogues from different perspectives especially from the perspective of SAT. In "A Study on Speech Acts of Characters in A Clean, Well-Lighted Place" the author analyzed the dialogues in A Clean, Well-Lighted Place and pointed out that SAT, as one of the most important pragmatic theories, can facilitate to understand the underlying acts covered by the surface utterances and to study languages from a fresh perspective(Qiao Hui 53). In "The speech acts in the movie Monsters University", the author said that SAT can help us analyze the different speech acts in particular circumstances to contribute to solve the conflicts in daily communications(Liang Yixin 101).

Methodology

Based on the previous studies above, this thesis has made a clear analysis about SAT mainly through the synchronic method. This thesis thereafter comes to comprehensive analysis on the dialogues in Alice's Adventures in Wonderland starting with the general overview of theoretical framework.

The data for this thesis are mainly extracted from the scripts and dialogues in this novel. Some materials come from related journals, text books and Internet. This thesis mainly adopts the text analysis to refine, to regroup and to analyze the dialogues in Alice's Adventures in Wonderland to make qualitative analysis for further research on the application of SAT.

With the support of these data, this thesis firstly has a brief study of the three senses of SAT. And in order to exemplify that SAT is feasible in analyzing dialogues in literary work, this thesis makes the qualitative analysis from the extracted conversations in Alice's Adventures in Wonderland.

Dialogue analysis from Austin's speech act theory

This part will conduct a specific study on the typical dialogues in Alice's Adventures in Wonderland from the perspective of SAT. This movie is adapted from a detective novel Sherlock Holmes created by Arthur Conan Doyle, but describes everything happened in the original novel in a modern way. It tells us that in the busy bustling metropolis of London, fashionable detective Sherlock Holmes and his friend John H. Watson experience a series of dangerous and unusual adventures.

According to Austin's SAT, a person performs three actions simultaneously when he says something. There are three senses in which saying something may be understood as doing something (Hu Zhuanglin 174). They are locutionary act, illocutionary act and perlocutionary act. This thesis will study the dialogues in Sherlock from the three aspects respectively.

4.1 Analysis of locutionary acts in Alice's Adventures in Wonderland

When performing a locutionary act, we may also be implementing such a behavior as: asking or answering a question, giving some information or a warning, pronouncing sentence, making an appointment or giving a description. The following dialogues from Alice's Adventures in Wonderland will contribute to intensively understanding:

"Who are you?" said the Caterpillar.

Alice replied, rather shyly, "I--I hardly know, sir, just at present--at least I know who I was when I got up this morning, but I think I must have been changed several times since then."

"What do you mean by that?" said the Caterpillar sternly. "Explain yourself!"

"I can't explain myself, I'm afraid, sir," said Alice, "because I'm not myself, you see."

"I don't see," said the Caterpillar.(Lewis Carroll 31).

Several locutionary acts are involved in this short dialogue. At the beginning of this conversation the Caterpillar conducts his locutionary act to ask a question to know the details about Alice. Alice then gives more information about her current state and confusion which is also the procedure of doing the locutionary act. In the next turn of speech, the Caterpillar is not satisfied about the descriptions from Alice and starts to ask the second question. After the continues questions about identifying who is Alice, the Caterpillar still don not know anything about Alice. All the locutionary acts in this short dialogue causes failure in communications. However, it can arouse a deeply thinking about the identity of Alice for the readers, which is one of the skills of communications between the author and the readers.

4.2 Analysis of illocutionary acts in Alice's Adventures in Wonderland

Illocutionary act can transmit information, release orders or make requests by words indirectly which express the speaker's intention. An illocutionary act is the act that performed in saying something. Here is an example that the illocutionary act performs in the following dialogue:

"Who are these?" said the Queen.

"How should I know?" said Alice, surprised at her own courage. "It's no business of mine."

The Queen turned crimson with fury, and, after glaring at her for a moment like a wild beast, screamed "Off with her head! Off--"

"Nonsense!" said Alice, very loudly and decidedly, and the Queen was silent.

The King laid his hand upon her arm, and timidly said "Consider my dear: she is only a child!"(Lewis Carroll 55).

This short conversation happened to Alice and the Queen on the Queen's croquet-ground. The Queen express her anger by simply asking an unnecessary question in which the illocutionary acts is realized, for the underlying meaning of the Queen is to make a threat that who dare irritate me and no one can do this to challenge me. Alice obviously know the underlying meaning of the Queen, but refuses the question from the Queen by saying it has nothing to do with her to protect the so-called criminals or even to challenge the authority of the Queen deliberately by which the illocutionary acts are performed. Finally, the King expresses his caring by saying Alice is only a child and the underlying meaning is to persuade the Queen to forgive Alice in which the illocutionary act is realized. To some extent, this conversation is successful because all the characters can understand the others' underlying meanings which is covered by the illocutionary acts.

4.3 Analysis of perlocutionary acts in Alice's Adventures in Wonderland

A perlocutionary act is the act performed by or resulting from saying something. It happens after the intention of the speaker is realized and the hearer performs consequential behaviors which can realize the expected or unexpected communicative intention or produce the perlocutionary results or effects. It can be further explained in the following example:

"No, no!" said the Queen. "Sentence first--verdict afterwards."
"Stuff and nonsense!" said Alice loudly. "The idea of having the sentence first!"
"Hold your tongue!" said the Queen, turning purple.
"I won't!" said Alice.
"Off with her head!" the Queen shouted at the top of her voice. Nobody moved.
"Who cares for you?" said Alice (She had grown to her full size by this time). "You're nothing but a pack of cards!"(Lewis Carroll 84)

This short dialogue happened in the trial to Alice. Alice is angry after the Queen says sentence first--verdict afterwards, in which the perlocutionary act is performed. However, the Queen is not satisfied with Alice's perlocutionary act, so the continues perlocutionary act conducted by the Queen is going on by which the Queen want to stop Alice. However, although she realizes the original intentions of the Queen, Alice continually performs her non-cooperation perlocutionary act. All the perlocutionary acts by the Queen and Alice push the conversation going on more and more intensively and finally cause the conflict. It is a typical form of Realization—Non-cooperation in the four forms of perlocutionary act.

From the above dialogue analysis through Austin's SAT, we can see that the three senses of his SAT are feasible to analyze dialogues. The underlying intentions and meanings of the speakers can be easily realized by SAT, which is a good application of SAT in analyzing the functions of language.

Conclusion

SAT has altered our understanding to the nature of language, which makes it becomes the core of pragmatics. It has exerted a great influence on linguistic study in solving the conflicts in daily communications. This thesis had a general view of SAT firstly and then focused on studying the dialogues in Alice's Adventures in Wonderland from the perspective of SAT to analyze the speech acts in this novel. From the dialogue analysis of Alice's Adventures in Wonderland by using SAT, a general view can be arrived at that SAT can completely explain the dialogues and reveal its essence in the three senses: locutionary act, illocutionary act, and perlocutionary act, which manifests the importance of SAT in analyzing the functions of language.

We can also find that speech acts can cause the conflicts and can also avoid them, which was determined by the actual use of it in actual context. We can finally arrive at that SAT can also be applied to analysis dialogues completely. From the above dialogue analysis through SAT, we can also see that the underlying intentions and meanings of speech acts can be easily realized by the theory.

The great contributions of SAT is that it provides a fresh perspective of analyzing the functions of language, which helps us to analyze the language in pragmatic functions. From the above analysis, we can conclude that SAT is a dispensable tool to analyze dialogues in explaining the pragmatic functions of language. We can draw a conclusion that SAT aims to solve the real problems in the actual use of language. Specifically, it provides us with an effective way of solving the conflicts in daily communications.

However, in reality our speech acts involve many factors, contain many underlying meanings and reflect our real inner world simultaneously covered by the coding words and delicious voice. This thesis have not studied the detail factors which affect our daily communications specifically and to understand the actual speech acts needs to do a great deal of work. SAT can not always solve the problems in dialogue analysis and daily communications. Only to study the ostensible speech acts in dialogues and daily communications further and deeply can we fully understand the underlying meaning of words in dialogue analysis and get access to successfully interpersonal communications.

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Is Opposition to Wind Energy Ever Justified

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Abstract- Wind energy is a renewablesource of energy which converts kinetic energy intomechanical energy. The mechanical energy canthen be used for various activities such aspumping water or grinding grain as well as connected togenerators and thus electric power is produced.Wind energy, compared toother sources of energy, does not havevery adverse effects of pollution on theenvironment and does not lead to global warming.However, wind energy still faces opposition. In therenewable energy debate, wind energy, like solarenergy, faces the criticism of being variable. Forwind energy to work, it depends on several factorssuch as availability of wind.Another opposition for wind energy is made up ofthe "Not In My Back Yard" (NIMBY) concerns.Therefore,despite being a renewable source of energy, windenergy still faces opposition. The purpose of thispaper is to examine whether the opposition towind energy is ever justified.
Keywords- wind energy, wind farms,wind turbines, opposition to wind energy

1. INTRODUCTION AND HISTORY OFWIND ENERGY

The history of wind energy dates back tothe B.C. era. The ancient Egyptians used it to saildown the Nile River starting around 5000 B.C.Around 200 B.C., the Chinese were using windmillsto pump water.By the19th century, settlers in America were usingwindmills to pump water and cut wood and later usedit for generating electricity. In the 20th century, bothsmall and large scale wind plants were used for farmsand powering the electric grid. However, by the1950s, cheap oil and low energy prices caused windenergy to fade. From 1974 to the mid-1980s, theNational Aeronautics and Space Administrationperformed large-scale research on windturbines in the United States. Altogether, 13 windturbines utilizing four wind turbine designs were putinto operation with funding from the NationalScience Foundation and U.S. Department ofEnergy. These experimental wind turbines allowedfor extensive knowledge that is still used today onmulti-megawatt wind turbines. Low oilprices in the 1980s once again threatened theexistence of wind energy. However, through federaland state tax incentives, wind energy continued inCalifornia and was used to create the first usage ofwind power for utility electricity. After the taxincentives faded, so did wind energy's investments inthe United States. [1]

2. ECONOMIC AND ENVIRONMENTALEFFECTS OF WIND ENERGY

Exploitation of renewable energy hasrelatively less impact on the environment incomparison to the use of fossil fuels. Wind energy in particular, still has raised seriousconcerns about its generation within and around thewind energy power plant. These issues include thenoise pollution impact from the rotor blades, visualimpacts or interference of the scenic beauty, and batand avian mortality among other concerns.

(1). Noise

Any mechanical system experiences frictionin its operations which in turn produces noise. Windturbines also produce such noise as they rotate. Theturbines rotate only when there is wind blowing onthem but the sound of the wind itself masks the noiseof the rotor blades. Some studies have shown that adistance of approximately one mile from residentialhomes the turbine noise may be completelyinaudible. Despite this finding, some residences havebeen reported to be as close as 300 meters from thewind facility and are therefore exposed toapproximately 45dB of noise. It is commonknowledge that noise increases the stress levelsof animals which in turn increases the risk of disease.Due to thisproblem, engineers have made changes in design andmodels of the wind turbines in order to reduce thenoise they produce. The target has been in reducingthe acoustic noise and focusing more of the wind tobe converted into rotational torque hence moreefficiency of the turbines. Generally earlier turbinesmodels are noisier than the larger and newer models.Some models have used insulating materials to makethe rotors more sound proof. In addition, to reducethe impact of the noise, proper siting is necessary [2].

In the United Kingdom, Renewable UK has looked totechnology to reduce the thumping noise, or the noisethat a wind turbine makes when the blades stall dueto changing wind speeds. The company hasdeveloped software to adjust the angle of aturbine's blades to reduce the unwanted thumpingnoise, or Other Amplitude Modulation as they call it[3]. However, newer technology may still not beenough to convince people to use wind energy.

(2). Visual Impacts

In recent times, the wind turbines have beenmade larger to increase their efficiency. This makesthem take up more space in terms of spacing andtheir set-up. Many countries that use wind energyhave set apart large tracts of strategic land of windenergy power plants. Despite scenic beauty andaesthetic value being in nature highly subjective toevery person, the impact of this development has tobe considered. Wind turbines have to be set up in thewind path which is generally in exposed places. Thismakes the turbines highly visible. It has been arguedthat visibility of structures may not be necessarily anintrusion. However, the location of wind turbines hasbeen viewed as an intrusion in many case studies.

One strategy used to minimize the visualimpacts is to site fewer turbines in multiple locations[2]. In addition, studies have been done on the effectsof wind turbines on tourism. While countries likeScotland first resented wind turbines for fear ofdamaging the landscape, many residents now acceptthem [4], and other countries have used the windfarms to their advantage as tourist attractions.

Wind turbines have also been linked to lightpollution with the shadow flicker effect caused by rotating turbineblades when the sun passes behind the turbines.Where a turbine is incorrectly sited adjacent toresidences, the duration of shadow flicker may bevery long and detrimental to eyesight [5]. This can beavoided by properly locating wind turbines to avoidunacceptable shadow flicker.

(3). Bird and Bat Deaths

The most controversial biologicalissue related to wind turbines is the death of birds and bats. Conservation groupshave been cited on many occasions opposing thesetup of wind power plants because of the potentialhigh mortality rate of avian and bats. Wildlifeagencies have also been involved in dictating thelocation of wind turbines. Some large wind powerplants have been reported to have operated for yearswith very few impacts on these birds. However thepotential extinction of certain birds requires fastmitigation measures to safeguard species of rarebirds.

Theroot of the problem with wind turbines causing birdand bat fatalities is from how birds and bats do notrealize that there are spinning blades on windturbines, so they see them as open space, and then flyinto them [6].In response to the bird and bat fatalitystudies, the University of Lund found a way thatcould reduce bat deaths from wind turbines.Researchers there proposed that at least ten nightsfrom June 15 to September 15, wind turbine bladesshould be turned off. Those months see low windspeeds, and, according to bird researcher MartinGreen, stopping the blades from spinning for at leastten days during those months will cut less than onepercent of the total output of energy from theturbines. Green also thinks that the bat species thatare getting killed are in danger of becoming rarespecies. The bats that are killed have been known toeat bugs that are attracted to the turbines. Stoppingthe turbine blades from running for ten days duringthose months would have a significant positiveimpact on bat populations while having a minimaleffect on the energy produced by the wind turbines [7].

(4). Pollution from Manufacturing

Wind turbines make use of magnets in theirmotors. Latest models of wind turbines are fitted withpermanent magnets to reduce the maintenance costsof the turbines. Neodymium is used in the productionof permanent magnets for use in manufacturing ofwind turbines. The extraction of this rare-earthelement (neodymium) has been linked to high riskpollution [8].

The radioactive waste of Neodymium could cause members of thenearby communitiesto lossteeth, have their hair turn gray at young ages, havehigh rates of osteoporosis, skin and respiratorydiseases, and cancer, and have newborns with softbones due to radiation rates that are ten times that ofother villages. [9]

In addition, the concrete and steel requiredmaking wind turbines are made from coal and windturbines need nearly 200 times more material than amodern combined cycle gas turbine. Every twomegawatt wind turbine needs roughly 150 tons ofcoal to produce with a half-ton of that going towardsthe production of just a ton of the steel needed foreach turbine and 25 tons going towards theproduction of the cement needed. In other words, tomanufacture 350,000 wind turbines to keep up withnew increases in energy demand, fifty million tons ofcoal will be required, or the amount of coal that theEuropean Union produces every year [9].

E. Price and Efficiency

Another concern is the price ofwind energy. The price of wind energy is 15-17 centsper kilowatt-hour, compared to four cents perkilowatt-hour for hydroelectricity, five cents perkilowatt-hour for coal, and eight to ten cents perkilowatt-hour for natural gas. Suppliers in the UnitedKingdom are required to buy energy from renewablesources or get fined due to the Renewable Obligation(RO)[10].

Another issue that wind turbine skepticshave is with the efficiency over time of the turbines.A study done by Professor Gordon Hughes, aneconomist at Edinburgh University and a formerenergy adviser to the World Bank, showed that theefficiency rating of a wind turbine decreasesdramatically over 15 years. The study showed thatwind turbines' efficiency is reduced from an averageof 24 percent in their first year of operation to 11percent after 15 years of use. For Danish offshoreturbines, the efficiency seems to be around 39 percentin their first year of operation but goes down to 15percent after ten years. However, the onshoreturbines in Denmark have a smaller decline inefficiency than the onshore turbines in Britain. Thereasons for that, according to Professor Hughes, arethat the wind turbines and farms in Denmark aresmaller than the ones in Britain and may be bettermaintained. The larger wind farms and turbines causeturbulence, which increases the stress on them. Atotal of 282 wind farms in Britain, or roughly 3000wind turbines, 823 onshore wind farms in Denmark,and 30 offshore wind farms in Denmark were used inthe study and the studies were confirmed by anindependent statistician at University CollegeLondon. The downside to this study is that any windturbine repair and replacement costs would be handedoff to the consumers, who already pay roughly £1 billion a year in Britain for a consumer subsidy. Inaddition, both the industry and government use anestimated lifespan of 20 to 25 years for costestimations, and those estimates may wind up beingmore if wind turbines need to be replaced sooner [11].

3. RESULTS AND CONCLUSIONS

There are diverse impacts of wind energyboth on the environment and economically. Moreresearch and consultations have been done byrelevant stakeholders in the wind industry to provideconcrete and foolproof solutions to these problems inorder to make the generation of wind energy as safeas possible. Most solutions are already in action andmore systems are being created to fit the needs forbetter wind facilities. This clearly shows that theopposition to wind energy is not justified at all. Thewind is a renewable weather element and itsexploitation for energy purposes should be highlywelcomed and appreciated. Instead of critics in thisindustry, more suggestions and recommendationsshould be given to assist in further development ofthe wind facilities and mitigate the problems arising.Therefore, wind energy should be proposed for morepower to be integrated into the power grid but notopposed.

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The application of continuing education model under Internet to college English teachers

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Abstract:Continuing education of teachers is an important link to strengthen the construction of teaching staff, and is an important guarantee for promoting quality education, promoting education equity and improving the quality and level of education and teaching.However, the overall situation of College English teachers in our country is not optimistic, especially in the context of College English teaching reform. The problem of inadequate teaching and research ability of College English teachers is more prominent.Therefore, it is of great practical significance to comprehensively promote the continuing education of College English teachers in order to improve the level of English Teaching in Colleges and universities.Based on the Internet environment, this paper analyzes the application of Internet model in the continuing education of College English teachers.

KeywordsUniversity; English teacher; continuing education model; Internet

With the globalization of economy, the multipolarization of the world pattern and the extensive application of computer network technology, English has been recognized as the most effective carrier for collecting and exchanging global information.At present, China's higher education is in a critical period of transition to quality education, and the construction of College English teachers is the key to the success of College English teaching reform.

1The importance of continuing education for English teachers

In the current educational situation, innovative education has become the core factor of quality education, and as the main body of innovative education, teachers play an important role.Therefore, continuing education of English teachers is the key factor in the reform, development and success of College English teaching.

1.1Continuing education for English teachers is an important prerequisite for their own sustainable development

At present, China's higher education is in an important period of transition to quality education, and the reform of outdated teaching concepts and teaching mode.To strengthen the construction of teachers and realize the sustainable development of teachers is an important condition for the success of College English teaching reform, and English teachers are the backbone of English teaching reform.Therefore, the cultivation of teachers is the key to the success of College English teaching reform.University of London education college professor of English Department of foreign H.G.Widdowson once said: "only have the system of education, with language teaching awareness and business ability of teachers can improve language teaching, language teachers should continuously improve the operational capacity to reach the occupation level, give full play to individual creativity."Therefore, the sustainable development of English teachers should be based on continuing education.

1.2Continuing education of English teachers is an important guarantee for teaching quality

The development of the times has put forward higher level requirements for College English teaching. Graduates from universities should not only master a solid knowledge of English, but also have the practical ability to flexibly use knowledge.As a key factor in English teaching, the teacher's professional level and classroom teaching abilityForce directly determines the progress and effectiveness of teaching activities, and affects the quality of teaching.

This requires continuing education for English teachers, expanding the professional knowledge of English teachers, improving their professional skills, and cultivating their initiative in self development.Only teachers can improve professional quality in continuing education really get the trust of the students, create active classroom atmosphere and high quality teaching results, in order to better serve the development of the times to cultivate high-quality English talent, provide a strong guarantee for the quality of College English teaching.

2Background of continuing education for College English teachers under the Internet

Computer multimedia information processing technology and Internet technology, the integrated use of text, sound, graphics, images and animations are integrated together, the performance of network course in the form of a more rich and colorful, vivid image.In College English teaching, online courses not only change the traditional teaching model of "teacher explanation" as the main teaching mode, but also change the students "learning mode and the interaction between teachers and students.That college English teaching reform put forward the network environment for College English teachers for many years, College English Teaching under network environment is helpful to cultivate students' Comprehensive English ability, improve the students' thinking ability, learning to stimulate the enthusiasm of the students.Therefore, the major colleges and universities actively use network multimedia technology in College English teaching practice.

The rapid development of modern educational technology, especially computer and Internet technology, has brought profound influence on College English teaching.Network teaching is considered as the future direction of teaching. "MOOC" and "flipped classroom" teaching model are the direct embodiment of this development direction.Because the Internet has the characteristics of breakthrough time and resource sharing, network education mode based on learners' main learning and collaborative learning advantages, so more and more attention by the majority of College English teachers.This environment has greatly enriched the means and resources of College English teaching, thus providing good opportunities for the development of College English teaching and English teachers.At the same time, the new teaching environment also puts forward new challenges and demands for the development and continuing education of College English teachers.The continuing education of College English teachers is no longer limited to professional skills and professional knowledge skills through professional training and autonomous learningWe need to understand, adapt and master the current rapid development of modern educational technology, so as to fully develop ourselves, meet the requirements of the times and the needs of College English teaching reform.

3The application of continuing education model under the Internet in College English teachers

3.1Teachers should strengthen their awareness of information and improve their ability of network information management.

The network multimedia technology to participate in the university English teaching, the teacher is no longer the only source of information, students can according to their own needs, hobbies, goals to choose learning resources, learning methods, learning time and progress, can also learn the self evaluation, students' learning autonomy, individuality and initiative are full play.

Of course, it also means that college English Teaching in the network environment puts forward higher requirements for students' initiative and self-learning ability.At the same time, education resources have been fully utilized and shared, and through the network and multimedia resources to provide students with more visual, intuitive, more interesting to attract students teaching materials.The network environment leads to a student centered learning model, which requires college English teachers to correctly understand the current situation and actively change their role in continuing education.

In the College English teachers under the network environment, must strengthen their awareness of information, can accurately and efficiently interpretation, analysis and integration of relevant information, can quickly grasp the latest information in College English teaching to adjust their teaching programs and strategies.One of the advantages of network teaching is that computer network has powerful function of automatic processing of database information.Student consultation, registration, payment, course selection, query, school management, homework and exam management are available through the network interactive communication mode and implementation of automatic management, makes network teaching become the most complete and efficient modern education.Therefore, in order to adapt to the teaching of College English under the network environment, teachers should be proficient in the use of network technology and the ability to use network information to improve the ability of network information management.Through the integration of network and College English, the teaching method will be improved.

3.2Teachers should strengthen the study of professional skills and improve the knowledge system.

The continuing education of College English teachers is a continuous, lifelong and comprehensive development.In addition to the training of university provided to teachers, College English teachers should take the initiative to seek opportunities, using a variety of information technology, improve their teaching philosophy, teaching methods, teaching content, teaching form.

In the era of information explosion, the knowledge needed by society and the teaching content of schools are constantly updated and fused.College English teachers should have complete and solid basic knowledge, understand the relevant foreign culture and constantly updated technical knowledge, adapt to the needs of the educational information background, and constantly improve their own knowledge system.

4Conclusion

The higher education in our country is in a period of great transformation, and the Faculty of College English teachers is closely related to the key to the success of College English teaching reform.To improve the professional ability of College English teachers and to improve their practice ability, it is necessary to have a perfect continuing education system as a guarantee.To pay attention to the growth of English teachers and to strengthen the continuing education of teachers is one of the key factors in the success of College English teaching reform.The integration of network and multimedia technology with college English teaching requires college English teachers to constantly adjust themselves, improve themselves, adapt to the development of the times, become a lifelong learner, and will not be eliminated by the times.In a word, under the network environment of College English teaching, the challenges and pressures faced by teachers are becoming more and more important.This requires college English teachers to actively improve their teaching ideas, to study multimedia and network technology, and constantly improve their own knowledge system, and adapt to the requirements and challenges of the new era.

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The dawn of the jungle-A brief analysis of Dead Poets Societ

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Abstract: Dead Poets Society is a 1989 American drama film written by Tom Schulman, directed by Peter Weir and starring Robin Williams. Set at the conservative and aristocratic Wilton Academy in the Northeastern United States in 1959, it tells the story of an English teacher who inspires his students through his teaching of poetry. Dead Poets Society has received nearly universal acclaim.
Keywords: Dead Poets Society; Wilton Academy; Spiritual Power

1. INTRODUCTION

The story takes place in the 1950s in Wilton Academy, a conservative and autocratic boy's prep school, which owns more than one hundred years history and a good reputation that 75% of students from here can get into the most outstanding school. Wilton Academy is proud of its tradition, honor, discipline and virtue. In fact, it is such a prison because of its hypocrisy, terror, decadence and filth. Students here just study as a machine in order to keep the reputation of Wilton Academy. Fortunately, things change in the student's thought on the learning process and life itself because of the arrival of an unconventional English teacher, John Keating. As his saying, "Words and ideas can change the world." With his unique way of teaching, the students not only begin to have a new sight of their life and learn to choose their future themselves, but also take action to revolt the teaching system which depress and constrain their personal thoughts. What's unfortunately, the suicide of Neil and the departure of Keating shows that their power is too tiny to change the situation of the dark society.

To be honest, this movie is one of the most wonderful films I have ever watched. From my perspective, most of us are losing ourselves because of the reality, authority and the pressure nowadays. We prefer to keep silence and accept the fact rather than say "No" or master our life in our hand. But in the film, the boys began to fight for their freedom. When the boys stood on the desk one by one, and shouted: "Oh, Captain, my captain", it was really touching my heart.

We can consider that the story is microcosm of society in America, tells about the confrontation fable of freedom and compliance, the individual and authority, romance and reality. In the midnight, they escaped from the Wilton prison and gathered at the old Indian caves and took turns reading from Thoreau, Whiteman, Shelly-the biggest-even some of their own verse, and in the enchantment of the moment they'd let poetry work its magic. "Gather ye rosebuds while ye may/Old time is still a-flying/And this same flowers that smiles today/Tomorrow will be dying." Mr Keating gave the boys encouragement to master their life. The boys created a new Dead Poets Society for themselves, which was a spiritual catharsis.

For everyone lived in this prison, it requires a great courage to be faithful to their own personality and more courage to release their feelings. In Keating's world, we see a educators who become exile in the institutions and dogma. In his first lesson, he told the boys the significance to seize the day in order to find themselves and do what they want to do. Then, he asked them to rip off the preface of the book to feel the real poetry in life. Dead Poets Society's purpose is to "enjoy the essence of life. " Whether happiness or pain, success or failure, laughter or tears. They are all part of life, the lack of one of them makes life incomplete.

Neil made me the deepest impression. He is a boy who was fond of poem and performances, but he was asked to go study in a outstanding college and to be a doctor under his father's authority. Nevertheless, he had a warm heart to be a actor. With the influence of Keating, he seized the day that he came to the stage to do what he liked to do without his father's agreement. He did what he wanted to do, he was happy. Like the saying, "We don't read and write poetry because it's cute. We read and write poetry because we are members of human race. And the human race is filled with passion. And medicine, law, business, engineering, these are noble pursuits and necessary to sustain life. But poetry, beauty, romance, love, these are what we stay alive for. "Neil was the first one to comprehended Keating's thought, but also the first one to leave "Dead Poets Society". Death is a tragedy, but for Neil, he has found the meaning of his life. If he did not meet Mr. Keating, he might not die. But he would not know why he stays alive and who he stays alive for.

To sum up, a question is that should we devote our life to our dreams or survive under the materialistic social atmosphere? We can not give the answer absolutely, but these boys showed their answer to their souls in the end of the film. This film still contributes a lot to modern society. Especially in this noise and confusing days, it's a spiritual power for us to keep our heart and let us do us. We should take action to express our growing and fortitude to our souls.

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Research On Marketing Platform Of Agricultural Products Based On Video

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Abstract: Under the industrial convergence environment, the key question of online video firms is how to realize the convergence with related industries. Based on analysis of the online video firms' comprehensive functions- information carrier, social media, marketing tool, the paper constructed the three-dimensional convergence model of the online video firms with related firms like media, IT firms, and indicated that the convergence process included three levels which is technology, product, and marketing, moreover, the paper analyzed the content of convergent development in each level. Finally what problems the companies need to pay attention to the convergence background is given.
Keywords: Online video, Industrial convergence, Development mechanism.

1. INTRODUCTION

Recent years, online video industry developed so fast that the online video has become the most important online applications of Chinese net citizens. Depend on the 32nd Chinese Internet development state statistic report announced by CNNIC, the quantity of Chinese online video users had reached 389 billion by the end of June, 2013. Despite online video firms have taken a part of the users and viewing time from TV, competition is fierce in the industry, and M&A between firms has continued to occur in recent years, for example, Youku and Tudou combined in 2012, Iqiyi acquired PPS in 2013, and so on. Moreover, the emergence of commercial micro movie, self-produced drama etc reflects that the online video companies are going through convergence development with related firms. The paper will reveal the internal development mechanism and give some advice to the firms.

2. RESEARCH BACKGROUND

The phenomenon of industrial convergence has been focused by firms and scholars since 1970s. As the technology innovation and diffusion intensifies and the consumers' need is becoming more and more personalized and diversification, the original business boundaries has become blurred, and more and more convergence between different industries comes, which leads to new inter-firm competition and cooperation situation.

Many scholars have explained the content and patterns of industrial convergence from different research perspective. Greenstein and Khanna (1997) thought industrial convergence included alternative convergence and complementary convergence from the technology view, while Penning and Puranam (2001) sort industrial convergence into supply level and demand level from the perspective of market. Alfonso and Salvatore (1998) proposed that the process of industrial convergence include technology convergence, product and business convergence, and market convergence based on the process view, while depending on the degree of convergence, Uekusa
(2001) sorted it to comprehensive convergence and partial convergence. Stieglitz(2003) proposed that industrial convergence will form through three phase: first, the convergence is motivated by the external factors; second, the boundary between different industries is broken up; third, the technologies and products of different industries are related, and the new market is stable.

From the views above, we can see that the industrial convergence is a dynamic evolution process, the essence of which is industry innovation, and the key factors are technology, product and supply-demand market. Nowadays, many new products or services combining functions of two or more than two industries have appeared. Online video is a typical representative, and this paper will analyze the development mechanism of video websites in the view of industrial convergence.

3. THE COMPREHENSIVE FUNCTIONS OF ONLINE VIDEO FIRMS

Online video is audio and video file which could broadcast directly online, and the platform operators which provide online video service to consumers are online video firms, just like Youtube, Iqiyi, etc. Through more than ten years ， development, the function of online video firm had already broken through just classifying and providing different videos. Nowadays, video websites have become integrative network platform which carries various functions. Specifically, three functions are very important: information carrier, social media, and marketing tool (shown in figure 1).

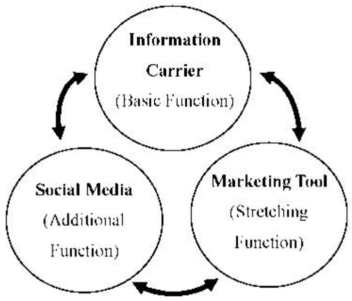

Figure l The integrated function of video website

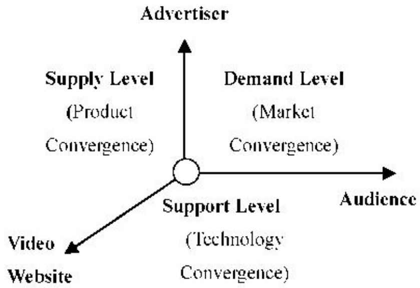

Figure 2 Three-dimension convergence model of video website

First, video websites are information source gathering places, which could provide a variety of video information including current news, movie and TV drama, variety show, education and technology, etc, and meet audiences' need of entertainment, information and education. Second, video websites are important social media to net citizens, and propel network interactivity between them. On the one hand, the websites provide a topic to review and comment based on the video content; on the other hand, they offer an open platform to encourage people to upload and share interesting videos, and build a new way for people to express themselves and communicate with others. Last, having a large number of audiences, the website is also a useful marketing tool, which could play a role in advertising and promoting products in diversified forms to maximize the consumers' focus and improve the brand image of target firms.

Information carrier is the essence function in the three, ordering to meet people' s information need. It is the base of the two other functions, because just having enough good videos could the website gather people together and have value to communicate and marketing. Social media function is additional function, through which users rate the videos, review the relevant content, and exchange opinions with others to express their willingness. For the sitcoms which are shot broadcast, users' opinions even could impact the story' s follow-up development and the finalresult. So giving full play to the social media function could improve the users' satisfaction and loyalty to video website. Market tool is stretching function, which could attract other companies to promote products using accumulating effect of large number users and various routes of transmission. Except the traditional advertises, the website may use a wide variety of forms to promote products, like micro films, using the audiences' creation, and so on. Now marketing tool is the main source of profit to support the website develop sustainably. The three functions are mutually complementary and reinforcing, therefore, only integrating them organically and opening up new profit points, could the video website gain competitive advantage.

4. THE CONVERTENCES OF ONLINE VIDEO FIRMS AND RELATED FIRMS

The chain of online video industry refer to many principals, including platform operators like Iqiyi, technology providers, advertising agencies, content providers like entertainment firms and TV stations, audiences, and content distributors like mobile video operators. However, three of them are especially important because they directly decide the final profitability; they are video websites themselves, audiences, and advertising agencies. So a three-dimension theoretical model would be constructed based on the three elements. At the same time, learning from the conception of Alfonso and Salvatore (1998), the paper will focus on the technology level, product level and marketing level of the convergence of online video industry and other industries (shown in figure 2).

In this model, the combination of video websites and audiences forms the support level, deciding the technology convergence; the combination of video websites and advertising agencies forms the supply level, deciding the product convergence; the combination of audiences and advertising agencies forms the demand level, deciding the market convergence.

5. THE CONVERGENCE OF SUPPORT LEVEL

The support level convergence of video websites and relative industries is mainly technology integration, which refers to things as follow:

First, the diffusion of computer communication technology makes the basic operation of video websites, like server, bandwidth, and the base hardware is the prime cost of websites. Application of network technologies like streaming media technology speeds up the fluency of the video and reduces the audiences' waiting time. So the basic technology has penetrated to video websites and has been prompting its development. However, there still has certain room for improvement to reduce the upload and download time. Likewise, the construction of website itself also needs to improve, because common problems of video content disordering and lots of repeated video resources are universal in most of the websites, which impact the convenience and experience of the audiences negatively.

Next, technology convergence exists in kinds of video receiving terminals. Now online video has diffused to the mobile receiving terminals like phone and pad, and this complemented the previous form of watching video on computer. So it is more convenient to watch video and it is beneficial to use fragmented time. According to CNNIC's statistics, the online video usage rate of internet users on mobile phone had reached 34.4% by the end of June of 2013 in China, and it is predictable that the rate will increase in the future. Therefore, mobile video market has been the competition target of websites, and some of them like Iqiyi and Youku have launched mobile clients. However, mobile video still has some faults. First, there are still gaps in resolution and operation speed compared with PC, which will impact the user's experience. Second, the wireless network coverage is still limited in China, and it is expensive to access the internet by mobile phone, but the network traffic is high when watching video, so consumer's demand is restrained. So the website need closercooperation with internet technology companies to improve the user's watching experience, and it also need to combine with telecom operators on innovating service form to reduce the user's burden on video traffic. Moreover, the rise of internet TV also promoted the convergence of online video and TV terminal, but the viewing habit need to foster and the user's experience is still to be improved.

6. THE CONVERGENCE OF SUPPLY LEVEL

The convergence in supply level mainly refers to product convergence. There are two kinds of customers for online video industry; that are common audiences and advertisers, so the product of video website include video and advertisement. For the video, the sources of video had combined since some websites were founded. With the popularity of camera and mobile phone with video, and the support of network technology, many people could create video and share on the internet, so the boundary between professional video makers and amateur makers has blurred. However, although the videos made by netizens add the video source, and sometimes supply first hand information, they still have some faults, like rough creating, lacking depth, blurry image, copyright violation, and so on. So how to keep the amateur maker's enthusiasm while ruling their behavior is an important target of websites.

Moreover, the advertiser's goal depends on the audience's support, but people usually dislike the traditional advertisement. While the combination of video and advertisement could improve this situation. Now attached advertisement which plays before or after the video is commonly used, and it takes less time than TV advertisement, but it still repels the audiences. Thus more and more new forms of advertisement were developed, like commercial micro film. It is the combination of movie and advertisement, which has both full storyboard and meaning of target brand, so watching it could leaves people deep impression. Micro film has strength in brand promotion because it impact audience in a subtle way, and excellent micro film could attract consumers to search and view actively, and large amounts of video forward and comment will follow, just like “old boy” and “number 66 road”，which forms the effect of virus spreading on internet.

In addition, other forms like ad-placing video and program homemade with advertiser also lower people's resistance to product promotion, and more forms will be developed in the future. Apparently, this trend will push the collaborative development between video website, advertiser and entertainment firm.

7. THE CONVERGENCE OF DEMAND LEVEL

The convergence in demand level mainly refers to market convergence. Although audience of the video website and the target market of the advertiser are different, yet they are related. Using the integration information platform of video website, the advertising agency hope to expand the market by guiding the audience's purchase behavior, and the key is how to translate the video audience into product customer. Once the conversion is improved, the appeal to website of advertising agency would greatly strength, and the profitability would rise. In order to the convergence development in market level, the video website must develop new advertisement pattern, and transform the audience into the advertiser's customer successfully.

Nowadays, the standard of traditional advertisement-moving and attracting consumers- is out of date. The core of internet promotion has changed into capturing the consumer's experience requirement. Meanwhile, the emphasis of marketing has transformed from how to make more person know certain brand to how to make people join in and spread one brand actively. Usually large-scale discussion and video forwarding will attract more people's focus, and it will drive consumer's attitude to brand step up to their agreement and maintaining on some kind of idea and value. Therefore, the website should fully use its social media function to generate discussion and increase interaction between the audiences.

For example, Skoda repacking talent show created by Iqiyi and Skoda is a video program to pull consumer's involvement and interaction. It chose 3 automobile repacking talents based on the online voting, then the 3person would repack the Skoda Fabia with other participant in the workshop. The audiences could see the whole process of the match by Iqiyi, and Skoda could reach the aim of promoting its brand. Moreover, the official ID of Iqiyi forwarded the latest dynamics of the match at the later stage, and lots of people were attracted to focus on it. Through this program, the popularity of Skoda Fabia has been greatly improved. The amount of video play exceeded 2,000,000, the total exposure quantity of advertisement in "Skoda repacking talent show" reached 811,124,618, and the number of clicks on advertisement reached 2,040,3641. Therefore, the boundary between video website and social network site will be more and more blurred. On one hand, the video website should strength the social media function itself and improve people's involvement and interaction; on the other hand, it will cooperate deeply with SNS like micro-blog and website Renren to extend the promotion ways of the advertiser.

8.CONCLUSION

In the background of technology diffusion and demand personalization, the online video operator must pay more attention and adapt to the trend of industrial convergence in their strategic mind. It will soak into relevant industries in technology level, product level and market level to realize the extension of industry value. Therefore, the video website should occupy the high ground of technology and market by focusing on cooperating with relative firms like telecom companies, entertainment companies, social network site, and so on, then the win-win situation will be formed. The position of customer is more important than before, and the criterion in the convergence process is consumer's satisfaction and developing customer demand. At last, the website should emphasize integrated management which requires the firms take a holistic approach, then the three functions of the website will join as one to form an integrated multifunctional network platform.

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A Study of the Common Aesthetic Character of Modern Art and Interior Design

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Abstract: the aesthetic principles of architecture and interior space design originate from the development of abstract art. initiated by cubism and futurism, after being explored by many artists, the formation of aesthetic rules has important value for interior design. Modern art is in pursuit of fashion and trend of modern art, interior design also pursuits of fashion and trend, it attaches great importance to the overall layout of the indoor space, but it also pays attention to the perfect combination of interior space layout and function. Interior design not only follows a certain aesthetic principle but also contains the thinking of modern art.

1. INTERIOR DESIGN CONCEPTS

Simply speaking, the overall design of indoor environment is the interior design concept, it includes indoor and outdoor space environment design, interior environment design, decoration and furnishings environmental design and interior decoration design four parts. The interior design is also known as the interior design and interior decoration. different saying but content is consistent, it mainly includes indoor plane and space combination . For the whole layout, indoor surface treatment and indoor decoration art and Home Furnishing modeling, layout style, this paper mainly discusses the space .

2. AESTHETIC CHARACTERISTICS OF INTERIOR DESIGN

2.1 The simplicity of interior design

With the continuous progress and development of society, people's demand and pursuit are also changing. In today's complex society, people are more willing to abandon luxury and grandiose, but instead they pursue simplicity, they pursue the simple form feriously. This phenomenon on reflected in the results of the interior designs, the natural and simple style, which makes the raw materials and technical requirements more stringent, such as modern people advocate to design indoor environment using new materials, new technology, the theme is concise, modern people pay attention to the functional use of interior space . In addition, the Home Furnishing indoor layout is also a certain stress, everything must be in accordance with the layout of the indoor function to carry out the principle of distinction, furniture and furnishings are closely linked, in color, greatly pursuit of fashion element colors, meanwhile it will also abandon the extra modification and avoid the burden.

2.2 The "green" character of interior design

Contemporary society, the concept of environmental protection has been rooted in hearts of the people, people are paying more and more attention to the surrounding environment. so people are very particular about the indoor environment, and promote green design. This kind of green environmental protection design is no pollution, it is no pollution design. Of course, it mentioned here is not only the traditional sense of pollution but also pollution in addition to the direct harm , including light pollution and visual space pollution, the pollution can not be reflected in the modern green design. otherwise it can not be called a green environmental protection design. This is the beginning of interior design, the concept of environmental protection green injection is consistent with the idea of building an environment-friendly green lifestyle.

2.3 The connotation of interior design

Compared with the past, people pay more attention to the beauty of form than interior design on interior design. This is determined by the current state of the social life, because people pay more attention to the pursuit of the spirit, which is reflected in the design of the interior, with the deepening of the concept design people's aesthetic consciousness has undergone fundamental changes, people's aesthetic pursue from a single form to the profound cultural awareness, for the pursuit of artistic style and aesthetic consciousness changes, which are manifested in the styles of interior design, modern interior design often expresses the designer or owner’s the concept and value pursuit, so it has a profound connotation.

2.4 The "nature" of interior design

We had already experienced ancient times housing property, housing for modern people demands not only beauty but also enjoyment, so modern interior design is to build a green, healthy, enjoyable living and activity space. People's demand for living space has undergone a qualitative change. People are eager for designers to build them a space where will continue to provide them with nutrients, to absorb the nutrients of nature, to enrich themselves and enrich their lives.

3. MODEM ART AND INTERIOR DESIGN OF THE AESTHETIC PRINCIPLE INTEGRATION

3.1 The principle of integrity

It pointed out that all objects within the indoor area are connected by an object or element as a hub .in this process, relationship between objects forms a basic commonality, and ultimately inevitable trend is the formation of a unified whole. The holistic principle of modern interior design is divided into two aspects: material and spirit.

3.2 People-oriented principle

People oriented, it is the basic principle of interior design. The

principle of "people oriented" requires that interior design should always put people first and make the user as the center. Adhere to the "people-oriented" principle, which requires designers to fully listen to the requirements of homeowners, modern emotional appeal and aesthetic requirements as the basis, on this basis for innovative design. The designers should fully consider various factors, including living habits, life experience, life habits and aesthetic needs and so on. Not everyone demands the same for the indoor space design , designers have to understand and compare, then come up with an overall design scheme, only in this way can betterly meet the needs of consumers seeking for living space.

3.3 The principle of unity

The fundamental purpose of interior design is to create an ideal living place for people, people not only tend to pursue comfortable living environment but also pursue the modern high-tech to bring enjoyment to people. According to these, the designer should consider the unification of function and form in interior design, functional beauty and beauty are combining, creating an ideal living place for people, so in the design, not only to pursue the simple form, art or technique. but to pursue the overall unity

3.4 Ecological principles

The principle of ecology means respecting nature and conserving resources. In advocating harmony between man and nature, the interior design is bound to respect nature, designers must correctly deal with the relationship between interior design and the environment. the control of the natural environment must be strict. To use the environmental protection, raw material recycling, avoid harmless, and avoid excessive packaging design, excessive luxury phenomenon, to avoid excessive waste of resources, promote scientific and economical life style design. In addition, interior design should be made by local conditions, according to geographical environment and climate conditions, to formulate a scientific design. For example, before the designer designed indoors, to investigate the local geographical environment, climatic conditions, adopt scientific design, rational utilization of local climatic advantages or geographical advantages, so as to avoid unnecessary waste. Finally, the designer should consider the reasonable and scientific design, so the designer should try his best to appeal the natural environment to the interior space iso that the indoor space will not be isolated from the natural environment, the natural environment, use sunshine, fresh air, creating a space environment and the natural environment cycle, so that people can get closer to nature.

4. AESTHETIC COMMON REALIZATION ON MEDERN ART AND INTERIOR DESIGN

4.1 Integrated design of furniture and interior

Relative to other factors, furniture is also very important for interior design, because furniture is the main component of indoor space. In the choice of furniture and how to decorate is particularly important, because this is related to interior design overall style. The above mentioned whole thought, namely "the beauty", is to achieve the overall unity of the indoor environment and furniture layout, achieving a unified whole, it requires the designer in the indoor layout, make a good plan to design and decoration of the interior ,the overall shape and style of furniture to make furniture and the indoor style integration, to form the integrated design.

Interior design is often subject to the spatial interface, because the spatial interface is certain, so leading to the space function can not get the best use. At this time, furniture is the best supplement, you can use the furniture function to make up for the limitations of the limited space interface. According to the distribution of indoor space, furniture segmentation is used to make up for the lack of aesthetics. The designer plans the size, shape, color, In this way, the perfect combination of interior space and furniture makes the whole interior design reach the whole optimization. In addition, the design of furniture is very important for the design of furniture designers, usually use a variety of modules, to adjust the collocation to form various forms of furniture, so it can adapt to the need of space, furniture and indoor environment, so the integration of furniture and interior, which not only meets the aesthetic needs of the people, but also the inheritance of traditional aesthetics idea.

4.2 Create an overall mood

To create an overall indoor mood, refers to the interior space of materials, colors, atmosphere, shape and other elements of a match, so that these factors achieve the perfect unity of artistic conception. Space has a sense of wholeness, because all the elements and links in the room must be unified, and the various elements in the space depend on each other, so as to achieve a harmonious and unified space form. The whole atmosphere to create the indoor environment, the designer will feel the space of soul, localization, and design a Chinese feature and local style elements, and then put it into the furniture and interior decoration, furniture, decoration, space, and other elements to achieve harmony and unity, the formation of aesthetic impact of certain the people in the visual. Of course, designers in the overall indoor emotional appeal, we should combine the contemporary aesthetic orientation of the space, demand, and so on, as a basis for choice of materials and colors.

4.2.1 The choice and using of colors

Color for people,it is a very impact factor, the color of the living environment is also a very important factor. Comfortable, beautiful indoor environment can always give people a harmonious and beautiful feeling, because the color of the indoor environment can be very concrete. As the designer design overall layout of the indoor space, furniture, and the color of various decorations for a reasonable allocation, and strive to achieve harmony and unity of the color effect, the indoor environment is very important, for example, tone, will adopt the basic major and small contrast. Secondly, the interior space color must be divided by the primary and secondary, a main tone, one to two auxiliary tones to match, the main and auxiliary tones complement each other, emphasizing the main color, as a whole to achieve a harmonious unity.

4.2.2 Selection and collocation of material

In the choice of materials and matching, more attention needs to be paid. The interior decoration materials according to the actual situation to choose, because different materials have different texture, different materials used in the decoration will make people have a different experience and feelings, so in the choice of materials ,it adapts from the two aspects of visual and tactile to consider, this is the most basic needs of the people, at the same time in different age, different personality, different gender, people on the indoor environment choice will be different, the material selection of color will be different, specificially according to specific people's preferences to choose.

4.3 Injection of ecological elements

Owing to the deterioration of the natural environment, people are paying more and more attention to the ecological environment, and they always have a complex of ecology. Therefore, people are reluctant to inject their ecological environment into their living environment. At present, as for the designers, ecological concept has been in my mind, the ecological design is what designers strive for, of course, in ancient times china had ecological concept, the concept of "harmony" has existed since ancient times, people and self harmony thoughts into the design of residential space. On the other hand, the ecological significance is a narrow understanding, some people think that plant a few trees in the aile, build rockery or water or build a canal is ecology, this is actually a very superficial understanding, what is more, some people may be mistaken into ecological damage. For example, housing renovation with the original wood, the demand for wood is huge, that needs to spend much of forest resources, this is a violation of the principle of ecology, and our intention is to draw further apart. The design of indoor environment should be based on ecology and create a green, healthy and harmonious space environment.

4.3.1 Use green environmental materials

According to statistics, indoor air is more serious than outdoor air, the survey shows that furniture and interior decoration materials is one of the main reasons causing pollution, improper selection of furniture and decoration materials will result in serious pollution, the terrible is the source of pollution will have a certain impact on the surrounding environment, vicious spiral, or suffer in the end of our own. Therefore, in the choice of furniture and interior decoration materials, we must choose green environmental protection materials.

4.3.2 Take full advantage of solar energy

The sun is the most common and most important resources, solar energy for humans both environmentally and practically, so if the residential design can make full use of solar resources, lighting, heat etc. designers should make a set of scientific and reasonable residential design, designers should make full use of solar resources, so that each room light conditions are good, according to the local geographical conditions, rational planning. In the design, to mobilize all the technical feasibility, such as the partition method to increase the transparency of space then use glass to install, through the skylight to absorb sunlight, if necessary, office, kitchen, restroom design was used, so as to make full use of solar energy, environmental protection and health.

4.3.3 Use new materials to create a pure, natural interior style

In the choice of materials, to use the new environmentally materials, and high technology, the combination of the two, in emphasizting the close to nature close to the original ecology, melt high-tech into it, which embodies the concept of environmental protection, and filling process of modern style. You can consider the use of new materials with high density of environmental materials, environmental protection and selection of plastics and resins are also good, compared with the traditional solid, wood decoration can save a lot of trees, which coincides with the contemporary people to pursue the concept of environmental protection is consistent, but also reflects people's aesthetic needs simple.

4.4 The innovative use of traditional art expression

Compared with the ancient architecture, modern residential design of reinforced concrete and less natural spiritual vitality, because modern residential design is closed, which is cut off the natural independent, making indoor and outdoor isolated from each other, the lack of contact between people, so the reinforced concrete structure of the cold housing is ruthless. Residential interior design must reflect people's psychological appeal. so as to inject human feelings into the house. The city is noisy and complex, and the closed isolation of residential space makes modern life more depressing and difficult. Therefore, designers should take human demands and construct comfortable, comfortable and indoor environment into account, which is also the upgrading and innovation of traditional artistic expression.

4.4.1 Skillfully use "borrowing scenery" technique

Ancient houses, especially in the garden design, rockery and pseudo water are very common design, ancient designers cleverly quoted to the interior space design, in fact, it takes "borrow scenery" approach into practice. In ancient times, the designers can be the ancient garden of "borrowed scenery" skillfully applied to the design of the indoor environment, for example, with a clever idea, the "landscape" scene into the room, carefully layout in water on both sides, add the stone forest, trees and flowers, very delicately and highly praise.

4.4.2 Adds functionality to separation

Designers should also "take the essence", which can be absorbed and innovated in the traditional residential design. For example, in the traditional design, indoor space division way is a good point, the designer can make full use of it and innovation, as well as the use of cover cloth screen, so that can form a liquidity across and constantly, make indoor space layout more close to natural and fresh, inspired by the modern design, Can also use the bead curtain or bamboo curtain partition to indoor space division, the realization of "vivid effect and continuous isolation.

4.4.3 Recreation of "emptiness" and "reality"

The pursuit of modern people pay more and more attention to the living space of the artistic conception, artistic conception is also very seriously, the depicts of modern living space of the "virtual" and "real", which is through the interior elements to shape, through the design of indoor furniture, decoration materials, lighting and other elements to the performance of "virtual" and "real", And put the flexibility into the design of each step, so that the living space to enjoy with poetic form, pleasant taste. The designer's grasp of "emptiness" and "reality" is the pursuit of modern interior aesthetics design.

5 CONCLUSION

The continuous development of society, material abundance, people are more and more pursuit of spirit enriched and people demand a higher aesthetic value, the traditional and modern aesthetic essence put into modern living space design, an irresistible tide, color space and new concept in the interior design, designer’s concept can deserve the further development.

6 ACKNOWLEDGEMENTS

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Individual Learner Differences

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Abstract: Learners differ, so does their language acquisition. Research shows that some learners learn faster while some others slower, and the speed is not consistent in the whole process of acquisition. It is further noticed that some learners may reach a higher proficiency level while for some others, learning stop far before they reach a native proficiency, and the route can be variable. Factors Leading to the differences of learners are Learning Styles, Learning Personality, Learning Motivation, Learning age, Language aptitude, Learning strategies, and Learning intelligence. This paper attempts to indicate these factors to help learners to have a better understanding of their own learning and find out the individual learner differences among language learners. In this article, we will focus on style, personality and motivation.

Keywords: Styles; Personality; Individual Learner Differences; aptitude; strategies

1. INTRODUCTION

There are a lot of researchers about individual learner, which emphasize the differences among learners. Most people give impressions that learners learn foreign language in the same way. In fact, in the course of foreign language learning, learners show great difference. They have different attitudes, personality factors, language aptitudes and ages. All these indicate that learner ' s achievements are different. It is impossible for them to use the same way to learn foreign language. So it is very important to study the individual differences among language learners. If some of the characteristics affect the achievements, we can make them function in teaching and change the passive factors into active ones. The research will, to some extent, not only develop the SLA theory, but also enhance learners' judgments to their own individual learner factors. From this point of view, the study of individual differences has high practical value.

2. STYLE

People learn in different ways. "Some people have an instinctive ear and like learning from hearing and listening, while others prefer action such as making things with their hands, and walking about" Different people have different learning styles.

2.1.1. Learning style refers to the way a learner likes to learn. It is put into action by specific learning strategies. According to Oxford and Anderson, learning styles have six interrelated aspects:

1. The cognitive aspect includes preferred or habitual patterns of mental functioning.
2. The executive aspect is the extent to which learners look for order, organization, and closure in managing the learning process.
3. The affective aspect consists of attitudes, beliefs, and values that influence what learners focus on most.
4. The social aspect relates to the preferred degree of involvement with other people while learning.
5.The physiological element involves what are at least partly based on sensory and perceptual tendencies of the learner.
6.The behavioral aspect concerns the learners' tendency to actively seek situations compatible with their own learning preferences.

2.1.2. The cognitive style is one aspect of learning style which refers to the characteristics ways in which individuals orientate to problem-solving. There is the distinction between field independence (FI) and filed dependence (FD) attracting much attention in SLA research. Some experts believe that learners of field independence are good at the classroom learning while those of filed dependence are skilled in the communicating learning of natural environment. However, it is hard to mature the cognitive style as a greatest effect on SLA by now.

2.2. Second language learners may have different types of learning styles. In order to learn a language effectively, we need to know what types of learning styles we have. With this information in mind, it is possible for us to stretch our learning styles to cater to the needs of language learning tasks. The following are an inventory of learning styles described by A.Cohen.

1. Visual learners: learn through seeing
2. Auditory learners: learn through listening
3. Hands-On learners: learn through doing
4. Analytic vs Global learners: attentive to details or summative
5. Extrovert vs Introvert learners: talkative or silent
6. Intuitive vs Sequential learners: learn with or without directions
7. Closure-Oriented vs Open-Oriented learners: learn in a flexible or rigid manner
8. Impulsive vs Reflective learners: aggressive or careful
9. Field Independent vs Field Dependent learners: focus on part or whole
10. Concrete vs Abstract learners: learn with or without abstracting power

3. Personality Factors

Personality is the supreme realization of the innate idiosyncrasy of a living being. It is an act of high courage flung in the face of life, the absolute affirmation of all that constitutes the individual, the most successful adaptation to the universal condition of existence coupled with the greatest possible freedom for self-determination. The following are some main aspects of personality related to SLA research.

There are several personality factors among language learners. Here I want to discuss the following factors:

1) . Introversion-Extroversion

Traditionally, it has often been assumed that learners who are extroverts will be better and faster foreign language learners. Extroverts are generally more sociable and gregarious. It is thought that extroverts will be more willing to use the foreign in the class to ask and answer questions, without worrying too much about whether they make mistakes or look foolish. Extroverts will be more actively involved with the language than their introvert classmates. The more introverted learners through being willing to spend more time studying and practicing the forms of the language might develop a fuller and more accurate understanding of the language structure, than the extroverts. More introvert learners are likely to need a supportive and nonthreatening classroom environment, so that they are willing and able to take what they find to be difficult risk and try to use the foreign language.

2). Self-Esteem

Self-esteem is the most pervasive aspect of any human behavior. Self-esteem can be categorized into three levels: the first is global self-esteem; the second is situation or specific self-esteem, referring to one' s appraisals of oneself in certain life situations; the third is task self-esteem, which relates to particular tasks within specific situations. By self-esteem, we refer to the evaluation which the individual makes and customarily maintains with regard to himself: it expresses an attitude of approval of disapproval, and indicates the extent to which an individual believes himself to be capable, significant, successful and worthy. In short, self-esteem is a personal judgment of worthiness that is expressed in the attitudes that the individual holds towards himself. It is a subjective experience which the individual conveys to others by verbal reports and other overt expressive behavior.

4.Conclusion

Foreign language learning is a dynamic system which extends to more subjects other than linguistics as a cross-disciplinary field relating to cognitive psychology, psycho-linguistics and pedagogy. There exist individual differences among foreign language learners. Some people learn foreign language well, while some others do not. It will be helpful to study the characteristics of those whose foreign language ability is good. Teachers should have the responsibility to try and get to know their learners as individuals. On the basis of this understanding of the learners, teachers will be able to develop the kind of classroom atmosphere and motivating input that will enable students of all personality types to benefit as much as possible from their learning.

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The Great Firewall and Ways to Pass it

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Abstract: This paper mainly focuses on the Great Firewall of China(GFW), which blocks the internet usage of over half a billion of people. I will first have a look at the mechanics of the firewall, then do some research on various ways to bypass such limits. Finally, I will give a conclusion of which way is by far the most efficient one.

1. INTRODUCTION

About 700 million web users are blocked behind the Great Firewall, preventing them from accessing websites such as Google, Facebook, and YouTube. Started in 1998[1], the Golden Shield project has successfully created a “blockhole” on the internet, while the name “Great Firewall” is known to the world when Charles R. Smith [2] first wrote a passage about Chinese internet censorship, in which he mentioned the “Great Firewall” in accordance with the Great Wall of China. After 20 years of implement, China now has its own whole system of sites that completely replaced those that are blocked.

This passage will mainly discuss on various ways to break the firewall, and whether they are still accessible. Among those who still works, I will compare several aspects of them, such as accessibility, performance and cost, in order to determine that which one is by far the most efficient.

The mechanisms of the Great Firewall

The Great Firewall has various ways to block sites(Figure1.2) that are on the so-called blacklist. First it will monitor the domain server, whenever it detects the domains that are on the blacklist(for example, youtube.com), it will disguise as the DNS server and send a fake IP address to the user. This pollution even affects internet users in other countries. For example, the mass DNS pollution that happened many times have affected internet users in America and Chile to access sites such as Facebook and YouTube, only because they attempted to access the root DNS server in China.

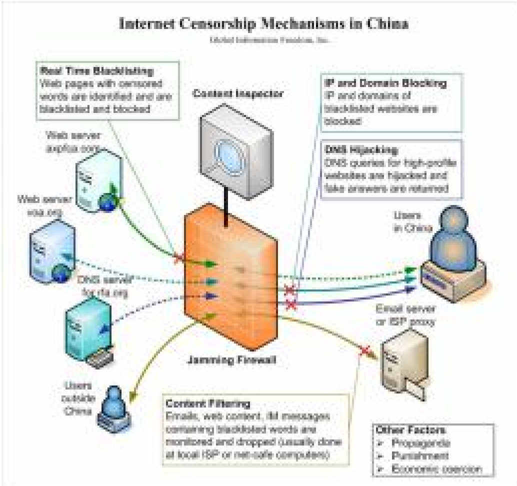

Figure 1.2

The firewall also utilizes the Router Distribution technique to better block IP addresses. The Firewall once uses an Access Control List that functions similarly as a “blacklist” that will block accesses to several IP addresses. Nowadays, the Great Firewall uses the router diffusion technique to create a false static IP which can capture any data that are intended to be sent to restricted IP address. These data can be simply discarded, or saved for further examination. With that technique, the Firewall can get the trait of several internet activities, such as watching videos or browsing articles. Such trait can be used to recognize some encoded data (mostly used by VPN as a disguise) and block them.

Additionally, the Firewall seals off some ports (via the router diffusion technique mentioned earlier) of these restricted IP addresses, such as the port 80 for HTTP, the port 433 for HTTPS, discarding any data sent to these ports. This port blockades causes several VPN services become frequently unavailable, including the commonly used PPTP, L2TP, IPsec, and OpenVPN. [3] However, the need for VPN exists, as international corporations and academic research faculties are usually the users of VPN service. Thus, the Firewall usually do not block these “known” protocols, only except some political events.

Even for those websites that are allowed to visit, such as Wikipedia (non-Chinese version), Google (before it was totally blocked), and Steam, a real-time blacklist is applied to search for several keywords. Whenever a keyword is detected (such as “Falun”), the firewall will instantly send a reset instruction to both the website server and the client. (An example of this shown by Figure 1.3) The connection is immediately stopped, sometime even occurs in the middle of opening a page. After such blockade happens, all the users on the same IP address will also become unable to access the affected site for an amount of time.

Message shown by Firefox that the connection is reset, which is typically caused by the Great firewall. Note the difference between the page and a regular error page.(Such as no internet connection or connection failed) Figure 1.3

As Chinese web users uses Various ways to break the Firewall (which will be introduced later), the Firewall constantly evolves to weaken the ability of these methods. This is usually performed by blocking several IP ports, or adding identification of several VPN protocols. The Firewall will even strengthen its blockade during special events, such as the Chinese Lianghui, June 4^{th} of each year, and during the National Congress of CPC.

The conflict between the Great Firewall and wall-breaking methods are like a cat and mouse relationship, as VPN services are becoming more and more complicated to avoid the blockade. The main methods that are commonly used by Chinese web users will be furtherly discussed in later part of the paper.

Main methods of breaking the Firewall

1.Manipulating hosts file

The hosts file functions as an index that translates domains into IP addresses, which is commonly considered as a substitute or extension of DNS service. One of the Great Firewall's main way to block internet access is DNS pollution, thus tampering with hosts file usually works. [5] However, this seemingly easiest approach has its own setbacks: Websites such as Google usually have multiple servers to optimize the performance. As the host file is set, one can only access one IP address which might not be the best server to reach. What's more, the Great firewall is dynamic and will constantly upload its IP filter list. Users should update their host file frequently (which is usually up to date) to gain accessibility.

2. VPN service

VPN is considered as the most commonly used service in order to break through censorship, which essentially provides access to a server located outside the Firewall. As the data package is encrypted, one can access blocked sites safely via these servers and bypass the firewall. Various VPN services varies themselves by using different protocols, such as L2TP, PPTP, IPsec and OpenVPN. [6] However, as the GFW evolves, most protocols are "decrypted" and no longer available [7], while VPN service providers are also asked to stop their service by the government. [8] The performance usually increases as the price increases, while free VPN usually are unstable and sometimes contains ads. As VPN mimics visiting websites in foreign countries (by visiting them with servers located in different countries), speed of visiting Chinese websites are greatly affected, which depends on these different service providers. This will further be proved by our experiment that accessing Chinese Websites costs significantly longer time.

Each type of VPN protocol has its advantages and disadvantages. The PPTP (Point to Point Tunneling Protocol) is the oldest standard developed mainly by Microsoft and 3Com. It is the easiest to implement, while the connection speed is the fastest. However, it was developed about 20 years ago, which is considered not safe enough now. [9] The L2TP (Layer Two Tunneling Protocol) is an improvement on PPTP. It usually uses IPsec protocol on PPTP as an improvement on security. The IPsec protocol encrypts the data pack excepts the first and the last part (which indicates the IP address of the sender and the receiver). The only problem is that the data is encrypted two times, making it slower than other approaches. [10] [11] Another popular approach is OpenVPN. It is an open-source software that uses SSL technology. It is considered as a secure and fast way to access blocked sites, and is considered as the Fastest and most secure VPN protocol.

3.Lantern

Lantern (Icon shown in Figure 1.4) is an open-source software which is based on P2P to break internet censorship. It was once free and now only provides limited usage(500MB) for users, otherwise one shall pay RMB216 for one year's license. Lantern supports multiple platforms, including Android and Linux. It seems that it is fast as it advertises and does not affect visiting Chinese websites, as it only functions when it detects censorship. [12]

Figure 1.4

4.Wujieliulan and Freegate

Those two software are mainly used by regular web users because they are free. However, as they are developed by Falungong, who refuses to release their source code, leaving the security a problem. We can only assume that they also utilize the VPN technology. It still remains unclear why they would provide costly VPN service completely free of charge, while their main page contains much political content (mostly anti-China, at least anti-Chinese Government). Therefore, it is not recommended to use them for any private purposes as the security is not guaranteed. The two software both belongs to the Global Internet Freedom Consortium, and they are developed by the same group of people. Thus, in this paper we will use Freegate to refer them both. [13] [14]

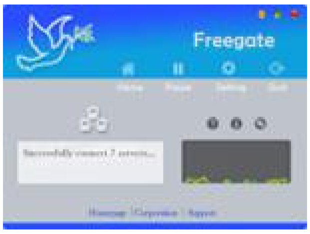

Figure 1.5

The interface of the Freegate 7.57

5.Shadowsocks

Shadowsocks is once an open-source project on GitHub that is based on Socks5 protocol. The main difference between Socks protocol and regular ones is that the Socks protocol only transfers data, which can also be used in direct communication(while regular ones can only access web pages). It is widely used for its security and highly changeable(because it is open-souorce). In order to utilize it, one should either build his own server (or rent one from service providers) or similarly buy a pre-packed service from the provider. The accessibility is great while Chinese websites are unaffected. However, this project is unavailable on Github as the author was threatened(in a Chinese way, invited to have a cup of tea) by the police to stop the development. Thanks to the benefits of open-source, this project is kept updating by others and is currently effective way to break the Firewall.[15]

Anti-wallbreaking methods by GFW

The GFW will of course block these VPN services, or else it would be useless. For example, VPN providers' servers' IP address are frequently blocked [16], forcing them to change their servers. And also, as mentioned before, some VPN protocols such as PPTP and L2TP uses specific ports (port 1701 and port 4423). OpenVPN uses a specific procedure (or hand-shaking) to create connection, which is detectable by the Firewall, thus being also frequently disturbed. [3]

Experiments

We can get the condition of our connection. The Computer that I used is a laptop from Lenovo(R720-15IKB). The Chart below shows some of the details of the hardware.

CPU	Intel i5-7300HQ
Network adapter	Realtek 8821AE Wireless LAN 802.11ac PCI-E NIC
Graphics Card	Intel HD Graphics 630 NVIDIA Geforce GTX 1050
Disk(HDD)	ST1000LM035-1RK172(1TB)
Disk(SSD)	NVMe SAMSUNG MZVLW128(128GB)

Speedtest.net is used for measuring connection speed, because the website provide servers from all around the world and will automatically pick the one with the smallest ping for measuring connection speed. With these servers, we can fairly measure the connection speed of all approaches effectively. [17] The internet service is provided by china telecom, with a fiber optics network. The band width is said to be 200Mbps, while I accesses the internet via a wireless router that is called Tenda F3. The connection is using WPA/WPA-PSK combined as encoding, which uses 802.11n. The Chrome version is 59.0.3071.115. The current speed measured by speedtest.net is 20 Mbps for download, and 10 Mbps for upload. The difference between the bandwidth and the actual one is because both the nature of wireless connection and the wireless router in fact only support about 100 Mbps of speed. The connection is stable and the experiments are performed under this condition. The test is mainly about performance; thus we will make a comparison between opening web pages using different services. Time is the main factor to be compared, and all the web pages will be opened by Google chrome.

We will mainly test the methods mentioned before, and for the VPN part, we choose two VPNs that are famous among Chinese web users. One is Express VPN, and the Other is Tunnelbear VPN. [18] [19]

Express VPN is usually considered as an effective VPN service for their wide range of servers and good customer service. [20] While the tunnelbear VPN is known for its easy to use and interesting interface, as well as stability.[21]

For all the services, we use the default configuration. We have chosen the Japanese server for Shadowsocks and Tunnelbear, while for Express VPN, we choose the recommended server, those in San Francisco. Both Tunnelbear and Express VPN uses OpenVPN as protocol.

The websites chosen are baidu.com, qq.com, Google, and Facebook (Figure1.6). The Google developer tools allows us to test the loading time of a webpage. By comparing the loading time, we can get a reflection of accessibility. Thus, we picked some of the popular services that are commonly used by Chinese web users. By evaluating the load time and comparing it with each other, we can get a clear view of those services. Each websites are visited by each way for 10 times independently, and the average time (as well as the variance) is calculated to be compared.

During the experiments, we have found that the standard deviation is high, which may lead to the result that these services are usually not that stable. We first check on the performance when accessing

Chinese websites. (Figure 1.7) Lantern and Shadowsocks applies a PAC (proxy auto-control) list to enhance performance while visiting Chinese websites. If a domain exists in the PAC file (usually provided by the service provider, but can also manually figured), these domains will be accessed directly, without losing performance. [22] However, Tunnelbear and Express VPN suffers greatly when accessing Chinese websites compared to Direct access, while the variance is also high, indicating that the internet access is not quite stable. Another important thing to notice is that the Freegate failed to access both of the Chinese websites, which didn't respond for over 3 minutes, which is not shown on the chart. The failure of Freegate is probably because that the IP address of Freegate is blocked by the firewall from visiting sites, but there seems no proof (only statements in forums are found) and this statement remains an assumption.

The reason behind this latency is the mechanic

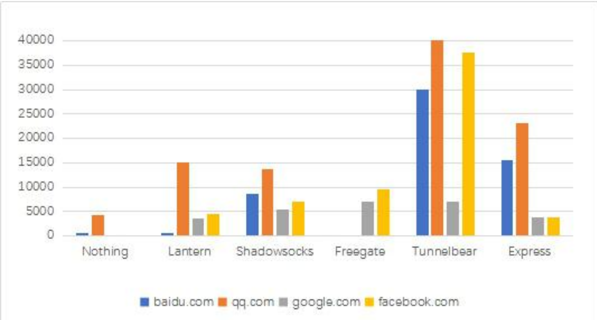

Figure 1.7

All the average time that is used accessing the pages by different approaches.

s of VPN service. 10050As is said before, VPN service provides connection to a server, which sends back the website that you want to access. This is good when accessing foreign websites, but it would be a drawback if no additional improvement is made. For example, Express VPN provides a Chrome extension that enables different strategies for different websites. Otherwise this would cause great inconvenience as we usually want to visit both Chinese and foreign websites at the same time.

Then is the most concerned part: the performance when visiting blocked sites (Figure 1.6). All these ways can at least successfully access the blocked pages, as the performance is roughly the same. Among these ways, the Lantern and Express VPN seems to be the best ones. In order to better compare these services, we also measured the speed at speedtest.net to get the bandwidth provided by each of the services. All the service seems to have enough bandwidth, which is approximately 2Mbps, so we can exclude this factor when measuring webpage access speed.

When surfing on the internet, we want that our access each time takes approximately the same amount of time. This is also importance when using VPN service, as it measures the stability of the connection. Thus, we also evaluate the standard deviation(Figure1.8) in order to get a comparable number of stability.

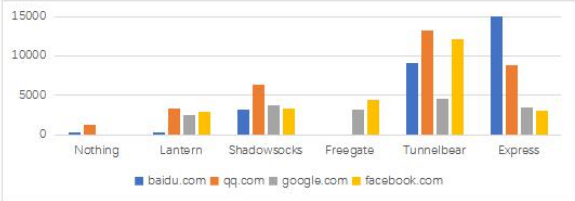

Figure 1.8

The standard deviation of various accessing approaches. Note that not only the loading time is affected when visiting Chinese sites using VPN, the standard deviation is also high, indicating that the connection is not stable (compared to when visiting blocked sites).

It seems that the location of VPN server is important, as the service providers usually recommend some of the places over others. Those in Japan and East coast are usually recommended for common use. The former for its close distance, the latter for that most websites that are blocked is in the US, while the east coast is the nearest..

20445Another important aspect considered is the cost. As service providers will usually give promotions, offing lower prices when you buy for a longer period, thus we will compare one option that is commonly provided by all users: the price per year assuming that you pay your service annually.

	Cost(USD per year)
Lantern	35
Shadowsocks	20
Freegate	Free
Tunnelbear	60
Express	100

According to the Charts, we can make a conclusion that the vpn services provided by Chinese providers are usually more economical, and improvements are made to enhance performance when accessing Chinese sites. Some of them provide only a limited data for a month in exchange of an even lower price, as cheap as 7 USD per year. The foreign provider provides a costlier service, but the service is better. They usually support more protocols, and more servers are provided. Express VPN even has 24/7 online customer service [20], which explains the relatively high cost.

Related Work

https://cc.greatfire.org/zh/test

This is a website that mainly focusing on comparing various Services that break the Firewall. For each test, the website will download images from the ten most popular websites (According to Alexa) and compute the average speed. They also measure stability as once an image fails to load within some time limit, for example, 40 seconds, it would be considered as a fail. Users can test their own service and the website will collect the data. Finally, a ranking will be shown to indicate their conclusion.

They do not give the exact time of each download, and no additional data expect speed is given. This test is up to date and one can easily track one specific VPN's performance. They also run a twitter account to share the newest news about the firewall.
https://www.vpndada.com/best-vpns-for-china-cn/

This website mainly focuses on recommending VPN services in China. They provide review for most of the VPNs and can let users gain first knowledge of their service.

There is also various research in this area. G. Lowe, P. Winters, and M. L. Marcus discovered the DNS polluting aspects of the GFW. [23]

As the Firewall is considered as defensive, the Chinese Government also uses The Great Cannon (in accordance with the GFW) to attack other websites. The most famous example is the attack on GitHub from 2015/3/21 to 2015/3/26. [24]

VPN was usually considered as a grey area that the government does not give a specific opinion of whether it's forbidden, as is mostly needed by international corporations. However, most of the VPNs are forced to stop their service since the beginning of the year. [25]. This is because the ministry of Industry and Information Technology of PRC has announced in the beginning of the year that all VPN service will be banned by 2018/3/31. [26] This surely is a shock to Chinese web users and they usually turn to foreign VPN services that are not likely to be affected.

Conclusion

After all these researches and experiments, we gain a clear result of these VPN services. For regular Chinese users, there are more economical plans as there are providers such as Lantern and various Shadowsocks services that provides a better performance. But if you concern more about service and reliability, then there are always foreign service providers that gives a better service, while the cost is relatively high.

On important thing to notice is that the performance of the VPN differs greatly, thus other's experiences might not be appropriate. Only choose one after you have tried it, in order to get the best performance.

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Two Pricing Models in China's (Metal) Futures Market

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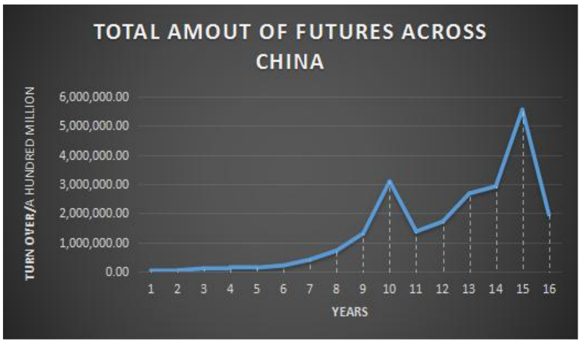
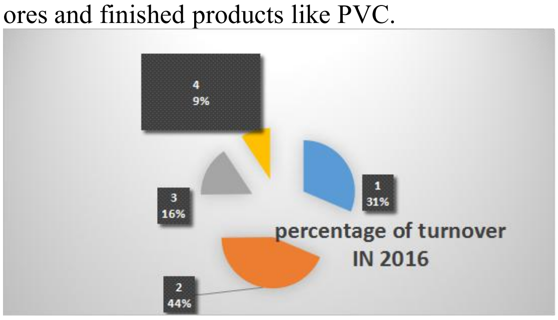
Abstract: In this paper, I will show you two models of the price change in China's Futures Market. Both models apply to the metal futures market, but their price change in different ways, which could give us

B.



The diagram shows the total amount of turnover of futures in China in each year. (from 2001-2016).

In each Exchange center, they have different kinds of futures. For example, China Financial Futures Exchange has only two kinds, "IF"(index futures) and "TF"(treasury futures). Shanghai Futures Exchange mainly has metal futures, such as gold, silver, deform steel bar and other kinds of metal. It is a major metal transaction center in China. Dalian Commodity Exchange has two kinds of futures are in the market. The first one is related to agriculture products such as beans corns eggs while the other one is related to the industrial products including raw material like iron ores and finished products like PVC.



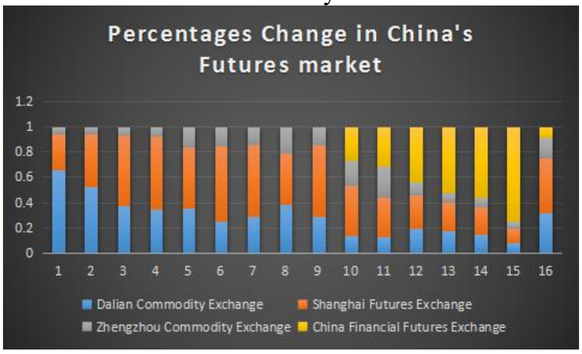
It is worth noticing that, Dalian Commodity Exchange is famous for the Soybean Meal Futures. Since the Soybean meal is the key ingredient to the fodder for the livestock, the price of it will significantly influence the price of the meat and poultry. As for Zhengzhou Commodity Exchange, it is mainly focused on the agricultural products, and

an idea of the price change mechanism in the whole market.

II. Background Information

A. How Big is the China's Futures Market?

also has raw materials for the textile industry and energy industry. Thus we can see in four exchange centers, only one trades financial futures, while others are based on commodity.



This diagram shows how the percentage of each exchange center in the total market in China vary with the time. We can notice that China Financial Futures Exchange (the yellow part) start function in 2010. [1]

C. How China's futures being delivered

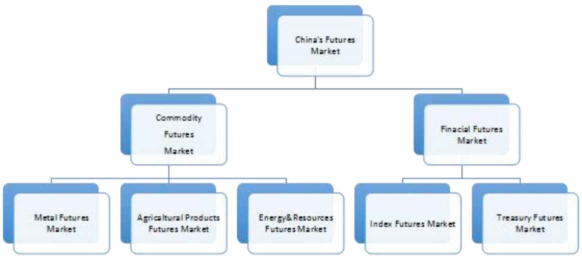
Suppose a person is trying to create an account for Chinese securities trade. If he or she is a private investor, he or she could only create an account with the speculative property. However, if he or she is a corporate representative, he or she can open an account with speculative property or keep valued property. These two account properties give them different right in the delivering process. For the commodity futures, a private investor does not have the opportunity to enter the delivery process, since the futures will be forced to close out on the market. As for the corporate representative, if he or she holds the commodity futures to the maturity, he has the opportunity and obligation to close them out. In each transaction, the seller has to submit the Standard warehouse receipt on time, the buyer has to submit full-fill money, and then they could transact at the exchange center. Natural rubber futures in Shanghai Exchange center is an example.

The delivery date is in the mature month's day 16 to 20. The buyer needs to submit a letter of intent before 12 o'clock on the day after the last trading day, which is Day 15 in the mature month. The letter of intending should cover the name of the commodity, the code of the future, the amount of trading and the name of the delivering warehouse. The seller also needs to submit standard warehouse receipts and Value-added invoices before 16 o'clock the day on Day 18 in the mature month; if Day 18 is a statutory holiday then postpone to the next workday. In the last delivery day, the buyer has to deliver the payment before 14 o'clock, then he could receive the Standard warehouse receipt. The seller will receive the payment before 16 o'clock in the last delivery day. If the buyer or the seller did not follow the procedure, he will lose all his margin money, worth to know, the margin rate increase to 30% when the futures enters the mature month. Apart from the commodity deliver, there is another delivery kind, called cash delivery, which only appears in the financial futures market i.e. in China Financial Futures Exchange. Under cash deliver, every remaining futures will automatically clean out in the settlement price. How is the settlement price being settled? Take Shanghai-Shenzhen 300 Index futures as an example. It's settlement price is equal to the last two hours' arithmetic average price. The China Financial Futures Exchange has the right to adjust the settlement price, according to the condition of the market.

III.How is China's Futures Market doing

A.The Structure of China Futures Market

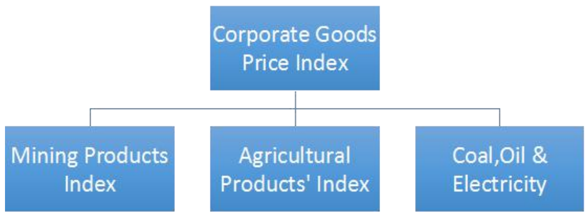
We can basically divide the China's Futures Market into five sub-markets. Firstly, the futures in these small markets are highly related; secondly, each of these sub-markets is trading all in each Futures Exchange Center. For example, the Metal Futures Market is all on the Shanghai Futures Exchange and all financial futures trading in China Finacial Futures Exchange. Although there is an exception, the agriculture Products trade in two exchange centers, each of which has their focus.



B.Tool Used to Measured the Performance of China's Futures Market

Here I will introduce an index called Corporate Goods Price Index, which was invented and measured by The People's Bank of China. This index provides the information of general price change, which is helpful for People's Bank of China to set and adjust the fiscal and monetary policies.

Especially the three sub indexes in it are very sensitive to the market change, such as the change in supply and demand relationship. So in my opinion, it is a good idea to compare the change in the index with the price change in some representative futures price.

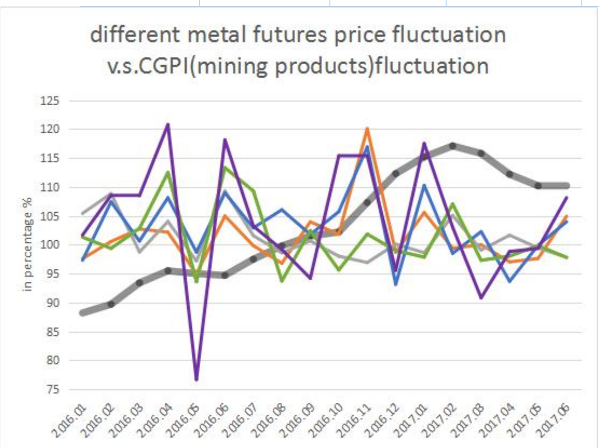


Corporate Goods Price Indices(CGPI)				
previous corresponding period=100				
months	overall index	agricultural product	mining product	coal,oil & electricity
2017.06	106.1	98.2	110.2	110.7
2017.05	106.2	97	110.2	114.2
2017.04	106.8	97.2	112.2	118.6
2017.03	108.4	97.7	115.8	120.6
2017.02	109.3	100.1	117.1	121.5
2017.01	108.5	104.5	115.2	117.7
2016.12	106.8	103.5	112.3	111.2
2016.11	104.5	104.6	107.3	106.3
2016.10	101.7	103.3	102.2	101.9
2016.09	100.2	101.6	101.5	98.6
2016.08	98.7	100.1	99.8	94.1
2016.07	97.9	101.4	97.5	91.7
2016.06	96.6	103.4	94.7	90.2

2016.05	96.2	105.3	95	89.1
2016.04	96	106.9	95.5	86.7
2016.03	94.9	106.8	93.4	85.5
2016.02	93.9	105.6	89.7	85.7
2016.01	93.4	104.7	88.2	85.5

IV.How is Metal Futures Market Doing

months	mining products' index	copper futures CU0	gold futures AU0	silver futures AG0	Zinc futures ZN0	Nickel futures NI0	screw-thread steel
2017.06	110.2	104.93	97.82	97.81	103.98	97.81	108.14
2017.05	110.2	97.63	99.45	99.83	99.89	99.83	99.36
2017.04	112.2	97.03	101.65	98.04	93.67	98.04	98.83
2017.03	115.8	100.02	99.08	97.31	102.27	97.31	90.81
2017.02	117.1	99.38	105.08	107.03	98.51	107.03	103.03
2017.01	115.2	105.58	98.62	97.86	110.26	97.86	117.51
2016.12	112.3	98.7	100.11	98.99	93.16	98.99	95.57
2016.11	107.3	120.08	96.92	101.84	116.93	101.84	115.38
2016.10	102.2	101.8	98.02	95.64	105.72	95.64	115.4
2016.09	101.5	103.97	100.67	102.45	101.78	102.45	94.19
2016.08	99.8	96.8	98.59	93.74	106.05	93.74	99.17
2016.07	97.5	99.84	101.57	109.3	102.92	109.3	103.21
2016.06	94.7	104.98	109.29	113.33	108.98	113.33	118.15
2016.05	95	94.93	97.19	93.6	98.72	93.6	76.67
2016.04	95.5	102.17	104.02	112.48	108.13	112.48	120.79
2016.03	93.4	102.73	98.75	102.84	100.64	102.84	108.48
2016.02	89.7	100.56	108.85	99.37	107.42	99.37	108.54
2016.01	88.2	97.59	105.42	101.31	97.32	101.31	101.68



From this diagram, we can find out that the CGPI index has no direct relation with the price change of the general metals' futures. Especially in May 2016, we can find out from the diagram 4 that a huge decrease in the price of screw-thread steel futures did not Decrease the CGPI considerably. In my opinion, the reason behind this may be the different weight of different metal futures in the market. Then it is found that the main futures turnover in Shanghai Futures Exchange on May 2016 presented as follows. We can notice that the top one turnover value was found in screw-thread steel, which nearly constituted one-third in total.

A.Change in Price of Screw Thread Steel

Below is the spot good price and futures price of Screw thread steel.

From the graph, we can find out that the main contract's price, which is shown with the pink line, is always below the prices of the spot good and recent contract, which are represented as the blue and green lines despite the fact that in theory there is a correlation to illustrate the relationship between the price of futures and spot goods, as shown below:

Futures price= Spots goods prices+cost of stocking

So, when Futures price<Spots goods price, the cost of stocking for the Screw thread steel is negative.

■ Demand pull factor

According to a passage in 《China Security Newspaper》on July 28, it said that the reason why the price of screw thread steel futures reach a new high, is because the continuous rise in the price of spot goods, and the low amount of Strore. The rise in the price of spot good of screw thread steel attributes to the downstream steel consumption increase, which is in turn due to the rebound of the consumption of car and fix assets invest, in June fix asset investment rose 8% on year-on-year basis. Fix assets involves real estate development and capital construction, both of which consume lots of steel. The acceleration of Investment in the capital construction rebounds from 4.2% to 17.9% on year-on-year basis. The acceleration of real estate assets continuously rebound, in June, it increased 7.9% on year-on-year basis.

Base on the simple economic idea, we could know when the demand of certain product increase, and the supply of the product is limited, it's price will go up. It could explain why the price of the screw thread steel is increasing currently.

■ Cost push factor

Furthermore, the price of raw material of steel is increasing. For example, the coke price in Shanxi Province has increased 2.94% in July. The diagram below expresses that the general price change over three months in China. We can estimate that the price change is around 1.09%from mid-June up to now.

Below is the diagram of three indexes of iron ore in China's market. Generally, all indexes went up during last month. Furthermore, we could notice that the general index(China Iron Ore Price Index) changes just like JinKou(import) Ore Price Index does, but the GuoChan(domestic) Ore Price Index had been below them.

This kind of phenomenon attributed to China's great dependence on imported iron ores, which constituted more than 80% of the market. The prices change of import iron ores will directly lead to the change of the general price of iron ores in the domestic market.

Recently, on July 27, two analysts in Goldman Sachs issued a report. In the report, Goldman Sachs changes the expect price of iron ore in three months from 55$/ton to 70$/tones. It is about 27% increase in the price. The reason Goldman Sachs gives out is: the demand of rebuilding Stock of China's steel factories excesses previous thought and the profit of the steel factories will be sustained by the result of supply-side structural reform and cut of overcapacity.

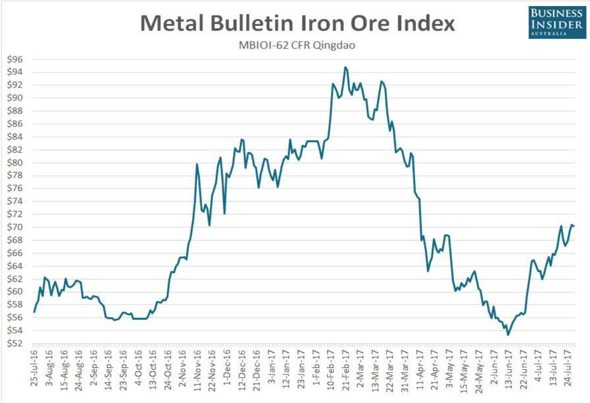
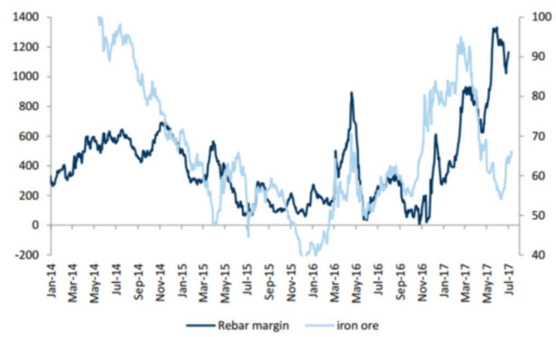


Exhibit 4: Rebar margin and iron ore price

Rebar margin, RMB/t, lhs; Iron ore price, $/t, rhs



Source: Mysteel, Platts, Goldman Sachs Global Investment Research

Furthermore, global production recovery will also promote the consumption of iron ore. The Metal Bulletin Iron Index is one of three key indexes used to measures the price of iron ore in the global market(The other two are TSI-The Steel Index and platts index). From the graph, we can get the information of the price change recent two years, we can find out one month earlier, the index reaches the bottom, for now, there is still a considerable price spread. The Index, in another word, the price of iron ore will increase dramatically later, as long as the price could come as high as it has been reached before.

If the price of iron ore, as a raw material for steel industry, increased,the production cost will increase too. So the steel firms have to increase the price in order to get the same amount of revenue.

Based on all the discussion above, we can predict that the price of screw thread steel futures will increase in the near future. It could have a positive effect on the metals futures market.

B. Analysis of the Price Change of Screw Thread Steel

It is important to test the conclusion by using the market data. We also know that in financial, futures price reflects the expectation of future price of spot goods. The data of the price of screw thread steel futures with different maturities is gathered as follows

RB1708

date	settlement price （Yuan）	opening price	the highest price	the lowest price	turnover
2017/8/1	4100	3914	4166	3881	0
2017/7/31	4100	3914	4166	3881	316
2017/7/28	3922	3888	3922	3872	92
2017/7/27	3881	3916	3916	3871	260
2017/7/26	3910	3929	3929	3906	94
2017/7/25	3884	3800	3925	3800	88
2017/7/24	3812	3862	3862	3770	58
2017/7/21	3800	3771	3822	3745	46
2017/7/20	3770	3828	3828	3770	100
2017/7/19	3833	3788	3834	3788	26
2017/7/18	3817	3798	3817	3791	90
2017/7/17	3817	3810	3817	3791	90

RB1710

Date	settlement price	opening price	the highest price	the lowest price	turnover
2017/8/1	3698	3710	3759	3693	4104600
2017/7/31	3733	3565	3740	3559	6960054
2017/7/28	3558	3566	3595	3530	5509860
2017/7/27	3570	3555	3599	3504	6196006
2017/7/26	3568	3579	3639	3547	6233630
2017/7/25	3568	3523	3590	3485	6185898
2017/7/24	3516	3528	3566	3455	5893656
2017/7/21	3525	3510	3547	3467	6661080
2017/7/20	3496	3667	3675	3488	8574736
2017/7/19	3679	3598	3688	3583	6243064
2017/7/18	3586	3627	3652	3573	6543818
2017/7/17	3627	3535	3668	3534	6886134

RB1712

Date	settlement price	opening price	the highest price	the lowest price	turnover
2017/8/1	3597	3639	3663	3597	294
2017/7/31	3640	3521	3649	3501	354
2017/7/28	3491	3496	3538	3470	316
2017/7/27	3476	3467	3488	3435	56
2017/7/26	3478	3458	3518	3456	152
2017/7/25	3449	3424	3458	3382	68
2017/7/24	3391	3407	3418	3352	86
2017/7/21	3416	3392	3416	3353	206

2017/7/20	3380	3515	3515	3380	252
2017/7/19	3522	3464	3528	3464	180
2017/7/18	3441	3507	3536	3441	232
2017/7/17	3479	3406	3508	3406	124

RB1802

Date	settlement price	opening price	the highest price	the lowest price	turnover
2017/8/1	3494	3529	3529	3488	56
2017/7/31	3535	3373	3549	3373	166
2017/7/28	3351	3390	3417	3351	124
2017/7/27	3370	3350	3381	3312	174
2017/7/26	3377	3347	3404	3334	290
2017/7/25	3322	3277	3330	3249	166
2017/7/24	3271	3287	3287	3223	32
2017/7/21	3274	3251	3276	3166	50
2017/7/20	3245	3361	3361	3245	86
2017/7/19	3395	3311	3395	3311	78
2017/7/18	3309	3365	3365	3300	422
2017/7/17	3352	3335	3372	3327	226

RB1804

Date	settlement price	opening price	the highest price	the lowest price	turnover
2017/8/1	3481	3504	3504	3481	6
2017/7/31	3500	3413	3500	3399	34
2017/7/28	3363	3365	3388	3363	58
2017/7/27	3328	3338	3369	3321	30
2017/7/26	3363	3322	3376	3322	48
2017/7/25	3312	3267	3313	3267	12
From this 2017/7/24	3252	3270	3270	3228	10
2017/7/21	3258	3249	3258	3227	76
2017/7/20	3248	3334	3341	3240	44
2017/7/19	3349	3321	3374	3318	40
2017/7/18	3302	3346	3352	3293	36
2017/7/17	3347	3284	3359	3284	20

Rb1806

date	settlement price	opening price	the highest price	the lowest price	turnover
2017/8/1	3399	3419	3428	3392	122
2017/7/31	3418	3300	3426	3300	498
2017/7/28	3275	3283	3312	3270	318
2017/7/27	3280	3248	3288	3222	298
2017/7/26	3255	3231	3301	3230	386

2017/7/25	3215	3170	3232	3155	230
2017/7/24	3178	3179	3190	3132	228
2017/7/21	3165	3180	3188	3142	204
2017/7/20	3158	3249	3254	3158	258
2017/7/19	3285	3219	3287	3214	196
2017/7/18	3210	3256	3267	3204	136
2017/7/17	3252	3199	3268	3199	198

Then I extract all the settlement prices from the six futures above.

settlement price						
date	RB1708	RB1710	RB1712	RB1802	RB1804	RB1806
2017/8/1	4100	3698	3597	3494	3481	3399
2017/7/31	4100	3733	3640	3535	3500	3418
2017/7/28	3922	3558	3491	3351	3363	3275
2017/7/27	3881	3570	3476	3370	3328	3280
2017/7/26	3910	3568	3478	3377	3363	3255
2017/7/25	3884	3568	3449	3322	3312	3215
2017/7/24	3812	3516	3391	3271	3252	3178
2017/7/21	3800	3525	3416	3274	3258	3165
2017/7/20	3770	3496	3380	3245	3248	3158
2017/7/19	3833	3679	3522	3395	3349	3285
2017/7/18	3817	3586	3441	3309	3302	3210
2017/7/17	3817	3627	3479	3352	3347	3252

using the data, I plot two graphs, the first graph illustrates the settlement prices change of futures with different maturities. The second graph illustrates the relationship between maturities and the settlement prices.

From this diagram, we could find out that the settlement prices of futures with all maturities increase during this period of trading. But since the time period is very short, we could general ignore the price change caused by the inflation. However, we can derive the inflation or discount rate fromthe SHIBOR which is the Shanghai Interbank Offered Rate.

Latest SHIBOR data								
Date	O/N	1W	2W	1M	3M	6M	9M	1Y
2017/8/1	2.8093	2.886	3.708	3.8886	4.2631	4.3518	4.3815	4.3931
2017/7/31	2.806	2.882	3.705	3.889	4.2561	4.3493	4.379	4.3881
2017/7/28	2.8152	2.877	3.703	3.8915	4.2514	4.3481	4.3761	4.3892

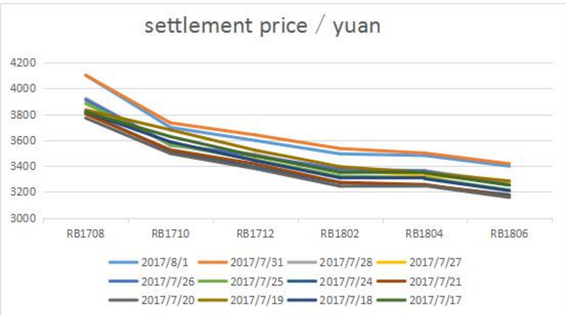
2017/7/27	2.786	2.8626	3.703	3.8994	4.25	4.3432	4.376	4.3908
2017/7/26	2.725	2.849	3.6997	3.9086	4.251	4.3434	4.3759	4.3904
2017/7/25	2.7147	2.849	3.698	3.9205	4.254	4.3444	4.377	4.3935
2017/7/24	2.708	2.845	3.699	3.93	4.255	4.3453	4.3782	4.396
2017/7/21	2.733	2.847	3.702	3.9497	4.255	4.3517	4.3804	4.3977
2017/7/20	2.7534	2.853	3.705	3.9792	4.2551	4.3597	4.3812	4.3976
2017/7/19	2.722	2.842	3.6973	3.992	4.26	4.3685	4.3854	4.4008
data from: SHIBOR.org								

We can use fisher effect to obtain the inflation rate. Fisher effect basically tells us that the nominal rate(n) is equal to the real rate plus the inflation rate (π) $n=r+\pi$. This formula is an approximation from the $1+n=(1+r)*(1+\pi)$, since in normal time, the product of r and π could be ignored. So if we regard the real interest doesn't change in short time, then we could calculate the short term period of inflation.

In 2017/8/1 the over night SHIBOR rate is 2.8093,
In 2017/7/19 the over night SHIBOR rate is 2.722,
In 2017/8/1 the over night SHIBOR rate is 2.8093, $r_1 = 2.8093$
In 2017/7/19 the over night SHIBOR rate is 2.722, $r_2 = 2.722$

$$r_2 = r + \pi_2$$
$$\Delta\pi = r_1 - r_2 = 0.0873\%$$

Then we can say that the growth of the settlement price mainly due to the increase of real value and not due to the inflation. For example, when we look at the RB1802, the price change from 2017/7/19 to 2017/8/1 is (3494-3352)/3352=4.24%. Which means the nominal increase is 4.24%, and according to the fisher's law, the real increase is equal to the nominal increase minus the inflation rate in the period of time. So we can know that the real increase rate of the futures RB1802 in the period of time between 2017/7/19 to 2017/8/1 is 4.24%-0.09%=4.15%

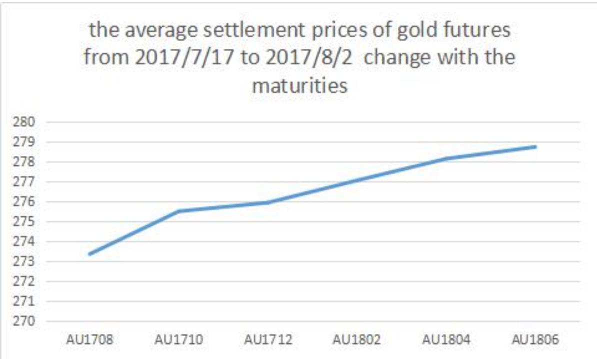


From this diagram, we could know in each trading day, there is always a relationship between the maturity date of each futures with their settlement price. The further the maturity date is, the lower the settlement price will be. This phenomenon shows the expectation of the fall in the price in the futures. And for a fall in the price, there are two possible contributing factors: the first one is the depression, and the second one is the negative increase in the real increase rate.

The explanation has a limitation by nature that the screw thread steel futures is the commodity futures. Furthermore, in China, regulation prohibits the short in commodity futures. But if we look at the gold futures, it will have no these kind of limitations. Since first, gold is highly related to the financial. People generally think it will keep its value, and they will hold it in long term. Secondly, although it is also prohibited to short the good futures on China, the global gold futures market is connected, so you can short abroad instead of shorting in China.

C. Change in Price of Gold Futures

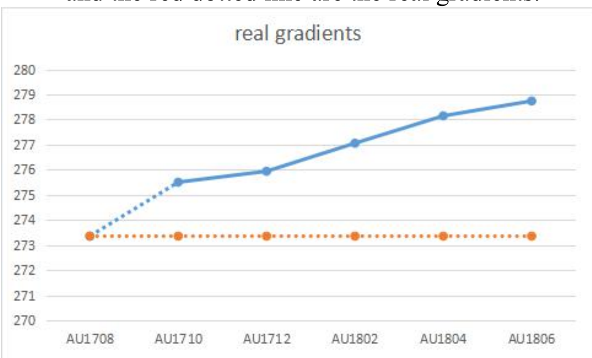
Date	futures					
	AU1708	AU1710	AU1712	AU1802	AU1804	AU1806
2017/8/2	271.1	278.35	277.95	278.7	279.95	280.75
2017/8/1	275.5	277.25	278	279.25	279.95	280.95
2017/7/31	275.5	277.25	278.05	278.9	279.95	280.9
2017/7/28	275.3	277.55	277.25	278.15	279.95	279.9
2017/7/27	275.3	277.55	277.6	278.55	280.75	280.4
2017/7/26	271.05	273.55	274.4	275.6	277.8	277.3
2017/7/25	273.8	276	276.8	277.55	279.45	279.75
2017/7/24	272.6	276.3	276.45	277.55	278.1	279.15
2017/7/21	272.45	275.1	275.8	277.05	278.1	278.6
2017/7/20	272.85	273.45	274.2	275.6	275.45	277.1
2017/7/19	272.85	273.4	274.05	275.6	275.45	276.7
2017/7/18	273.95	273.4	273.7	274.95	275.5	276.35
2017/7/17	271.45	272.45	273	274.3	275.5	275.75
average	273.3615385	275.5076923	275.9423077	277.0576923	278.1461538	278.7384615



C. Analysis of the Price Change of Gold Futures

Below is the relationship between the real gradient of price change and the estimated gradient.

- Real gradient here is the rate between the later maturate futures with the up-to-date futures. So in the graph, the slopes of the blue dotted lines and the red dotted line are the real gradients.



	1708-1710	1710-1712	1712-1802	1802-1804	1804-1806
real gradients	1.007850972	1.009440864	1.013521119	1.017502884	1.01966964

- Estimated gradients are derived from the formula which is summarized from the market.

$$gradients = e^{r*t}$$

The r is equal to the one-year SHIBOR rate and the t is count in years

SHIBOR

date	O/N	1W	2W	1M	3M	6M	9M	1Y
2017/7/17	2.6329	2.8057	3.6809	4.0120	4.2706	4.3790	4.3929	4.4050
2017/7/18	2.7010	2.8293	3.6926	3.9989	4.2666	4.3692	4.3879	4.4034
2017/7/19	2.7220	2.8420	3.6973	3.9920	4.2600	4.3685	4.3854	4.4008
2017/7/20	2.7534	2.8530	3.7050	3.9792	4.2551	4.3597	4.3812	4.3976
2017/7/21	2.7330	2.8470	3.7020	3.9497	4.2550	4.3517	4.3804	4.3977
2017/7/24	2.7080	2.8450	3.6990	3.9300	4.2550	4.3453	4.3782	4.3960
2017/7/25	2.7147	2.8490	3.6980	3.9205	4.2540	4.3444	4.3770	4.3935
2017/7/26	2.7250	2.8490	3.6997	3.9086	4.2510	4.3434	4.3759	4.3904

2017/7/27	2.7860	2.8626	3.7030	3.8994	4.2500	4.3432	4.3760	4.3908
2017/7/28	2.8152	2.8770	3.7030	3.8915	4.2514	4.3481	4.3761	4.3892
2017/7/31	2.8060	2.8820	3.7050	3.8890	4.2561	4.3493	4.3790	4.3881
2017/8/1	2.8093	2.8860	3.7080	3.8886	4.2631	4.3518	4.3815	4.3931
2017/8/2	2.8320	2.8920	3.7070	3.8875	4.2681	4.3521	4.3837	4.3961
2017/8/3	2.8070	2.8840	3.7037	3.8884	4.2704	4.3563	4.3838	4.3982
average	2.7533	2.8574	3.7003	3.9311	4.2590	4.3544	4.3814	4.3957

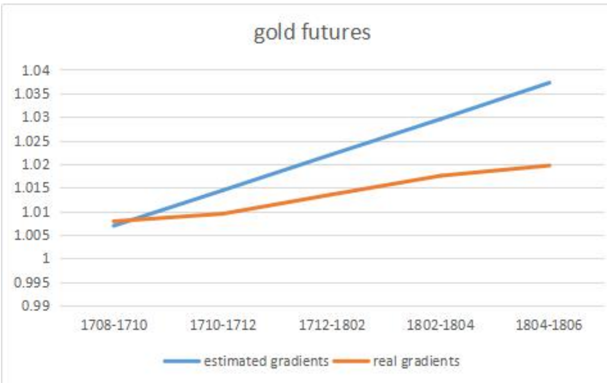
2-months average SHIBOR: (3.9311+4.259)/2=4.126
4-months average SHIBOR: 4.259+(4.3554-4.259)/3=4.291
6-months SHIBOR:4.3544
8-months SHIBOR: 4.3544+(4.3814-4.3544)/3=4.3634
10-months SHIBOR: 4.3814+(4.3957-4.3814)/3=4.3861
Then calculate the estimated gradients using these five SHIBORs

	1708-1710	1710-1712	1712-1802	1802-1804	1804-1806
SHIBOR used / %（r）	4.126	4.291	4.3544	4.3634	4.3861
time period / Y(t)	1/6	1/3	1/2	2/3	5/6
estimated gradients	1.006900365	1.014406115	1.022010739	1.029516561	1.037227028

Plot both the estimated gradients and real gradients together trying to find whether the formula could illustrate the gold futures change in price.

$$gradients = e^{r*t}$$

	1708-1710	1710-1712	1712-1802	1802-1804	1804-1806
SHIBOR used / %（r）	4.126	4.291	4.3544	4.3634	4.3861
time period / Y(t)	1/6	1/3	1/2	2/3	5/6
estimated gradients	1.006900365	1.014406115	1.022010739	1.029516561	1.037227028
real gradients	1.007850972	1.009440864	1.013521119	1.017502884	1.01966964



Notice that the estimated gradients are increasing at a greater rate than the real gradients. I think a possible reason behind this is because of the limitation of the formula.

The formula only has two parameters, which are about SHIBOR rate and time. But there are many other factors will influence the change of the price of futures. For example, a change of the exchange rate between RMB and US dollar will influence the prices of good futures in China's market.

When we look at the exchange rate diagram, we can find that the RMB has become stronger recently, so Chinese investors will invest more money into the market instead of buying gold futures since they expect a higher return from the market than the gold futures. Less demand for the gold futures will make the real gradients of gold futures price lower than it is estimated.

E. Conclusion

The price of gold futures will increase in the future. It will increase more rapidly if the RMB could not maintain mighty in the future.

The introduction and analysis of six Chinese stocks in the manufacturing industry

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Abstract: As the high-speed and parallel processing features on FPGA, so it is widely used in high-speed information processing system. In this paper, the front-end data of X - ray energy spectrum is taken as processing object, high-speed data acquisition and processing methods based on the FPGA are proposed, which embodies the advantages of FPGA in the application of high speed information processing. The compensation measures in the electronic measurement system are also discussed in this paper.
Keywords: FPGA; High-speed Information Processing; X-ray energy spectrum; Electronic measurement system; Compensation measures

1. INTRODUCTION

Manufacturing industries involving in the items' manufacturing and processing or indulging in either creation of new commodities or in value addition can be called manufacturing industry. Manufacturing industry consists of series of human activity, which include the handicraft, high tech and so on; but in most cases it is used in industrial production, and during the process the raw materials will be processed into large scales of finished products. The manufacturing sector consists of various kinds of jobs, that is, both the manual labor utilizing manpower and the high-tech production applying the latest technology are in this sector. In developed countries, the manufacturing industry is a very important industrial sector. The final goods have two way to be sold out, one way is to be sold as a finished good to customers, and the other is to be used as intermediate foods in the production process.

Manufacturing industries account for a significant share in producing wealth for economy. These industries have well-known manufacturing process management, which refers to a variety of technologies and methods. It also can be divided into engineering industries, building industries, electronics industries, chemical industries, energy industries, catering industries, plastic industries, transportation and communication industries.

Introduction to the firms:

Firm #1:

Xinjiang Tianshan Cement Co., Ltd mainly engages in the production and sale of cement, clinker, concrete, and other related products in China and internationally. The company is found in 1988 and is headquartered in Xinjiang, China. Its products are used in railways, airports, water conservancy, transportation, oil, and other projects.

China Cement Association passed a program that reduces the total output by 25% and the government supports the development of Tibet. In the short run, this company will have an increased demand because many small firms are forced to leave the industry, and some big firm like this will have advantage to sell more cement. In the long run, their growth rate on revenue will rise, but competition may occur in this industry.

Firm #2:

CRRC Corporation Limited (CRRC) is headquartered in Beijing with more than 180,000 employees and 46 majority-owned and wholly-owned subsidiaries. Producing the leading technologies and complete product lines, CCRC, as the biggest supplier of rail transit equipment in the world, engages in development and research, import and export, industrial management and investment, electric products and environment protection equipment, all kinds of electrical equipment, urban rail transit vehicles, sale, manufacture, asset management, consulting services, electronic equipment and parts, engineering machinery, lease and technical services for rolling stock, repair and design. With the revenue of 37.8 billion dollars in 2015, CCRC ranked 266 in the list of Fortune Global 500, and with the investment on research and development of 1.408 billion euros, it ranked 96 in the list of World Top 2,500 R&D Investors.

CRRC has established the leading producing base and technology platform of rail transit equipment in the world, and it will continuously upgrade technology creation capability and enhance the technology creation system. Its products, such as railway trucks, high-power locomotives, high-speed trains and urban rail transit vehicles, have become the first-class in the world, which can adjust to a variety of complicated geographical environments and satisfy different market demands. Serving as the significant card of China, the high-speed trains produced by this company present the achievement to the globe.

Jinchaung Corporation, one of the biggest partners with CRRC Corporation, lost almost 1 billion RMB cash flow. The stock price for CRRC has dropped 10 days in a row, which is a really big impact on the stock. After several days, *CRRC* *announced that they got more orders this year*, which bumped the price up a little bit. *Ten days later after they released the information, a subsidiary sold their stocks and bought bonds in another company.* This action dropped the price a little bit but it's not a big deal. However, the company and its subsidiary didn't announce any related information. *Four days later, they established a company in Canada,* which expended their firm oversea.

Firm #3:

Wuliangye Group Co., Ltd. is the world's leading liquor production-based large group company. Formerly, the eight liquor workshops jointly formed the Sichuan Yibin Liquor Distillery of China's Monopoly Company in the early 1950s, which was officially named as Wuliangye Liquor Distillery in 1959 and then changed to Wuliangye Group Co., Ltd. after restructuring in 1998. At present, with the liquor industry as the core, the Group is characterized by diversified development with the employees of more than 50,000 and an area of 12 square kilometers, which has the ancient fermentation pit of the Ming Dynasty that has been used since the early Ming and a large number of modern and large-scale liquor production workshops.

The Group will thoroughly implement the spirit of the Eleventh Party Congress in Sichuan Province, effectively promote the supply-side structural reform, carry forward the spirit of "innovation and progress to be NO.1", adhere to the development strategy of " Strengthening the main industry, optimizing the diversified development and enlarging the platform", achieve the improvement of the Wuliangye brand value, achieve the transformation development of the Group to the state-owned capital investment platform, achieve the optimal adjustment of diversified industries, strive to achieve the goal of 100 billion during the 13th Five-year Plan and lead the reform and development of the liquor industry in Sichuan Province and even all over the country.

Wuliangye Corporation cleans up 18 series because some of them are not making profit and they already have over hundred of series. *Also, they begin to sell its products online with Alibaba.* I think this is a huge move for the firm in terms of its business model. In the long run, they may cut off some of the stores because more and more people prefer to buy things online. *The firm raises the price of high –priced baijiu by 10%-15%.* I believe there are some people who don't really care about the price, and the group is trying to target on those people and increase the revenue.

Firm #4:

Shenzhen Rapoo Technology Co., Ltd, mainly engages in wireless peripheral technology, supplies domestic and foreign consumers with wireless peripheral products of high quality and with high performance. Rapoo has been consecutively considered as No. 1 in the wireless mouse and keyboard market in China because of its high-quality industrial design and quality, which enables it to be the industry-leading supplier.

Founded in 2002, Rapoo possesses huge research and development capacities and first-class producing management after over 10-year development. Rapoo attracts lots of international consumers. In 2007, as its own brand-Rapoo was introduced, the domestic market strategy was carried out. Sticking to the management philosophy of paying attention to scientific, technological and people-based creation and satisfying the needs of customers, Rapoo has provided the advanced after-sales services and made full use of its multiple channels, and established a close and harmonious relationship with employees, suppliers, stockholders, partners and consumers. At present, as it provides high-quality products and gradually expands its global markets, the company has been praised by a great number of media at home and abroad and won almost 100 rewards.

Rapoo produced mobile assistant handles for a very popular game, King of Glory. Rapoo also corporates with other companies. The news and stock for Tencent might affect the stock price for Rapoo.

Firm #5:

Midea was founded in 1968, which is now a publicly listed company. It ranked in Fortune 500 in July 2016, which provides a great variety of home appliances. Headquartered in south China, it engages in lighting, floor care, water appliances, large cooking appliance, air treatment, laundry, large and small kitchen appliances as well as air treatment. As a global company, Midea has more than 100,000 employees and operates in over 200 countries and regions. With 260 logistics centers and 21 production facilities all over the world, the company has developed for almost 50 years with annual global income of over 22 billion US dollars.

As the biggest manufacturer of main appliance in the world, Midea is the most famous brand of air-coolers, rice cookers, air-treatment products and kettles. Annually, Midea obtained more than 40 design awards globally, for example, Good Design Award, reddot and iF.

Recently, Midea has signed an agreement with Electrolux to establish a long-term strategic joint venture in China to promote the German brand AEG appliances, the firm that made the world's first automatic washing machines in 1950, for Chinese customers. With this corporation, more Chinese customers will know the German brand and Midea's reputation will spread to Germany too.

Firm #6:

Guangzhou Zhujiang Brewery Co., Ltd. is a large state-owned enterprise with beer industry as the main body and related industries as auxiliary. It was established and put into operation in 1985 and beer production capacity increases from the initial 50,000 tons to the current 2.3 million tons. The company is a top-ten enterprise in this industry, a national environment-friendly enterprise and a new and high technology enterprise in Guangdong Province.

The consumption indicators, circular economy and cleaner production of this company are industry-leading at home and abroad. It has achieved "smoke free" emissions, sewage after treatment can breed fish and the resulting biogas has been used for power generation. It is the first enterprise, which has passed the cleaner in Guangzhou and in the beer industry of China and has won the highest honor in the field of environmental protection - *The National Environment-Friendly Enterprise*.

Recently, Zhujiang Brewery Company decides to slow down their business, and focus on enterprise culture and creativity. The company may have some problems with its business model, so they decide to focus on developing culture.

Spreadsheet:

1		Tianshan	CRRC	Wuliangye	Rapoo	Midea	Zhujiang
2	Market Cap(B)	12.7	272.1	210.1	5.88	281.8	12.3
3	Market Cap in USD	1.88	40.31	31.13	0.87	41.75	1.82
4	Beta	1.11	1.57	0.6	-0.02	0.83	0.7
5	Growth Revenue	-0.90%	-5.04%	13.32%	14.81%	14.71%	0.74%
6	Growth Earning	102.84%	-1.33%	10.08%	100.45%	16.42%	30.95%
7	PE ratio	-23.68	62.97	14.62	129.51	16.3	254.31
8	M/B=PB ratio	2.16	2.46	4.45	4.99	4.79	1.59
9	Dividend yield	11.35%	1.48%	1.45%	1.69%	1.84%	0.45%
10	PEG ratio	-23.03	1.5	0.62	31.21	1.48	21.28
11	200 Day M.A.	12.68	10.15	44.62	26.79	34.9	12.68
12	Stock price	13.02	10.13	56.01	21.13	40.79	11.15
13	CA/CL=current ratio	0.44	1.27	3.85	6.27	1.09	3.97
14	Quick ratio	0.34	0.91	3.25	5.69	0.93	3.6
15	TD/TE	1.82	1.5	0.31	0.12	2.04	0.35
16	TD/TA	0.65	0.6	0.23	0.11	0.67	0.26
17	Profit Margin	-27.35%	4.46%	36.80%	6.59%	7.81%	2.09%
18	ROE	-2.29%	1.03%	7.35%	0.97%	6.87%	0.21%
19	ROA	-0.27%	0.64%	7.28%	0.58%	2.73%	0.10%
20	Dupont EQ	(0.02%*25.64	(0.05%*70.6	(0.28%*42.	(0.03%*41.	(0.09%*106.	(0.03%*54.
21	FA T/O ratio	0.34	4.13	4.55	1.97	7.99	0.95
22	TA T/O ratio	0.03	0.1	0.16	0.11	0.3	0.08

Analyze Column 1:

The market cap for the stock of Tianshan Cement Company is 1.88 billion dollars, which is a small cap. This stock has a higher market risk than other companies in the manufacturing industry because its beta is slightly above the average. Since this firm is cutting off the cost of production, there's a very big range between its growth rate on revenue and growth rate on earning, -0.09% and 102.84% respectively.

From a value investor's point of view, PB ratio looks good and debt ratio is okay. In addition, a PEG ratio of -23.03 is really attractive to the conservative growth investors. However, there are something need to be concerned, such as its dividend yield and current ratio. A dividend yield of 11.35% is not sustainable because is too high, it might be the dividend yield for the most recent quarter but not annual. And the current ratio is a little bit low. Importantly, the profit margin is a negative number, which means this company is losing money since the beginning of the year. The asset turnover ratio is relatively low, which indicates that they are not using their fixed asset productively. Plus, the expected return is 13% and the current price is 12.7RMB. Conservative growth investors seem really like this stock, value investors might want to wait until its profits turn positive, aggressive growth investors would not choose this one since the price is lower than the 200-Day Moving Average, and a typical asset pricing person would not want to invest in this stock because the return on equity is much lower than the expected return.

Analyze Column 2:

The market cap for the stock for CRRC is 40.3 billion dollars, which a big cap. This stock has a very high beta of 1.57 because it's transportation related, so the market risk is a little bit high and the firm specific risk in about average. Its negative growth rate on revenue and negative growth rate on earning indicate that this year is not a profitable year for transportation industry. This firm has a safe and reasonable dividend yield and good current ratio and quick ratio.

However, a value investor might consider this stock because of its attractive PB ratio. Even though the debt ratio is a little high, it is not a problem in this industry. Plus, a PEG ratio of 1.5 looks really nice for conservative growth investors. Based on the profit margin, this company is not doing extremely well but it's still making profit, which might due to the whole environment of railroad industry. The company is using its fixed asset extremely productively because it has an asset turnover ratio of 4.13. Its ROA is low but it's about average. The expected return on equity is 15% and the current price is 10 yuan. Conservative growth investors and some value investors would invest in this stock, aggressive growth investors would not choose this one since the price is lower than the 200-Day Moving Average, and a typical asset pricing person would not want to invest in this stock either.

Analyze Column 3:

The market cap for the stock for Wuliangye is 31.13 billion dollars, which is a mid-cap. This stock has a really low beta due to the liquor industry, so the market risk is pretty low. There's a pretty good growth rate on revenue and growth rate on earning, 13.32% and 10.08% respectively. However, the debt ratio is not that high for this stock, which indicates that there's a low risk. The high current ratio shows that it is very liquid and they have a lot of current asset.

However, a PE ratio of 14.62 seems very high for value investors and the PE ratio is not attractive enough for value investors, but the PEG ratio is reasonable for conservative growth investors. The dividend yield is also not a compelling reason for value investors to buy this stock. The price of the stock is much higher than 200-Day Moving Average, so it is attractive to aggressive growth investors. Asset pricing investors wouldn't buy this stock because the expected return is much higher than the return on equity. Conservative growth investors, and aggressive growth investors are interested in this stock, but value investors wouldn't touch it because of its high PE ratio.

Analyze Column 4:

The market cap for the stock for Rapoo is 0.87 billion dollars, which is a small cap. Surprisingly, the beta for this firm is negative and about near zero, so this company doesn't really have a beta. It wouldn't be affected by the economy and the stock market, but it stock price might related to other companies that it has partnerships with. The big range between the growth rate on revenue and the growth rate on earning tell us that the firm is cutting off the cost of production. The debt ratios are very low, which means the firm specific risk is low.

Also, the PE ratio is not attractive to the value investors and the PEG ratio is too high for conservative growth investors. In terms of the PE ratio, it's way too high for value investors because it's already over a hundred. That would be too expensive for them and the PB ratio is also a little bit high, so a value investor wouldn't think about this stock. Comparing with the 20-Day Moving Average, the price is 15yuan higher than that, which looks exceedingly well for aggressive growth investors. The expected return is 8.8%. So, conservative growth investors, value investors and fundamental growth investors don't want to invest in this one, but aggressive growth investors would think this is a buy.

Analyze Column 5:

The market cap for the stock for Midea is 41.75 billion dollars, which is a big cap. A beta of 0.83 is relatively low compared with the other stocks in this industry. So this firm has a relatively low market risk. In addition, the growth rate on revenue and the growth rate on earning are very compelling to investors because they are all positive and two-digit number. Current ratio and quick ratio all look pretty common and debt ratios look reasonable due to factories. They also have many factories and businesses oversea.

PB ratio is a little high for value investor; they might want to wait for the price to come down a little bit. For conservative growth investors, the PEG ratio, which is under 2, is very attractive. The profit margin shows that the company is doing very well, producing and selling more products than last year. In addition, the price is much higher than 200-Day Moving Average, which is 40.6 yuan. From the CAPM equation, the expected return should be 8.5%. So, conservative growth investors and aggressive growth investors seem really like this stock, value investors and asset pricing investors don't want to touch it because the ROE is 6.87%, which is lower than the expected return.

Analyze Column 6:

The market cap for the stock for Zhujiang is 1.82 billion dollars, which is a small-cap. This firm has a really low beta because it's in the beer industry; the economy doesn't really affect people's desire to drink beer, so the market risk is pretty low. The growth rate on earning is way higher than the growth rate on revenue, so the firm is trying to cut off the cost because some of their brands are not profitable.

In addition, the PE ratio looks attractive to value investors but a very high PE ratio over 250 doesn't look good for them. However, it has a compelling debt ratio, which make some value investors want to buy it. Plus, the price is underneath the 200-Day Moving Average; so aggressive growth investors wouldn't touch it. For conservative growth investors, peg ratio is too high for them. From a fundamental growth investor's point of view, the expected return is 72%, which is way higher than its return on equity; they don't want to touch this stock either.

Summary:

1. Xinjiang Tianshan Cement Co., Ltd

I would put 60% of my money in this stock because of its low PE ratio and nice PB ratio. Compared with the other five stocks', the PE ratio for Tianshan is the lowest, while the others are all really high and over 10. Plus, a high dividend yield of 11.35% is really attractive, I wouldn't worry about its high dividend yield due to the fact that their earning is two times more than its dividend; they have enough money to pay for the dividend. Although the PE ratio is a negative, it's still under 10 and I care more about PB ratio. They might go bankrupt because of the low current ratio, but I believe the Chinese government would like to support them. This company has very attractive PB ratio and dividend yield, so I probably would put half of my money in this stock.

2. CRRC Corporation Limited

CRRC has a pretty good PB ratio around 2.5, but I wouldn't buy it because the PE ratio is almost 63, which is over 2. It is way too high than the average. However, they have a really pleasing fixed asset turnover ratio, which means they have a relative big volume, and their profit margin is also higher than the average. Although they have satisfying profit margin and risks, I wouldn't invest in this one because of its PE ratio and PB ratio.

3. Wuliangye Group Co., Ltd

Wuliangye Group Company is not attractive enough for me because of the high PE ratio and a high PB ratio of 4.5. Also, the dividend yield is not a compelling reason for me to buy this one. However, its profit margin is the highest in the six stocks and it is much higher than other profit margins. It might be related to the industry, and the company is doing really well in the industry. However, I wouldn't buy this stock because its data doesn't fulfill my requirement.

4. Shenzhen Rapoo Technology Co., Ltd

Rapoo Technology Company has a PE ratio of 129.51, which is too expensive for me to buy it. Their earning might goes down and the stock price still stays the same. PB ratio doesn't attract me neither. It's not worthy to buy it, so I wouldn't consider to buy Rapoo's stock, even though they have exceptional debt ratios.

5. Midea Group Co., Ltd

Midea has a lot of business with foreign countries and they are still expanding their business. They have a high debt ratio, but the risk is not very high due to a lot of factories. Although this company has very high and sustainable grow rates, a PE ratio of 16 is very high in this industry. It has the second highest PB ratio in all the six stocks. The dividend yield is not attractive to me but it's about average, so there isn't a compelling reason for me to invest in it.

6. Guangzhou Zhujiang Brewery Co., Ltd

I would like to buy this stock because of its superior PB ratio. It has the best PB ratio for me. The very high PE ratio doesn't look very good, however, I would still consider this one as a valuable stock. The debt ratios all look normal and reasonable. But it seems like they are not good at managing assets due to a low fixed asset turnover ratio. Overall, I would want to buy this one for 40% of my money because its dividend yield and growth rate are not as compelling as Tianshan Cement Company's.

Sector: Manufacturing

Xinjiang Tianshan Cement Co., Ltd 000877 --- BUY (1, 60%)

CRRC Corporation Limited 601766 --- Sell

Wuliangye Group Co., Ltd 000858 --- Sell

Shenzhen Rapoo Technology Co., Ltd 002577 --- Sell

Midea Group Co., Ltd 000333 --- Sell

Guangzhou Zhujiang Brewery Co., Ltd 002461 --- BUY (2, 40%)

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Physics engine--How to make simulations more realistic

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1. INTRODUCTION

1.1 Physics engine

In games and other computer programs, we usually need to simulate the situation of real world. To simulate the situation, physics laws are required. A simulation includes physics in many aspects, such as dynamics, fluids, optical and so on [3]. This being the case, in order to make the objects in games or projects move in a reasonable way, we need to include some special programs or pieces of codes to simulate such physics systems which sometimes have the same principle in many situations.

The main purpose of computer graphics is to simulate the world graphically. In order to make the work more realistic, numerous physics laws are required to be taken into account. However, creating models every time is extremely time-consuming and mistakes may occur. This being the case, the same parts of the games are reused again and again because of the similarity of the laws applied are exerted. These programs or codes are called physics engines. Some of these engines offer high-precision simulations while others offer real-time simulations [1][2]. Also, physics engine would render it possible for programmers to make high quality scenes with little effort [2].

1.2 Problems remaining

There are, though, some problems remaining in the domain of physics engines. Sometimes, physics engine is not general enough to simulate certain physics systems since the application of physics laws largely differs from systems. Also, the processing power is being wasted when the engine makes no assumptions about the object simulated [2] and merely to make the system capable of being applied into various systems. Furthermore, occasionally, the properties of the object we simulate may be unknown to the developers, which can be problematic since the selection of wrong parameter can make the scene unreal [4].

1.3 Overall structure

In this paper, the basic concepts of physics engine are introduced. Different kinds of physics engine were discussed in detail and specific examples of the development of each kind is also described. Also, applications thereof and solutions for the problems are given. An example of applying physics laws into games is also described.

2. Background-Basic Newtonian Physics

In order to gain a better understanding about the inner structure and principle work of physics engine, it is important to have some knowledge of physics. In this part, some basic physics ideas and theories are introduced. After this, physics engine is discussed in detail.

Newton's three laws of motion are practical yet important in designing physics engine because it is the basic block of the physics we encounter every day. The Frist law states that the motion of an object would not change without external force or torque exerting on it. The second law mentions that the rate of change of velocity is proportional to the external force exerted on the object. The normal force is also very important because it constantly demonstrates the Newton's third law—interactions between objects are always with equal magnitude and opposite direction. Furthermore, friction is very important when the movement of an object is simulated since almost every object people encounter experiences friction.

3. History and Development

There are two kinds of physics engines; the real-time engine which mainly used in games, and high-precision engine [2] which mainly used in scientific simulations. As soon as the physics engine appears, the investigation and modification of it has never stopped.

3.1 High precision physics engines

As for the high-precision physics engine, commonly used in scientific simulations and animation, can be divided into the rigid body system, soft body system and mass-aggregation system [2].

3.1.1 Rigid Body System

The rigid body system, as showing in Fig. 2, is the system made up of rigid bodies. Rigid bodies are objects that undergo no deformation experiencing external forces. Non-penetration is another restraint that can be used to set up functions for the engine. Also, developers of the physics engine need to take dynamics for rigid bodies into account since rotation is needed to be considered in this situation. This can be quite complicated due to the difficulty of defining different forces and damping systems. In order to approximate the calculation, the programmers usually use the approach of simulating rigid body using different models for simulating the appearance and the collision model [3]. Sometimes, this would lead to unwanted effects of having objects penetrates each other since these two models are separated.

The above domain of physics engine has great application not only in science but also in animation. The characters in early animations were mostly simulated by rigid bodies. Ever since 1991, the studies about applying physics into animation has been prosperous, with efforts such as applying algorithms to real programs that can simulate real physics phenomenon [8], while others are trying to do some difficult tasks such as constructing facial models using physics-based models [10]. After that, improvements and adjustments were done by changing the basic approaches of building physics engine. In 1998, Grzeszczuk, Radek, Demetri Terzopoulos, and Geoffrey Hinton tried to find alternatives for numerical simulation with neural emulator which dramatically increased the efficiency of simulation [11].

3.1.2 Soft Body System

Soft bodies, as shown in Figure 3, are objects that undergo deformation with external forces. Soft body can be analogized to the system of rigid bodies connected by springs where the ease of deformation is defined by the strength of the spring [3]. This approach allows the object deforms while also makes it possible for the developer to customize the ease of deformation.

The study of soft body mainly lies in the domain of simulation for clothes and numerous models were made to better simulate the clothes. A possible approach [12] is proposed by Michel Carignanl, Ying Yang, Nadia Magnenat Thalmann, and Daniel Thalmann that the clothes can be built in two dimensions and then being attached to three-dimension characters. Further investigations were done on this part and procedures are established that the dressing gradually being rendered and smoothened while the application of physics laws upon simulating process increased the quality of simulation [13].

3.1.3 Mass-aggregated System

The third part of the scientific engine is the mass aggregation system. This engine simulates the objects using tiny spheres, as shown on Figure 4, which experiences force independently and are mainly used to simulate fluids. In this kind of engine, the rotation is not taken into account since the spheres are too small that their rotation can be ignored [15]. The engine of mass aggregation can be used for simulating fluids and one example is the simulation of boiling water, which contains countless tiny particles acting actively with each other [14]. In figure 4, the cube is made up with half a million of little spheres and the simulation of their movements were carried out. The simulation of the large number of spheres requires a large number of computation, which makes simulating fluids and flames the most difficult among the simulations.

3.2 Real-time engine

The other part of physics engine can be categorized as real-time physics engine, which is mainly used for games to create realistic scenes and give players immerse effects [3].

3.2.1 2D Games

In the very first stage of game developing history, most games are 2D and physics engines are applied to these 2D games. As shown in Fig. 5, the game engine only considers the 2D situations while all of the physics phenomena are in two dimensions [17]. The use of this 2D physics engine can be dated all the way to Pong in 1972, which is a simple collision based game that players barely recognize the presence of physics engine [18].

3.2.2 3D Games

Nowadays, more game engines are designed for three dimension games. Along with the advancement in both physics and computer graphics, more physics laws are taken into account and more special effects are added to the games themselves. For example, in 1991, the game Scorched Earth included gravity in the game to predict the trajectories. Also, particle systems are included to simulate explosions and flames. The release of Half-life 2 is regarded as a great change in the physics simulations. The realistic effects it gives includes allowing players to pick up things and actually through things at other players, which is really advanced at that time [18].

4. Enabling techniques

4.1 Programming languages available

Many programing languages are suitable and capable of implementing physics laws into programs. The common programing languages used are java, C, C++, C# and HTML [20]. The implementing process is very simple and would lead to realistic effects.

4.2 Application of Physics Laws

The example of a gravity game is used to explain this idea. In the example, the programming language java is used.

In this case, a simple gravity game is made. Example cited from the book *Physics for game developer* [20]. In the interface of the game, there are several buttons on the left and a window showing the current status of the game on the right. The goal of the game is to drop the ball into the box, whereas the ball drops with a constant acceleration (free fall) and the box moves with constant velocity.

The first step is to initialize the ball, box and the user

interface. Next, the timer object is created to set the time interval to refresh the position of ball and box every 0.05 seconds. This timer object is very important because it slows down the process of simulation and display. If the timer project is not applied, the final position of the ball would be computed in a fraction of seconds and the path thereof would be too fast for users to see. Thirdly, the gravitational acceleration of the game is set. The top left box offers several options of the planet of the game where the gravitational acceleration is different. After setting up the program, when the “start” button is pressed, the function that describes the position of box is called and the box would start to move rightward. Then, as the “drop” button is pressed, the function that describes the movement of the ball is called and the ball will start to move. After the ball reaching the ground, the program will verify the position of the ball and the box to see if the ball falls into the box.
The following is part of the codes of the program, where physics laws were implemented.

```
//    Update the time and compute the new position
        //    of the box and ball.
        double timeIncrement = 0.05;
        time += timeIncrement;
        boxLocation = boxVelocity*time;
        if ( dropped ) {
           dropTime += timeIncrement;
           ballAltitude =
               initialAltitude                                  -
0.5*g*dropTime*dropTime;
}
```

In the code above is the specific part where the laws of physics are applied. There are two kinds of motion in this game: linear movement with constant speed(box) and movement with constant acceleration(ball). In the code “boxLocation = boxVelocity*time”, we can see the formula of object moving with constant velocity, which is that displacement is equal to velocity multiplies by time. Furthermore, the ball altitude is equal to the initial altitude minus the displacement of the object. The displacement of the ball is equal to a half of the acceleration multiplies time squared.

4.3 Increase speed

In many situations, due to the requirement of processing speed and more interactive game experience, the speed is urgently required to be increased.
In the article [21], Jue-min Lu, Jin-chun Piao, and Shin-dug Kim approaches the 3D simulation of fluids on mobile devices but the outcome is not that optimal. In this situation, they proposed several means to renovate their simulations. Firstly, they used the parallel computing method to increase the speed of mathematical computation. Next, they simplified the algorithm of the program. Finally, they changed their rendering method.
Also, similar approaches such as skipping the station object also renders it possible for programmers to speed up their computations. In many situation, the computation processing is wasted because computers keep calculating the motion of stationary objects. For example, for a book rest on a table, it experiences gravity and normal force. In this situation, since the gravity is equal to the normal force, there is no need to keep calculating the state of the object. So it is reasonable for computer to temporarily ignore these objects and they calculate them after they are experiencing forces [16].
Some other means including the proper utilization of GPU (Graphic processing units) and CPU (central processing unit). Joselli, Mark, te al. made a physics engine that would distribute the work automatically between CPU and GPU [23]. This approach renders it possible to save the processing power of CPU and allow it to do other computations.

5. Applications of physics engines

5.1 Medical

Physics engines, especially real-time engines, are prevalent in the training process of doctors. When the doctors are trained to do surgeries, it is dangerous yet impossible to allow them to practice on live person. Under this condition, computer simulated surgical training has been gaining more and more attention. As shown by Figure 7, physics engine renders it possible for programmers to make highly realistic yet interactive programs for doctors, which is also cheap to operate [24]. The basic components of physics engine in surgical simulator is shown in Figure 8. Specifically, Kup-Sze Choi & Sze-Ho Chan & Wai-Man Pang did the work that specifically confirms that the presence of physics engine increases the ease to build medical training programs [31].
Also, it is common to use computer simulations about the microscopic activities inside the cells. Simulating the protein activities would provide a platform to better study the influence of the behavior of proteins in a micro-level. Physics engines are again needed to realize it. The collision and motion of different objects are simulated to better approximate the migration of cells. Some other principles are applied to the simulation, too. Such as fluid, dynamics, surfaces, chemical bonds and interactions between proteins. This simulation would help researchers to gain a more profound understanding about the protein activities in the cell, allowing further investigation and development to be achieved [25].

5.2 Scientific

In many situations, certain natural phenomenon is too rare to be seen that scientific studies are difficult to be carried out. Through simulating natural phenomenon, such as fluids or lightening can be virtually challenging, many scientists still strive for these approaches.
For example, ball lightening is a rarely occurred natural phenomenon. It is a complicated natural phenomenon which conditions for it to occur is extreme and even difficult to achieve in laboratories. In this way, being able to simulate the phenomenon on computer is very helpful. To simulate the phenomenon and to achieve an optimum effect, physics engines are introduced [26]. Figure 10 is the simulation of ball lightening in the kitchen. The yellow sphere in the picture is the ball lightening and it undergoes deformation because of the pressure difference between outside and inside of the room. The deformation will be impossible to detect through recordings of the lightening.

5.3 Entertainment

The application of physics engine in entertainment can be divided into two parts: game-developing and film-making.

5.3.1 Game-developing

The application of physics engine in games is prevalent and vital. In order to attract more consumers, game developers strive to improve the experience of the game, and the most important part of it is creating the feeling of immersion.
In basketball or football games, certain physics engine is needed to compute the trajectories of the ball [22] because the most important part of the whole game is the ball. When the users are playing the game, most of their attention are on the ball. If the trajectory of the ball does not follow the law of physics, which means that it moves in an abnormal way, the users are highly likely to be unsatisfied with the game. Also, in the domain of augment reality and virtual reality games, it is important to incorporate the physics laws therein.

Also, better simulating the cloth of characters in games is another domain that game developers strives to do. Before the application of physics engine, the movement of clothes were mainly simulated by the motion captured by camera which are later converted to formulas. However, this process is time consuming and cannot be applied to various situations. As seen from Figure 9, a dress of a character in the game is simulated. The left dress is simulated using physics formula and the right one is simulated through motion capture. The simulation on the left is more realistic because its movement is more random. Also, the application of physics engine would save the computation for computer since less equations are required to apply [13].

5.3.2 Film making

Nowadays, many films add special effects after the shots were taken. Though some scenes do not obey the laws of physics, most of them, in order to create the feeling of immersion, still have to take physics laws into account. Also, most animations require the scene to be like what people are seeing in reality. In this situation, the utilization of physics laws in the modeling is urgently needed [19].
However, some natural phenomena are difficult to simulate because of their complexity. In many films, the scene with a large amount of water is usually a tough part to deal with [27]. There have been countless studies in this domain while the simulation of a large amount of water remains challenging. With the application of physics, this can be achieved and a realistic simulation is achieved [27]. As shown in Figure 12, a large amount of water flowing through the building is simulated using the computer and the realistic scene is otherwise impossible to be achieved without physics engine.

5.4 Education

Along with the constant and rapid development in the domain of physics engine, program developers are seeking for ways to implement physics engine into ordinary classes. In physics classes, teachers used to describe the phenomenon and write the formula on the board, while few teachers would bring equipment to carry out experiments in the classroom. However, only limited types of experiments can be carried out in the classroom while the reactions are sometimes time consuming and dangerous. In this way, it is a better approach to use computer models to simulate the scenes in real world [32]. In Figure 13, certain physics systems are simulated in virtual reality. Different forces and properties of the objects in the system is labeled and the overall simulation is easy to comprehend.

5.5 Public Security

Physics engine has the application in a more serious part, which is public security. Proper implementation of physics engine will improve the efficiency of the designing process of the city.
Natural catastrophes are unpredictable and detrimental. Earthquake is an important example that frequently occurs in certain cities. Designing a building that is resistant to earthquake becomes very important. Without physics engine and proper simulations, the tests of the feasibility of the design

of buildings are carried out in real-scale models, which is expensive and inconvenient. Also, whenever a new design is proposed, a model is required to be made. This being the case, the application of computer simulation in this domain is urgently called for [30]. In Figure 14, the process of simulating the architecture undergoes earthquake is given. In (a), the buildings are simulated as mass points, then the rigid-body engine is applied, whereas the final result is displayed in (c).

Designing the arrangements of districts of urban area in important because it directly relates to the safety of individuals living in the district. Sometimes a better arrangement of different districts in the city can save time to rescue people in danger. In study [29] carried out by Jijun Wang, Michael Lewis and Jeffrey Gennari, they proposed a possible model that simulates the urban situations, therefore tests the feasibility of the designs of urban arrangements.

6. Conclusion

Physics engine, pieces of code or programs, makes up vital part in simulation of real world.

Dividing by the processing speed, the physics engines can be categorized into real-time engines and high-precision engines. Real-time engines are usually used in interactive programs while high-precision engines are used in scientific simulations and film making. Also, divided by the system it simulates, physics engine can be categorized into mass aggregation system, rigid-body system and soft-body system. Different physics laws are implemented in different engines.

Applying physics laws to physics engine not only adds credit to the scenes simulating, but also decrease the time and effort required to develop the program. The process of applying physics laws therein is simple and helpful. To better cope with the rapid development of programming, the speed of the physics engine is required to be increased.

Physics engine has many applications. Combined with augmented reality and virtual reality, physics engine can be applied into medical trainings, education, entertainment, scientific simulation and increasing public security.

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On The Shift of Ideas of Sovereignty and Their Historical Context

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The concept of modern state is rooted in the characteristics of modern society. Yet this modern state theory, which was not truly elaborated until the French Revolution in 1789, was relatively new compared to Hobbes' and Bodin's theory of the sovereign state. One of the most pronounced distinctions between these two ideologies is the way they conceive the sovereignty, an artificial personality of the state for the former yet a collective character from subjects for the former. However, such a transition is not merely ideological; the period from 17^{th} to 18^{th} century saw the most dramatic political and social changes in Europe, and with these changes were the change of the ideology of sovereignty: Hobbes' absolute sovereign theory was born during the English civil war, and the modern nation-state and modern concept of sovereignty was shaped with the rise and fall of the French absolutism. As Marx would argue, "If in all ideology men and their circumstances appear upside-down as in a camera obscura, this phenomenon arises just as much from their historical life-process as the inversion of objects on the retina does from their physical life-process.", the carriers of the sovereignty might provide us an insight into the particular social settings in which two theories developed. The question then becomes: does the sovereignty, from the sole "artificial personality" to the "collective character", reflect the shift of political or social power? If it does, in what ways? The aim here is to identify the historical backgrounds that contribute to the creation of two sovereign theories, and how these differences in historical context are reflected in the political thought. To address it, the essay will discuss the text of representative works of Hobbes, and Rousseau, and investigate the historical background upon which they wrote their works. A careful analysis would be employed about the English civil war and the building of French monarchy on both political, social and economic context.

To understand the social context of Hobbes's theory, we must not only focus on the English civil war, during which Hobbes wrote his work, but also beyond it, on the rise of absolutism, the closest sample to the idea that "may reduce all their wills unto one will to submit their wills, every one to his will, and their judgements to his judgement." The attempts of feudalism to parcelize sovereignty began as early as 13th century, together with the autonomous towns and autarkic agriculture prevailed in the western part of the continent. This constant unrest between the parcelized and unified sovereignty is addressed by later scholars and writers, eventually featuring the account of absolute sovereignty by Bodin and Hobbes. Indeed, the monarchies had their reason to struggle: up until the English civil war, local resistance to the regime had an immediate impact on the government's ability to collect taxes, despite the intimidating presence of troops in the shires. In this case, the problem of the feudal ownership of land for absolute sovereign is its growing independent power, namely the taxation. Therefore, it is not surprising that Hobbes emphasizes on the obedience and protection directly under the office of sovereignty, which, far from obedience and protection under the feudal land owners, unifies individuals and their covenant under one authority. And opposite to the feudal privatization of public power, the sovereign can be considered as the publicized practice of private covenants, conferred not form up(monarch) to down(land lords) and then to peasants, but from down to up, by the consent of the people assembled; thereafter, while the privatization has its bounds, the absolute sovereign is united and unlimited. In a sense, the transition from parcelized sovereignty to inalienable and indivisible sovereignty marks the transition from the protection of the feudal landlords to the direct protection of the subjects by their monarch direct from monarch to its subjects. The unity of Hobbes' sovereignty reflects the idea of the centralized monarch and the centralized power.

But did the ground of emerging centralization alone contribute to the idea of the absolute sovereign? Is Hobbes's theory merely an indication of the tendency of centralization, or the reflection of the thirst for a unified sovereignty in response to the contemporary political and social context? The answers to the questions would be found in a careful examination of English civil war. As historians would argue, Hobbes distrusts the fragmentary power for parties constantly conflicting each's intend. And it is such division accounting for his account that sovereignty consolidates many wills to one, "otherwise the appealing to the force would again become the decisive factor in the decision, and thus individuals are back to the state of war." The Parliament itself was a collection of all voices all over the country, yet itself was unable to pronounce any coherent voices. The House of Common, for instance, if finding their proposal disapproved, would gather to the Parliament and air their proposal until it got passed. For Hobbes, such a kind political dispute revealed its inability to provide peace and safety. With Parliament's return to the political scene in 1624-1629 and again in 1640-1641 in the wake of renewed external warfare, these tensions soon exploded into civil war. The war revealed struggles for the ruling power and responsibility between the monarch's and feudal land lord's, and for the right to make a decision between the king and the Parliament. In this case when Hobbes talks about absolute sovereignty, what he wanted to address is the belonging of power; To discuss where the power comes from, Hobbes refers to the covenant among individuals, and to identify where the power should go, he conceives the absolute sovereignty. And only through the absolute sovereignty, the one above all, can the questions of belonging be finally determined. The essence of the absolutist state is to settle the procession of power and rights, as embodied in John Barclay: "depriving the embattled parties of their rights and transferring those right—along with all responsibility—to the sovereign alone."

It might be the case that absolute sovereignty was created to avoid the war bringing about domestic unrest and unsafety. However, a deep reason behind this dispute was the incoherence between religion and politics. For Hobbes, the greed and jealousy compose the basis of the state of war, but as for the division and struggle of power, the contradiction between the secular ruler and the church play the major role. And it is such a dispute that essentially lead to the split of sovereignty. Hobbes saw the civil war a battle between two prestiges— what he called the "enthusiastic reader of the Bible" and the "enthusiastic reader of Plutarch"—the prestige of religion and of politics. The church, by definition, has a contradictory social role rooted in its doctrine: it is supposed to lead men's way to spiritual salvation, yet to achieve this duty it must constantly exercise a vigilance to avoid any acts that endangered the salvation, which create another authority other than the king in political and social organization. In the 16th century, the traditional order had disintegrated. As a result of the split in ecclesiastical unity, the entire social order became unhinged. Old ties and loyalties no longer existed. The church, a spiritual guide invading the social and political sphere, exerted its remarkable influence in Hobbes's era by causing division and unrest within the community, and catalyst the need of forming an absolute sovereignty. It was under such a circumstance, when the unrest and unsafety of a divided society is made so tangible by the civil war, that Hobbes developed his view: that there shall be one figure of sovereignty above both secular and theocratic power, the only shell great enough, to accommodate the safety, and to eliminate the uncertain attribution of ruling power.

But the dominant ecclesiastical influence had come to its decline the time the modern theory of sovereignty was invented. The split of power and the unclear attribution of sovereign power had no longer been the issue, partly blessed with the build of absolutism. To begin with, the carrier of the sovereignty did change during this period. In the Declaration of Rights of Men and Citizens Article 3 is this word: "The nation is essentially the source of all sovereignty; nor can any individual, or any body of men, be entitled to any authority which is not derived from it." By the time the Declaration was drafted, people had already reached a clear consensus that sovereign power is intimately tied to the nation, no matter in the form an artificial personality or the collective characteristics. What matters now, therefore, is not where the sovereignty should belong to, but in what way it shall be carried. It was under such a circumstance that popular sovereignty called in to question of the legitimacy of monarchs in practicing the sovereign power.

What stimulated the popular sovereignty thought to cast doubt in this specific period? During this process, the major impulse would be the increasing significance of the financial problem, which finally converted into the political and social issue. The fiscal inability is a universal specter constantly addressed in many different systems, not only concerned with the old regime. Although various governments succeeded in substantially increasing the state's military and administrative capacities, they were unable to solve the perennial problem of finance. In France, the mounting financial burdens, together with the external pressure lent new urgency to the task of extending royal power over regional and local lords as well as creating strong incentives for the administration of royal financial resources. Nonetheless this administration, once again, proved its ineffectiveness in checking such a tendency. It indeed turned out that it had become a kind of parasite, extracting resources from the productive sectors of the nation and redistributing them among a small political class with access to power, offices, and contracts. And thereby people began to doubt the legitimacy of the way of taxing. Present attack on the private property reveals monarch's failure on duty of protection, invoking the thirst for liberty. Looking at the historical documents and letters, a universal satisfaction towards the bureaucrats is pronounced during the period of absolutism:

The form by which these taxes are imposed is also as contrary to your wishes as it is to general laws and to our charter. Unauthorized administrator's personal judgement becomes the basis of the tax. Their official success will complete the loss of our liberty…

But why this time? For the burden of taxation persist in all regime, all period, and all system, why the reaction here finally manage to become a preserving idea and leads to rebellion? Part of the reason is that at this time peasants and farmers eventually procure the social significance. To overcome the increasing pronounced financial problem, farming, the monarchy's largest source of ordinary revenue, become more and more consequential. It follows that the farmers soon became the government's primary source of short-term credit, and, blessed with such an indispensable position, managed to acquire social power. It was this vital position regarding the finance and taxation laid a heavy burden on people, but meanwhile also render them the possibility of social and political participation, which nullify the attempts to press the conscience within individual’s mind. One way that individuals are able to gain and apply the conscience in public is through the ownership of lands. Financial burdens, including tithes, inalienable ground-rents, interminable rent-charges and mutation fines were indeed heavy, but had people not been the landholders, they would not react so severely to those burdens, and had they stilled been governed by the feudal seigniors, they would deem their burden, the remnant of the feudal rights, as the natural consequence of the constitution of the country.

Through the various centralized attempts by Louis XIV and his successors, nobility gradually lost their political significance. The taxation contributes vitally in diminishing importance of nobility and marks the diminishing significance of power. To set the supreme source of sovereignty, monarchs emphasize the universality, but in practice, this universality not only unified the absolutism but creating for the ruling class its own specter. Under a universal tax system, citizens contribute to the crown through paying tax, thus enhancing their character as the citizen while providing king bountiful resources. Thus the social barrier was crossed, and the power no longer determines the social rank. Rousseau, based on this idea, instead, proposes that wealth shall become the decisive factor of social rank, and also of the magnitude of political and social participation. Rousseau’s account showed a tendency that the significance of power is diminished by the significance of wealth, While Rousseau agree that conflicts would be generated when every member is able to conduct sovereign acts, he proposes the popular sovereignty as a system in which the individual yields others no rights over himself, but gaining “an equivalent for everything he loses, and an increase of force for the preservation of what he has,” above which is the supreme direction of the general will that “receive each member as an indivisible part of the whole.” This is where the meaning of wealth becomes unique to Rousseau—it is the norm that makes people dependent within this general, and also the decisive factor in deciding the ends of sovereign protection, and the way this protection is enforced. The purpose of social compact he invented is “to find a form of association which will defend and protect with the whole common force the person and goods of each associate.” Different from the idea of absolute sovereignty, Rousseau conceives the popular sovereignty not united under the need of one source of power, no because he despises it, but, as mentioned above, because this idea has already been widely rooted. For him, what unified people under the sovereignty is the common emphasis on protecting the private property. And in this way, he believes that if only individuals act according self-interests, the common good could be preserved.

Hobbes and Rousseau largely shared the opinion on the carrier of the sovereignty, the ruling power of it, its ends, its unity and its superiority. On the other hand, on the parts concern with the identity of the sovereign, whether the rights remain, and the ways sovereign act, two sects diverge. Without such social and political context, the two ideas of sovereignty cannot be understood. The absolute sovereignty mirrors the concerns about ecclesiastical-secular division and civil war, revealing a tendency and a demand of centralization of power, while the popular sovereignty reflects the diminishing influence of ecclesiastical influence, and the increasing significance of finance, through the issue of taxation. These revelations might provide us a broader contemplation on how the base of sovereignty shifts in accordance to the dominant social influence, and how people and doctrine, under such circumstances, meet each other.

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Lack of Innovations Might Render China Falling Into Middle-Income Trap

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Over the past four decades, China has evolved from an isolated, unimportant part of the world economy to the second largest economy in the world， and it is widely anticipated to replace the United States to be the dominant economic entity in the world. However, overreliance on inefficient investment and lack of innovation-driven growth have hindered the growth of a consumer economy that has the potential to shift the economic basis from export and infrastructure to final consumption. (Very well stated.) What's more, the thinning out of rural labor force supply makes workers' wages increase faster than those of white-collar workers. As a signal of the Lewis Turning Point (this would have to be quickly defined for the reader in order to be useful), [China has now made no effective solutions of skip over it] (hard to follow; meaning unclear). Therefore, many economists worry that China will fall into the middle-income trap like Brazil and South Africa did because of the imbalanced nature of its economy. Although the Chinese government has realized the severe inefficiency in the economy and set forth a series of programs of reform such as "13th five-year plan" and "Made in China 2025", the prospects for China's economy are still worrisome due to the absence of the country's innovative power. It is clear, that China aspires to-indeed, it must-develop a mature economy possessing a highly innovative capability. Hence, it is essential to explore reasons that would effectively augment China's innovation based on its particular domestic conditions. We [hope] (a word like hope sits awkwardly in a public policy paper. You are a policy advocate and must give an evidence based argument for your recommendations about how to achieve whatever goals you define for the country.) that China would upgrade to a high-income country in 2030 with viable policies to boost innovation, which plays a pivotal role in the third industry.

The government has long ago realized that the country needs innovation to foster sound economic growth, early actions like the ZGC technology zone, Tianjin Binhai Business Incubator reflected governments' experiment of innovation development through imitating Silicon Valley model. Yet, this model proved a failure because of the overemphasize on infrastructure, lack of university links, and arbitrary bureaucratic regulations. After that, there's no outstanding experiment or policy that aimed to improve innovation of private companies. After almost 10 years' policy vacuum, the Chinese government recently started to repeatedly emphasize the importance and urgency of boosting innovation and private investment. Then a succession of systematic projects has come out to guide government at all levels to encourage innovation. The most prominent project among them is the "Made in China 2025", with guiding principles that have manufacturing be innovation-driven, emphasize quality over quantity, achieve green development, optimize the structure of Chinese industry, and nurture human talent. Despite the detailed, ambitious plan and massive governmental devotion, it is still difficult for China to accomplish these goals only if government prioritize education and business environment reform at first since the serious obstruction of them in the development of innovation.

2.1 Education reform

The education system is one of the most prominent factors that reduces the civil innovative spirit. Chinese parents are universally stereotyped as paranoid types who are extremely strict about their children's education. Certainly, not all the parents in China would do so, but a vast-majority of middle and lower class parents would set stern expectations and regulations on their offspring's education. Unfortunately, these efforts didn't make Chinese students extremely exceptional when they entered professional environment.

In China, a number of factors feed into parents' paranoia. The main one is fierce competition. "With so many people fighting to get into the best schools and presumably best jobs, the only way-in besides guanxi (relationships), is through stellar grades." Xu (who?) explained that China's most important high school and university entrance exam, called the Gao Kao, is a killer of passion and creativity — a rather bold statement. [1] Gaokao is often characterized as treacherous "one-plank bridge" from students and parents. This criteria makes teachers only focus on teaching students how to score higher on the tests rather than impart student the best implication of knowledge appearing in the textbook. With so much emphasis on the test, students keep reciting, memorizing and drilling in their free time, and that almost leaves no time for free thinking. "If they don't think beyond the model provided by them, they don't form ideas out of paradigm," said Lin, professor of international education policy at the University of Maryland. [10] This kind of tedious teaching method is frittering away students'" curiosity and creativity. When students enter professional environments, the detrimental impact of the rigid education model begins to concern businessmen in China because many people attribute the lack of globally competitive technology companies to the fault of education system, and many of them worry that the system will never change. "There was no system framing him (businessman with Steven Jobs caliber), while Chinese companies spend too much energy wrestling with the system, and do not spare enough energy on innovation and competing in the market," Ren Zhigiang, former chairman of Hua Yuan Real Estate Group, said on Twitter. China, he continued, won't allow, "crazy thoughts take over the market. Consequently, there cannot be a Jobs in China." [11]

Since Xi's inauguration, China has reshaped its national exam under the guidance of the 13th five-year plan. The Ministry (of what?) hopes to reform and modernize the education system by 2020 — it built a blueprint for this reform, launched in 2009, that will attempt to incorporate more independent thinking and problem solving. For example, the reform plan includes promoting research-based study, community service and social practice in high schools and encourages social-participation in pre-schools. [9] The new system encourages students to focus on a wider range of topics and skills, and requires teachers to repeal didactic teaching in the school to foster students' creativity and deep understanding of basic knowledges rather than let them "studying for testing". In addition, the class performance will account for the college admission, beyond test of Mandarin, English, Mathematics, and other elective courses students take in May. Moreover, top universities will also take students' social service record and extracurricular activities into account. China's ambitious reform of college admissions now sends "a clear message to secondary-school students and their teachers that a narrow focus on rote learning … may not be enough to ensure entry to higher education," wrote John Morgan and Bin Wu, experts on China policy, in an article for The Conversation. These factors taken into the admission process other than scores on Gaokao would release tremendous pressure from students for taking the test and make students more willing to participate in activities which help develop their creativity.

Nevertheless, the education reform on the admission criteria is not adequate to cultivate innovative thinking for students. As China shifting itself from a country with large human resource to a nation with strong human resource, government also need to enhance equal accessibility of education and curriculum quality.

Nowadays, the distribution of education resources is regionally unbalanced. In the first-tier cities like Shanghai, there are public schools, such as Shanghai Foreign Language School, which enjoy colossal linkage with prestigious universities and national funds. Hence, students there are given priority consideration during college admission, especially in some top universities that are cooperation partners of those high schools. This sort of admissions process apparently hurts equally competitive students from other ordinary high schools in some other economically undeveloped areas. (excellent point.) More than that, in order to serve educational requirements of booming middle-class families in those metropolises, there are a handful international schools which adopted Western-style teaching in classes, assign students applied projects in complex topics, and engage them in multicultural literature. Mostly, these students will be bound for colleges overseas. Unfortunately, these kinds of schools with exceptionally advantageous conditions are inaccessible in the interior regions of China. Instead, most high schools in those regions zealously advocate mechanized didatics which demand students to repeatedly memorizing or transcribing contents on the textbook, and overload students with assigning excessive homework every day. Under the tremendous pressure of school work and stringent regulation of teachers, students are not able to spend their leisure time in doing activities. Get stuck in the limited contents will wear away all the potential creativities of students under the most crucial age of fostering it, which is a huge tragedy to the entire young generation of Chinese.

To avoid this kind of tragedy, from the reform perspective, there're urgent demands of balancing education resources and improving curricula. A systematic adjustment, however, takes time to accomplish completely. So, the reform policy should follow several steps to meet the expectations. In the first five years, the Ministry of Finance provides subsidies to the normal school graduates who decide to work in the interior regions of China. This move could largely encourage high quality teachers to work in those unprivileged areas. Also, the Ministry of Education should eliminate the implicit preference for students from certain schools-merely because of their university-high school cooperation-to create an absolutely impartial enrollment procedure. Next, following the instructions of quality-oriented education reform, the curriculum should be up dated to meet real world needs. Students will be emancipated from heavy school work to devote themselves into other activities to spark their creativity. For instance, math will de-emphasize response speed and the need to memorize complex and seldom-used formulas. In their place, the curriculum will encourage multiple ways of solving problems, and a deeper understanding of concepts relating to space development, for example. In science, inauthentic demonstrations, calculations, and drills will be replaced with student experiments in real-world applications, including an emphasis on new energy, health, and conservation. [3] If these policies could be enforced effectively, plus the effect of 13th Five Year Plan, the education system will no longer be a white elephant of Chinese innovation development. This section is a tremendous improvement from your previous draft.

2.2 Improving the Business Environment

The peculiar business environment in China is another important reason that stifles innovation development. The inefficient allocation of bank loans is the key factor of it. China has a large and fast-growing private sector, which accounts more than 60% of domestic industrial outputs, but private firms are much smaller than state-owned enterprises (SOE), on average.

Most the large companies in China are SOEs, and virtually they dominate all of the capital-intensive sectors. With the back-up of governments, SOEs commonly are more likely to be a tool to fulfill employment and are captive to local government interests. Meanwhile, due to the support of administrative power, SOEs have less incentive to innovate, but they still had access to 61% of the bank loans in 2013. [4] In other words, a majority of the national funds, mainly raised by private parties, will return to SOEs which are much less innovative on average and are producing less value to the society. Therefore, the current distribution model tied down the private companies which is the core innovation power in the society. (Very well done.)

Also, innovation in the private sector is costly due to the corruption and absence of protection of intellectual property rights. Corruption has become central political and economic issue in the Chinese society since "reform and opening" era. Even though Chinese leaders have always paid attention toward anti-corruption efforts, only President Xi Jinping adopted iron fist policies to fight against ubiquitous corruption in the bureaucratic system since 2012. Indeed, corruption not only could waste national fund but also harm private companies' innovation. Corruption inevitably increased uncertainty and cost of transaction associated with holdup and expropriate because the value of companies' innovation must involve some related officials and authorities during the process of innovation. Corruption also makes the license, permit, and all sorts of government service extremely expensive, for which innovators have a strong reliance on it. [According to a statistic published in 2016, [5] it shows quantitatively important link between anti-corruption efforts and firms' access to new debt. Also, the coefficients of the interaction term between new debt and anti-corruption are significant and positive in both specifications, indicating that in provinces with stronger anti-corruption intensity, firms invest a larger proportion of their newly acquired debt in funding R&D.] (This is a really long and complicated sentence and it's too hard to follow. It would be better to break it in two and simplify the language.) Therefore, we expect that government could take more drastic measures to combat corruption which would enable entrepreneurs to capture a larger proportion of revenue obtained from their innovation and thus stimulate higher levels of innovation activities, especially for firms that are highly susceptible toward government expropriation. Moreover, formal politically favored corporations are also obliged to devote into their innovations to compete with those private companies in an impartially competing business environment. Besides, entrepreneurs all over the world have also complained about difficulties of operating their business within China because of murky regulation environment and vaguely worded laws. As for innovation issue, the number of applied patents in China in 2016 was 1.339 million, [6] but the quality of them are not ideal. A Shanghai-based patent attorney argues that "patents are easy to file, but gems are hard to find in a mountain of junk." [7] And SIPO, China's patent office, reports that only 26 percent of resident applications in China are for invention patents, which overwhelmingly dominate foreign applications. In turn, nearly three quarters of resident applications in China are for utility model and industrial design patents. The reason for this fact is not only caused by weak innovation power, but also complicated process of registration for invention patent. "The registration process raises one obstacle after another for companies, they need to go to a couple of departments to attend all of their formalities to finish the registration" said Huang Can, Professor of management at Zhejiang University. From another perspective, utility models provide indigenous companies a huge advantage because they could apply for patent much faster than foreign companies which are preparing for invention patents that requires substantial input from scientific examination and financial support. This form of patent application system facilitates "low-budget forms of innovation (such as reverse engineering and incremental innovation), and hence are of great importance for smaller Chinese firms." [8] One common phenomenon reflects drawbacks of this model is no-name *shanzhai*, which refers to blatant, unlicensed copy of IPs but have utility model patent in China. Hence, China need to build a more comprehensive law for protecting intellectual properties only which could encourage indigenous innovation and foreign technology importation. This kind of policies have started to appear on national strategic decisions. Early in 2017, President Xi holds the National Financial Work Conference in Beijing, it emphasizes that financial institutions should contribute more to private sectors, strengthen SOEs' reform in finance part and better protection of IPs.

These policies, however, may not be a long lasting problem. Government should set forth policies that could solve the radical conflict between innovative power and inefficient market regulation. Before the 2020, accompany with the 13th Five Year Plan, the government should further its anti-corruption regulations; not only constrained on seriously punish corrupted officials, but also should prevent corruption from happening such as build a cross- (This is good. Details of how to do so would be even better.) Also, the invention patent registration process should be simplified, innovators can directly contact with State Intellectual Property Office rather than let other irrelevant departments get into the act of registration. These two kind of policies could largely reduce the cost of innovation for private companies. (Good suggestion.) After that, the government should reduce the portion of loans lend to state-owned enterprises and give more financial support to private sectors. Without changing the predominance of state-owned enterprises, redistribute bank loans toward private sectors could boost innovation for both of them. (ditto)

"With the close attention paid by country leaders, the entire environment of innovation is getting better gradually, but it at least takes about 10 years for China to catch-up leading economies in the world." Le Yan, an economist from KPMG said. In 2030, following the policies we proposed, the business environment will never be a drag of innovation in China.

Even though China's upgrading speed in its innovation capacity is unprecedented, the gap between developed countries persists. The barriers remain to China to develop innovation power is tremendous, ranging from pragmatism in education to severe quality problem, and serious bureaucratic corruption and regulation. We hope China can fix those problems as soon as possible to skip the middle-income trap and finally become a high-income country in 2030.

This is tremendous work, Torres. Certainly one of the best papers in our class, and I am delighted to see the way you put in extra work to think through a number of policy recommendations of your own and to make good arguments on their behalf. You have also demonstrated a strong assimilation of the ideas we've discussed over the last few weeks, and done a good job of incorporating some of them here. Your writing is improved in this draft, and the paper flows nicely. On a technical level there remain problems with very tenses and with subject-object agreement (knowing when to use plural or singular), and with the use of the word "the," which still seems to confound you a bit. Overall, though, you deserve huge credit for your results and for your progress.

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Reflections on the Reconstruction of Assessment Methods of Ideological and Political Courses in Universities

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Abstract: Currently, there are many deficiencies in the assessment of Ideological and Political Courses The assessment targets of Ideological and Political Courses should be consistent with the teaching objectives of the courses and students' learning goals, that is to promote the coordinated development of students' knowledge, ability and quality. Therefore, based on this assessment goal, we should reconstruct the assessment methods by using multiple channels and diversified forms of assessment methods to rationally determine the composing proportions of academic performance and conduct a comprehensive assessment of students' knowledge, ability and quality.
Key words: Ideological and Political Courses; assessment methods; reconstruction

Whether the course examination method is scientific and reasonable has direct influence on teaching effect. There are many deficiencies in the assessment of Ideological and Political Courses so reforming the assessment methods of Ideological and Political Courses is an important link to strengthen the curriculum construction and improve the pertinence and effectiveness of the course teaching.

I. DEFICIENCIES IN THE CURRENT ASSESSMENT METHODS OF IDEOLOGICAL AND POLITICAL COURSES

There are two kinds of courses for evaluating students' ability on the ideological and political curriculum in colleges and universities, namely, courses with final examination and checking courses. In the courses with final examination, stress is put on the final examination organized uniformly by the school and the exam questions cover multiple-choice questions, true or false questions, analysis-type questions, short answer questions, essay-type questions, material analysis question and etc. In order to strengthen the examination link, some colleges and universities also stress the importance of other things such as separating examination from teaching and the importance of closed-book examination. The checking class is usually based on the quizzes organized by the teachers in the end of the term, together with the course paper or investigation report, which is the main basis for the final results. In addition to the final results, another current practice is taking such indexes as class notes, attendance, homework, quizzes and the essays written during the term into the category of assessment at ordinary times, thus the assessment pattern will be "total score = finalgrade(80%~60%)+usualperformance(20%~40%) ", which means the final exam is supplemented by extensive evaluation. This state of affairs is deficient in at least the following aspects.

First, too much emphasis is put on knowledge evaluation, inadequate attention on ability assessment, and quality evaluation is far from enough. Whether it is course for examination or checking course, the focus is always knowledge evaluation and the assessment of students' ability is neglected, and the evaluation of students' moral quality and ideological and political quality is even more insufficient. This kind of assessment target can't match the teaching goal of the curriculum, thus it will fail to promote the realization of the teaching goal of the curriculum.

Second, less attention is attached to practice than to theory. It means the educators only focus on the assessment at theoretical knowledge level, ignoring students' ability to put the theories into practice and neglecting the assessment in terms of conduct. This teaching method will lead students to focus on knowledge rather than guide them to implement concrete behaviors, detaching students' abilities to learn and master the basic theory and basic knowledge from the forming and cultivation of their inner emotions, willpower, behavior, moral practice, ideal and faith and other aspects. Thus, it will result in a situation in which students have a good knowledge of something that they do not necessarily believe and students always talk about something that they do not necessarily take into action. Without achieving the practice of unifying learning and practicing and knowledge and action, students will get high scores with low abilities and high scores with low moral standards.

Third, students have a passive attitude to test and study. Teachers tend to regard examination as a means of demanding and deterring students to learn, and take examination achievement as the most important and even the only index to evaluate students' learning effect. Meanwhile, for students the only purpose of learning is to cope with the exam and passing the exam means they have completed their study responsibilities so cramming up the theoretical content right before the exam and applying the knowledge mechanically have become a mainstream choice for students, thus forming a passive learning pattern , in which the students take notes in class, memorize them only before exams and forget most of them after the exam and also students recite what they have learned by rote before closed-book examinations and copy the content of the book in open-book examinations. In this way, students will treat the courses passively without much interest and enthusiasm, dramatically impacting the teaching effect.

Forth, the current teaching methods only give full play to the leading role of teaching teachers, and apart from the teachers' examination, lack other ways of assessment, especially students' self-assessment, mutual assessment and other diversified ways of assessment, ignoring the importance of self-education. The assessment, mainly based on the arrangements of teachers or educational administrative departments, make all the students as the object of examination with the relationship between teacher and students being chief examiner and examinees. It overlooks students' autonomy and such multi-dimensional and multi-directional evaluation factors like self-evaluation and mutual evaluation so it cannot mobilize and arouse students' initiative and enthusiasm in terms of their need, not to mention to promote students' self-education and self-growth, and it would even make students dislike the course, resulting in a confrontation between the teachers and students, so it would exert a bad influence on the effect of education and teaching.

Fifth, too much emphasis is put on the final evaluation while the importance of growth and process evaluation has been neglected. The teachers only pay attention to students' final grade instead of students' performance and progress at ordinary times, ignoring emotional communication and mutual promotion during the process of teaching, learning, evaluating and being evaluated. The practice of evaluating students through final exam and checking their notes at ordinary times cannot dynamically reflect students' progress in ideological and political theory and the improvement of their moral quality, and in this process, there will be no effective incentive for students to learn, so that students will only pay attention to the results in the study instead of the process and only focus on grades instead of moral quality. The examination process cannot be effectively used to tap into the potential of knowledge, or extend thinking space, or enhance students' emotion and belief. In this way, apathy and resentment among the students towards ideological and political theory courses will be exacerbated and students' bad behavior such as skipping classes and taking the classes unseriously will be encouraged.

In a word, in the current assessment methods of Ideological and Political Courses there are some deficiencies that are becoming the crucial factors exerting bad influence on the improvement of pertinence, effectiveness and practicality of the course teaching.

II. THE RECONSTRUCTION OF ASSESSMENT METHODS FOR IDEOLOGICAL AND POLITICAL COURSES

To reconstruct the assessment methods for Ideological and Political Courses, we should enhance the assessment objectives, increase the assessment methods, and promote the coordinated development of students' knowledge, ability, and quality under the guidance of the educational concept of promoting quality education comprehensively.

To improve the assessment objectives and to coordinate the assessment objectives with the educational teaching objectives, the assessment objectives of the Ideological and Political course must be determined according to the educational objectives of the curriculum, and the objectives must be kept in accordance with the teaching objectives and the students' learning goals. Opinions of the Central Committee of the Communist Party of China and the State Council on Further Strengthening and improving ideological and political education among students (No. [2004]16) gives a comprehensive description of the educational objectives of the Ideological and Political Courses in colleges and universities. First, take the education of ideals and beliefs as the core, and educate students on establishing the right world view, outlook on life and values.Secondly,with patriotism education as the key point, we should carry out the education of promoting and cultivating national spirit education. Thirdly, on the basis of basic ethics, we should further carry out civic moral education. Fourthly, with the overall development of college students as the goal, we should further carry out quality education. Centering on such educational goals, the teaching objectives of Ideological and Political Courses include not only the improvement of students' internal theoretical thinking ability, but also the enhancement of their external moral practice ability, which is the unity of knowledge and practice; the courses aim to promote not only students' ability to master the basic knowledge and theories, but also the formation of their capability to understand, analyze and solve problems by applying the basic knowledge and theories. Furthermore, the development of students' political quality, ideological quality and moral quality should also be included. Therefore, the teaching objectives should be unifying students' knowledge and conduct. Thus, the assessment targets of Ideological and Political Courses have been inherently specified. In the first place, students should have the ability to master the basic knowledge and theories. In addition, they should know how to analyze and solve problems by applying the basic knowledge and theories they've learned. Moreover, they should be equipped with political quality, ideological quality, moral quality and be able to perform them outwardly. All in all, the assessment goal of the Ideological and Political Courses is to promote students to master knowledge, improve their ability and develop their qualities so as to achieve the coordinated development of students' knowledge, ability and quality.

III. CENTER ON THE ASSESSMENT GOAL, USING EXAMINATION METHODS OF MULTIPLE CHANNELS AND FORMS

1.Examination method for basic knowledge and theory

The most important, direct, and effective testing method for basic knowledge and basic theory is examination. The main ways are as follows: The first method is close-book examination. A close-book examination is not a means to forcing students to study, nor is the goal of exam questions to make things difficult for students. Rather, these questions help students memorize and master the basic knowledge and theory, making the examination part of students’ learning. Reviewing the lessons helps students better memorize and understand basic contents. The second method is oral examination, which is characterized by its flexibility in organization and test. This method of examination not only effectively tests students' degree of mastery of the basic knowledge and basic theory but also exercises and develops students' oral expression and their ability to act according to circumstances. The third method is to ask questions before and in class. Through review and guidance, teachers can raise questions about basic knowledge and theories taught in the last class and urge students to review after class. During class presentation, in order to encourage students to master basic knowledge, we can ask them questions from time to time when it comes to basic knowledge taught before.

2.Ability Assessment

Ability can be assessed and many ways are available. In practice, students’ ability can be evaluated through open-book examination, essay writing, assignments, discussion and debate, book review, and investigation reports.

First, have an open-book examination. The questions are mainly case studies, data analysis and essay questions. Students are allowed access to textbooks and materials, so the original answers cannot be found in them. In order to get a high score, students must make use of the theories and knowledge in a comprehensive way provided that they understand and know how to utilize them.

Second, make assignments and ask students to write essays. Topics may relate to the content of teaching, and they can also be about social phenomena and events at home and abroad.Students are required to use their basic theories to explain their views and opinions and complete the task within a given time. This method not only tests the students' ability to understand and use the basic theories but also their attitude towards learning to a certain extent.

Third, have discussions and debate. Arrange 1 to 2 discussion sessions, and assign the subjects, goals, class hours, etc., to students at the beginning of the semester. Students, after reading documents and books and searching information, are expected to speak in class respectively, using 1 to 2 periods; it is best to form a debate.

Fourth, compose book reviews. Students are expected to write about the basic theories, materials and books they have read so as to examine the students' understanding and application of basic theories, and to assess their ability to recognize, analyze, and solve problems.

Fifth, complete investigation reports. At the beginning of a semester,tasks should be arranged and multiple topics should be available.The topics should be close to students' life and to the social reality. It is also acceptable that students discuss with teachers and choose a topic. Students should form a group of 3 to 5 people and complete the investigation report by way of team work and division. In a report,there should be conceptual expressions, origins of questions, status, influence, opinions of others, and suggestions and views from the team. The original investigation materials should be attached to the report.

3.Assessment method for students’ quality

The most important and direct reflection of the educational objectives of Ideological and Political Courses is through strengthening the guidance and establishment of ideals and beliefs by paying attention to the assessment of political quality, ideological quality and moral sentiment. In fact, to conduct such an assessment is the most difficult,because any quantitative index assessment is most effective for tangible content.However,ideals, beliefs, morality and other abstract contents can hardly be measured according to superficial indicators. This requires a variety of methods for in-depth understanding so as to get closer to quality evaluation objectives.

The first method is to check students' attendance, preview notes, after-class reviews and reading of original works to form a basis for future evaluation of students’ quality.

Another method is to get to know students' participation in group activities, social practices, and volunteer services, which reveal students’ ability and are a factor in the evaluation of students’ quality.

Also, we can observe students’ attitude towards study in and outside class, the amount of effort they put in, and their behavior. With this method, we can guide the students to develop in a positive and healthy way and complete the evaluation of students' quality at the same time.

The fourth method is called investigation method. Stable channels of communication with the instructor should be established.And we should communicate with the class committee from time to time to get an update about students' rewards and punishment and discipline during the term, which serve as a basis for quality evaluation.

The fifth method is to communicate. Through home visit, face-to-face talk, class tutor work, pair work, teaching network communication, and blog and e-mail exchange, we can get to know the emotional and moral will of students and their ideals and beliefs.

4.Reasonably determine the proportion of grades

The reconstruction of assessment methods for Ideological and Political Theory Course cannot be done without a breakthrough from the previous mode—"class performance+ final exam","final exam as the main factor and in-class quizzes as the supplementary one".A reasonable grading proportion should be set in terms of the knowledge, ability and quality.Knowledge is the foundation,ability is the improvement, and quality is the goal. In order to form a solid foundation,improve their ability,and get closer to the goal,we should determine a proportion of 4:3:3, which forms a diversified and compound assessment method.

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