JUNE 2017 VOLUME2 NUMBER2

Publisher: ACADEMIC PUBLISHING HOUSE Address: Quastisky Building, Road Town, Tortola, British Virgin Islands UK Postal Code: VG1110

E-mail: editorial@ij-em.com www.ij-em.com ACADEMIC PUBLISHING HOUSE

# CONTENTS

PROGRESSIVELY DEPTH EXPERIMENTAL TEACHING OF MATERIALS MECHANICS	1
STUDY ON THE CONSTRUCTION OF LOCAL LANDSCAPES IN HISTORICAL VILLAGES	5
AN EMPIRICAL ANALYSIS ON STOCK OPTION AND ENTERPRISE PERFORMANCE	8
RESEARCH ON THE MAIN FACTORS AFFECTING THE DEVELOPMENT OF POLICE PHYSICAL FITNESS EDUCATION CURRICULUM AND DIRECTION OF DEVELOPMENT	13
INFLUENCES OF INTERNET FINANCE ON THE TRADITIONAL BANKING BUSINESSES OF CHINESE COMMERCIAL BANKS	16
THE EXPLORATION OF THE REFORM IN TEACHING MODE FOR OPERATIONAL RESEARCH IN CHINESE NORMAL UNIVERSITIES	20
DIFFERENCE ANALYSIS AND COUNTERMEASURE STUDY OF THE VALUE ORIENTATION OF COLLEGE SPORTS DANCE TEACHING	23
XINJIANG MODERN LOGISTICS PROFESSIONAL SKILLS EDUCATION RESEARCH	28
AN ASIAN MALE SOCCER POWER BASED ON COMPETITIVE RECORD DATA	32
INVESTIGATION AND ANALYSIS OF THE DEVELOPMENT OF TENNIS COACHES IN HUANGZHOU DISTRICT	36
THE EVALUATION OF THE INNOVATION ABILITY OF CHINESE SPORTS INDUSTRY	39
APPLICATION STRATEGY OF "COOPERATIVE LEARNING" TEACHING MODE IN PHYSICAL EDUCATION	42
BASED ON THE GOAL ORIENTATION TEACHING METHOD IN BADMINTON TEACHING EFFECT OF SPSS T TEST	45
CHINESE SCHOOL PHYSICAL EDUCATION EXAMINATION SYSTEM CONSTRUCTION DEVELOPMENT TREND STUDY	
A STUDY ON THE INFLUENCE OF SQUARE DANCE ON SPORTS CONSUMPTION OF MIDDLE AGED AND OLD WOMEN	54
ASSESSMENT OF BODY COMPOSITION THROUGH SPORTS	56
ANALYZING OF THE PROMOTION OF POLICE PHYSICAL ABILITY BY THE BADMINTON	59
CITY DESIGN HARMONIZES WITH NATURAL LANDSCAPE	61
INTRODUCTION TO THE CULTIVATION OF THE PRIMARY SCHOOL ENGLISH CORE LITERACY	64
LITERATURE REVIEW OF EGP AND ESP TEACHING ABROAD AND IN CHINA	67
REFLECTION OF CROSSING THE THUCYDIDES TRAP	70
REFORM AND EFFECT EVALUATION OF GENERAL EDUCATION COURSE ASSESSMENT — AN CASE STUDY OF MILITARY THEORY COURSE	73
RESEARCH ON THE APPLICATION OF CAMPUS NEW MEDIA IN IMPROVING THE SATISFACTION OF STUDENTS IN HIGHER VOCATIONAL COLLEGES	77
RESEARCH ON THE "CHALLENGE BETWEEN XU AND LEI" ON THE ASPECT OF SOCIAL CONFLICT THEORY	80

STUDY ON THE HEALTH STATUS OF STUDENTS IN POLICE COLLEGES UNDER THE BACKGROUND OF PUBLIC SECURITY COMBAT	84
THE PREVAILING TEACHING APPROACH IN ENGLISH INTENSIVE READING CLASS IN A CHINESE UNIVERSITY	87
THE IMPACT OF FEMALE LEADERS ON CORPORATE SOCIAL RESPONSIBILITY PERFORMANCE ON THE BASIS OF FEMININE ETHICS OF CARE	92
STUDY ON THE OPERATING EFFICIENCY OF CHINESE BANKS' CREDIT BUSINESS OF SMES	96
HUMANISTIC SPIRIT AND CORE VALUE IN THE SPREADING PATH OF NEW MEDIA	100
AN EVOLUTIONARY GAME STUDY ON COORDINATED DEVELOPMENT OF SUPPLY CHAIN FINANCE BY LOGISTICS ENTERPRISES AND FINANCING INSTITUTIONS	103
AN EMPIRICAL ANALYSIS OF INFLUENCING FACTORS ABOUT ABNORMAL RETURNS IN STOCK MARKET	109
RESEARCH ON PROBLEMS AND COUNTERMEASURES OF CORPORATION RECOMBINATION IN CHINA	113
AN ANALYSIS OF DIFFERENCES IN APPLYING LISTENING STRATEGIES BETWEEN SKILLED AND UNSKILLED ENGLISH LEARNERS	117
SECONDARY COLLEGE EDUCATIONAL ADMINISTRATION MANAGEMENT UNDER THE NEW SITUATION THE OPTIMAL PATH	119
THE CONSIDERATION OF ISSUES AND SOLUTIONS FOR EDUCATIONAL MANAGEMENT OF COLLEGE STUDENTS UNDER 'MICRO-ERA'	123
CONCEPTUAL METAPHOR THEORY TO ENGLISH VOCABULARY TEACHING AND RESEARCH	127
RESEARCH ON THE DATA PROCESSING AND ROTATION MODE TRANSFER OF CLOUD COMPUTING BASED ON THE VIRTUAL MACHINE (VM)	
RESEARCH ON TEACHING REFORM AND PRACTICE BASED ON VIRTUAL REALITY TECHNOLOGY	
RESEARCH ON EVALUATION METHOD OF TEACHING REFORM AND PRACTICE BASED ON BIG DATA	
RESEARCH ON TALENT-TRAINING MODEL OF TRANSPORTATION ENGINEERING FULL-TIME PROFESSIONAL DEGREE POSTGRADUATES UNDER THE BACKGROUND OF "INTERNET+"	138

# Progressively Depth Experimental Teaching of Materials Mechanics

#### Xiaoman Liu , Yalin Ren

College of Civil Engineering & Mechanics, Yanshan University, Qinhuangdao, Hebei 066004

Abstract: Mechanics of Materials' experiment is an important part of well learning Materials Mechanics course. With classic experimental content, how to combine university engineering education and talent training mode, how to initial penetration in Material Mechanics experiment, sixty-four-dollar question is striving to make a different professional students do the "three learning" experiments of Mechanics of Materials: do, use, master. Doing is to complete the lab report, and using the experimental method to correctly handle experimental data. Conversance means to be able to combine the learning of theoretical knowledge and to understand applicable conditions of Materials Mechanics experimental methods. Accessing to relevant information and relearn to determine test methods for more complex issues.

Keywords: Mechanics of materials; Experimental teaching; Stress; Strain

The experiment is an important method to carry out scientific research. Material mechanics is a technical basic course of mechanical, material and civil engineering. Material mechanics experiment is an important link in the teaching of the course. In addressing strength, stiffness and other issues of engineering design, the mechanical properties of materials and the material constants that can show the mechanical properties will be the first to know. Of course these constants are usually obtained by the material test. When the geometrical shape and load of the components in the actual engineering are very complicated, the stress in the component is sometimes verified by means of experimental stress analysis to verify the correspondence of the key points between the numerical values and the calculation[1,2]. In the following paper, we will discuss the three experimental teaching level briefly by using the tensile test which is contained in the materials mechanics experiments.

### 1.BASIC EXPERIMENTAL TEACHING CONTENT

In the experimental teaching process, the body consists of two parts: teachers and students. Only by giving full play to both subjective initiatives can we achieve the purpose of teaching. Materials mechanics experimental outline requirements conclude three parts. [3]Firstly, a preliminary understanding of the basic mechanical properties and testing methods of common materials is made. Next, we have a preliminary understanding for the basic principle and method of stress analysis in electrical measurement experiment. Finally, complete the contents of the experiment report, learn to operate the test machine, and get the experimental data correctly through experiment. This is the most basic and important teaching content in the experiment of material mechanics.

1.1 basic content of material mechanics experiment

1.1.1 determination of mechanical properties of materials

The mechanical properties of various materials in engineering are indispensable basis for designing components. The mechanical properties of materials are usually measured by tensile, compressive, torsional, and fatigue tests. These basic test method for measuring mechanical properties of materials can be learned through these tests.

This part should explain the concepts and formulas involved in the experiment clearly. Taking the low carbon steel tensile test as an example, the definition of tensile strength, yield strength, elongation and section shrinkage is first described. Then, the working principle and operation flow are explained with the test machine, and the kind of sample and the size requirement iof the sample are explained. Consideration raised several questions for students, for example, as for the bar sample, which have the same diameter and the same material but different length, the measured elongation are the same or different; and how the rate of loading experiments will affect ultimate strength and elongation of the sample.

In this part, we should explain the experimental phenomena according to the experimental curve, and focus on the comparison between the curve analysis and the failure process. Taking the low carbon steel tensile test as an example, the "necking" phenomenon and the "cup cone" fracture were observed to distinguish the four stages of the stretching curve. How to calculate the elastic modulus of the material in the proportional stage and how to choose to lower yield limit in the yield stage can be extended to the upper and lower limits of the yield of plastic materials without apparent yield, as well as the determination of the strain hardening index and the plastic strain ratio during the uniform plastic deformation stage.

1.1.2 experimental stress analysis

In the engineering practice, the shape and loading of many components are complicated, and it is difficult to get the correct result simply by the theoretical calculation. The stress distribution law of the component must be understood by the experimental method, so as to solve the problem of strength. This method is called experiment Stress Analysis. At present, there are many methods of stress experimental analysis, and the application of wide electrical test is introduced in the material mechanics experiment. The above is the most basic teaching content in the experiment. The experimental class not only to enable students to better grasp the knowledge of theoretical courses, more importantly, to cultivate students' practical ability to carrying out experimental handouts is not enough. Students should be given an opportunity to analyze and solve practical problems. This requires access to the following "will use" link, and some of these extensions will be answered or validated.

### 2.EXPERIMENTAL EXPANSION OF ENGINEERING APPLICATIONS

"Will use" means that the correct experimental method is used and process the experimental data accurately when the mechanical properties of the material and the material constants that express mechanical properties need to be measured. Therefore, after the completion of routine experimental teaching, students should be given a Table 1 Material performance data sheet

#### International Journal of Education and Management

chance to practice. The environment causes most postgraduate related to machinery and materials profession use the way of stretch or compress to study new material's performance and new technology on the material processing effect, but many of them have no clear concept. So the Stretch compression experiment is used as an example to explain the "will use" teaching mode.

2.1 comparison of constitutive relation and tensile failure test of various materials

Give each group a bar specimen of different materials but of the same size to complete the experiment in tab.1. Stretching curve shown in Fig.1, various type of sample not only save the cost of experiments, but also allow students to intuitively understand the different materials in the tensile state of the engineering stress-strain curve. The constitutive relations and tensile failure phenomena of several materials can be compared and analyzed. It is changed that students perform the experiment use low-carbon steel and cast iron only in the past. And it is helpful to improve students interest.

					1	
Sample no	Sample name	Calibration lengeh mm	Yield strength (MPa)	Tesile strengeh (MPa)	Elastic modulus (GPa)	Elongation%
1	Brass	100	206.5	429.9	90	11
2	Aluminum	100	273.2	550.3	75	20
3	45 Steel	100	388.3	657.7	216	26
4	High-carbon Steel T8	100	720.5	1234.8	216	15
5	Polycarbonate	50	/	47.0	3.2	12
6	Plexiglass	100	/	66.9	3.45	/
7	Wood	100	/	111.5	15.3	12
8	Synthetic bar	50	/	44.8	5.27	/



Figure 1 A variety of material stretching curve 2.2 EXTRUSION PROPORTION OF SAMPLE SIZE AND PROCESSING REQUIREMENTS

Through the above tensile test, a clear ratio of the sample size and processing requirements are determined. Because the elongation of the same material at break A value is related to  $K = L_0 / \sqrt{S_0}$ , the sample with the same K value is called the proportional sample. According to the national standard [6] (GB/T228 - 2002), the sample size is listed as follows.

In Tab.2,  $d_0$  represents the original diameter of the sample gauge portion, and  $\delta_{10}$ ,  $\delta_5$  represent the elongation of the sample at 10 or 5 times the gauge pitch of  $d_0$ . Non-proportional samples and non-metallic materials can be processed in

accordance with the corresponding national standard requirements. A question arises: whether the measured elongation A is the same for a proportional sample with a cross-sectional area  $S_0$  of the same, but with a rectangular cross-sectional width and a different thickness. This is a question worthy of study.[7] Teachers can guide students to consult relevant literature in the "understanding" stage. Table 2 Proportional sample size(GB228-76)

		Gauge length $L_0(\text{mm})$	Cross-sectio nal area So(mm)	Round sample diameter	Express ed elongati on
Proporti	g	$11.3\sqrt{S_0}_{0}$ 10d	1.4	arbitra	$\delta_{_{10}}$
on	Sho rt	$5.65\sqrt{S_0}5d_0$		ry	$\delta_5$

2.3 study on the influence of strain rate on tensile constitutive curve

In the course of the experiment, we can explain and infiltrate some relevant experimental concepts for different professional students. For example, for mechanical processing and metal materials professional students, teachers should tell the students several loading control methods about the

tensile compression test: the mode of strain rate, stress rate, displacement control and force control. Combined with the experimental phenomena in the process of stretching, the concept of stress (strain) should be introduced. According to experimental phenomenon of uniform plastic deformation of low carbon steel specimens under tension and the principle of volume invariance, we could introduce the concept of true stress and true strain.[8] In combination with an experimental phenomenon, the concepts that some major students may involve in their future studies or work are explained.



Figure 2 Stress-displacement diagram at different strain rates

For example, in order to illustrate the effect of the loading rate on the test values, a low carbon steel tensile test can be made at each of the three different rates and then compared by the stretching curve as shown in Fig.2. We can figure that as the increase for mild steel, stainless steel and other random test speed, the strength index improved and ductility index decreased. Therefore, the tests should be carried out in accordance with standard test methods and regulations. In this way, the data obtained will have better comparability, especially for the nature of arbitration.

After the above explanation and training, students should achieve the "will use" level, that is one can use the correct experimental method and deal with the experimental data properly when someone need to determine the mechanical properties of the material and the performance of mechanical properties of the material constant. But there are still some of the test curve of the special cases and some of the engineering experience and GB requirements. Some of the above concepts or questions can be further explained for students from different professions so as to guide students in their follow-up areas to explore, to study, to find the answer.

3. THE EXTENSION AND PROSPECT OF THE PROBLEM

3.1 selection of yield strength of unconventional stretching curve in engineering

The extension and development of the problem is the "understanding" stage, for example, the selection of the upper and lower yield points in the drawing curve is very important and simple. With the progress of the test technology, after the end of the test software can automatically give the material tensile strength, yield strength and other parameters. But in the actual test, it often appears in the same conditions the same batch of sample have different yield strength. Found in the long-term experiment, this phenomenon is mainly due to electronic universal testing machine in the search for yield points when the error caused. The upper and lower flexural strength of the material mechanics is defined as the highest stress and minimum stress in the yield stage, which are called upper yield and lower yield limits, respectively. In fact, according to the national standard, the upper yield strength is the highest stress before the first decline of the specimen due to the yield, and the lower yield strength is the lowest stress during the yield period without the initial momentary effect.[6] The initial transient effect is the instantaneous effect (also called the inertial effect) from the upper yield strength to the downward excess yield strength. The instantaneous effect is related to the flexibility of the afterburner of the testing machine, the flexibility of the specimen, the test rate, the yield characteristics of the specimen and the inertia conservation of the force system. Here are some typical tensile curves. The choice of the upper and lower yield points shall be shown in Fig.3.

As shown in figure a, the A point is often mistakenly chosen when the yield point is determined. In fact, considering the influence of the initial transient effect, the point indicated on the diagram should be chosen as the lower yield point. As shown in Figure B, the B point is often mistakenly chosen when the yield point is determined. The basic principles for determining the upper and lower yield strength are as follows:

(a)The first peak stress before the yield (the first maximum stress) is determined as the upper yield strength, regardless of whether the subsequent peak stress is greater or smaller than it is.

(b)In the yield phase, if two or more valley stresses are present, the first valley stress (the first minimum stress) is taken, and the lowest of the remaining valley stresses is taken as the lower yield strength. If only one descending valley is presented, the valley stress is judged to be lower yield strength.

(c)In the yield stage, the yielding platform is assumed, and the platform stress is assumed to be the lower yielding strength. For example, if there are many and the latter is higher than the former, the first platform stress is the lower yield strength.

(d)The correct result is that the lower yield strength must be lower than the upper yield strength.



Figure 3 Typical stretching curve

3.2 the curve relationship between the stress-strain in engineering and the true stress-strain.

The mentioned experiment project is the relationship between engineering stress and engineering strain of the project, and the change of the cross section of the specimen during the drawing process is not taken into account. It is known experimentally that uniform plastic deformation occurs before the specimen reaches its strength limit. As is shown in Fig.4.



Figure 4 tensile specimen deformation diagram According to the principle of volume invariance, the actual true stress is tested:

$$S_{T} = F/S = F/(S_{0}L_{0}/L)$$

$$= (F/S_{0})(L/L_{0})$$

$$= \sigma(\Delta L + L_{0})/L_{0} = \sigma(1 + \varepsilon)$$
(1)

True strain:

$$e = \int \mathrm{d} l/l = \ln(L/L_0) = \ln(1+\varepsilon)(2)$$

According to the definition of GB / T5028-1999,the determination of the n value of the metal material is based on the relationship between true stress and true strain in the plastic strain hardening stage of the material:

$$S_T = ke^n \tag{3}$$

k is strength coefficient, nd n is Strain hardening index. Taking the logarithm of both ends of the equation (3), we will get a new equation:

$$\lg S_T = \lg k + n \lg e \tag{4}$$

Supposing  $\lg S_T = y$ ;  $\lg e = x$ ;  $\lg k = b$  we can contain following equation:

$$y = b + nx \tag{5}$$

Formula (5) is a linear equation with n as the slope and B as an intercept. As long as the data is properly selected at the uniform plastic deformation stage, the n value can be obtained by taking (1) - (5). Fig.5 is a comparison of the true stress strain and the engineering stress and strain.



Figure 5 A comparison of stress strain and nominal stress

In the "understanding" l ink, we should eventually extend and prospect the problem. For example, with the nvalue as an example, due to the development of super-plasticity and plastic precision machining, scholars have paid more attention to the study of n values[9,10] and found that the strain hardening index is closely related to the deformation path even under the same stress state, The classic Hollomon formula has been amended and develop, [11] teachers can guide the students interested in access.

4. CONCLUDING REMARKS

#### International Journal of Education and Management

Only in the above-mentioned tensile experiment, for "will do" example, through the "will use" three stages of experimental "understanding" teaching, students have basic grasp of common knowledge about tensile test field, and able to complete the tensile test correctly and independently. In this paper, the tensile experiment is taken as an example to illustrate the idea of the experimental teaching of the material mechanics experiment. It aims to discuss how to adapt the teaching content of the material mechanics experiment course to the engineering and experimental research. It can lay a solid foundation for the knowledge of this subject at the graduate level for some major students. The teaching of experimental course in colleges and universities is not only an extension of theoretical course teaching, but also a teaching node that cultivates students 'strict thinking mode, inventive consciousness and scientific experiment attitude, which plays an important role in the gradual cultivation of contemporary college students' practical ability.

#### REFERENCES

[1]Haishun Liu, Chun Hao, Xiexing Miao. (1): 67-69 (in Chinese with English abstract). [J]. Mechanics and Practice, 2006,28 (1): 67-69.

[2]Xinru Wu, Xishu wang. Journal of Mechanics and Practice, 2006,28 (6): 81-83 (in Chinese with English abstract).

[3]Xiangzhong Bai. Materials Mechanics [M]. China Building Materials Industry Press. Beijing .2003

[4]Junhui Wang, Yueya Li, Jianping Luo and so on. Journal of Experimental Techniques and Management, 2007,24 (6): 120-123. [J]. Journal of Experimental Technology and Management, 2007,24 (6): 120-123.

[5]Yu A M, lie G H.Explicit solutions for shearing and radial stresses in curved beams [J]. Mechanics Research Communications, 2005,32 (3): 323-331.

[6]Metallic materials - Test method for room temperature tensile testing - Beijing: China Standard Press, 2003. GB / T228-2002.

[7]Haobin Tian,Dachang Kang.Study on the Influence of Geometric Factors on Elongation of Tensile Specimens [J]. Journal of Harbin Institute of Technology, 2003,8 (4) .962-965.

[8]Yulan Li. Definition of true stress-strain and its mechanical characteristics [J]. Journal of Chongqing University (Natural Science Edition), 2001,24 (3): 58-60.

[9]Yuquan Song, Yongchun Cheng, Xiewen Wang.Experimental measurement and fine analysis of strain deformation hardening index of tensile deformation [J]. Science in China Series E, 2001,31 (3): 193-203.

[10]Yu Shen, Huping Yu, Xueyu Ruan.Study on the relationship between plasticity and geometry of materials [J]. Forging Technology,2006,(3): 64-67.

[11]Shu-min Han, Gang Liu, Changhou Bai. Effect of length of pipe specimen on elongation [J]. Nonferrous Metals, 2008,37 (2): 36-39.

## Study on the Construction of Local Landscapes in Historical Villages

Lu Gan<sup>1, 2</sup>, Jiangping Wang<sup>1</sup>

<sup>1</sup> School of Urban Design, Wuhan University, Wuhan, Hubei, 430000 <sup>2</sup> school of Art, Yangtze University, Wuhan, Hubei, 430000

Abstract: This paper analyzes the status quo of domestic and foreign theoretical research and practice of local landscape construction in historical villages, and finds that the development path of local landscape protection is similar in both domestic and foreign countries, but the history and current situation of local landscape planning are quite different. In terms of the basic theory of rural landscape, the characteristics of the local landscape are defined from the comparison with the concept of rural landscape. It is emphasized that the regional, cultural and folk, and then from the aesthetic concept of idyllic, ideal society, new rural landscape and so on Rich natural landscape connotation, and put forward the composition of the local landscape, including the external natural landscape, pastoral production and living landscape, rural settlements and architectural landscape, traditional culture and folk landscape four categories.

Keywords: Historical Village; Local Landscapes; Construction Study

#### 1. INTRODUCTION

The new rural construction is to further solve the "three rural" problem, narrow the gap between urban and rural areas, and in urban and rural development, urban and rural integration is of great significance. The new rural construction conforms to the great construction of a well-off society in full swing. Since the Third Plenary Session of the Standing Committee of the People's Republic of China in 1956, the focus of the new rural construction is on the economic development of the peasants. The core is to help the peasants get rid of poverty. To the Sixth Plenary Session of the 16th CPC Central Committee, the new rural construction of the connotation of change and puts forward the core of "production development, rich life, rural civilization, clean and tidy village, democratic management" and so on. Its own connotation and role determines the destructive nature of the destruction of the historical villages, mainly in the following two aspects. Local landscape itself and the new rural construction requirements mourning characteristics, such as experienced hundreds of years or even thousands of years of ancient construction can not afford the needs of the villagers, including water, heating, ventilation, disaster prevention and so on. And the tradition of the village pattern may also lead to traffic inconvenience, lack of public space and other issues. The new rural construction focuses on the living standard and the quality of life of the farmers, so that they enjoy the common treatment with the urban residents. Therefore, the lack of identification and analysis of the connotation of the native landscapes in the village planning is carried out only from the perspective of urban planning Construction.

#### 2. THE STATUS OF VILLAGE PLANNING

Village construction site is not serious, local landscape is ignored. Cangnan County village planning site is roughly this: first by the village committee to apply, and then by the relevant administrative departments to decide whether to include "thousands of projects" ranks, the final site survey, the competent departments and the village committee decided to specific Location site. This kind of village selection process almost did not take into account the problem of local landscape, and then "thousands of projects" on the village into the policy tendencies, making part of the village committee resorted to all the way to its village into the "remediation village" ranks Individual villages need to protect or not suitable for large-scale construction is also included in the village construction planning team

Village planning is popular, but many village cadres ignore the village status quo, the village land as white paper, requires Qi brush "painting" out of the "ideal" of the new rural scene, they think "planning is to be overturned, that is, To build the rural areas as rural areas, in order to allow the villagers have been on the city as a well-off life. The history of urbanization in China tells us that according to some of the current leadership of the aesthetic, value orientation, political views, the occurrence of formalism performance projects, display engineering is very likely to have. Moreover, the high level of planners is not a lot of village planning tasks and heavy, due to time and economic conditions and planners to understand the level of the problem, the planning is inevitable some rough, lack of analysis, taking into account the "landscape" The problem is less and less, blindly from the village cadres and the approval of the views of the department.

#### **3. PROTECTION OF NATIVE LANDSCAPES**

Local heritage landscape refers to the landscape elements, land patterns and spatial links that are of great significance to the spiritual needs of the vast urban and rural areas of China, the land and the spiritual needs of the people that have not yet been protected by the government and the cultural relics. A tree, a pond, a creek, a pillar, a cliff, a temple, a family, a family, a village of spiritual sustenance, these local, folk heritage landscape and their ancestors and sages of the soul together, it is The Basis of the Grassroots Belief of the Chinese Nation. China's agricultural society has always been established in this patriarchal patriarchal system and the worship of all the land on the basis of faith, has maintained a stable structure. People love the land of their hometown because it has ancestors and sages of the soul and spirit, can produce a sense of identity and a sense of belonging.

Planning and construction of villages is necessary to do rural landscape analysis. With the theory of landscape design to guide the construction of new rural planning, the correct planning and construction is to ensure that the new rural ecological good, social harmony material basis. Mr. Yu Kongjian has put forward the "anti-planning" theory, pointed out that "anti-planning" is not planning, nor is it against planning, "anti-planning" refers to the rural planning and design should first from the planning and design of non-construction land, rather than the traditional construction Land planning, "planning", is to prioritize and design rural ecological infrastructure, including maintaining and strengthening the continuity of the overall landscape pattern, protecting establishing diverse local ecosystems. and maintaining and restoring the natural form, conservation and restoration of river systems Wetland system protection heritage landscape network.

The analysis of the rural landscape of a village begins with the planning of the village, and the planning of the village is a comprehensive deployment of the regional villages, which plays a vital role in the protection of the local landscape of the village and the whole region. Village layout planning should be in particular for each village, where there is a strong local flavor and ecological environment better villages from all aspects of its suitability and construction intensity, such as some of the more remote villages, its rich local landscape, ecological basis Better, but the poor conditions of the infrastructure, such a village should be to protect the original natural order, or construction investment, serious damage to the local landscape, more harm than good.

And specific to a village planning and construction should pay more attention to local landscape analysis, a village construction intensity is determined by many factors, but must first consider the village's environmental capacity and landscape protection. A village is the locals choose the right place, the locals for life to take on the natural process and land and land on the space and pattern of adaptation, is the local way of life in the earth show. Its formation has

#### International Journal of Education and Management

its inevitability, it may have a small wetland to clean people's dirt, may have a small river or pond to improve the village microclimate. These should not be neglected in the planning and construction of the village, the village planning and construction is not rural urbanization, but the village organic regeneration - a culture, history, ecology and social life process of continuity and regeneration, a convergence history And future bridges, links and ties.

Local landscape protection should be deeply rooted through the village planning and construction of the whole process. In the increasingly scarce land today, rural construction is also inevitably driven by the interests of the local landscape is a common people, is common, ordinary, trivial, in the interests of the front can not attract people's attention. If we now understand the new rural construction as a rural material space construction, it is possible to bring the city model or city-like model to the rural land, the woods were cut off, the twists and turns of the river was buried or Cut the corners straight, there are thousands of years of the temple was demolished, as long as a little attention, all of these grassroots faith will be completely destroyed the foundation. People have the beauty to avoid the ugly instinct, but the low level of education of rural workers will also cause backward style. Studies have shown that economic development and living standards must be linked to the local education, economic income is with the improvement of the level of workers to improve the natural level. The urbanization of the laborer itself is far more meaningful than the urbanization of the material form of the village. We should encourage and help rural residents, especially young people, to enter the city, to achieve the nationwide urbanization (essentially civilized), rather than the village into the city. Therefore, in addition to the level of planning and awareness needs to be improved, but also to continuously strengthen the quality of village leaders and villagers, village leaders not only for the villagers to increase economic income but also for the villagers to create a comfortable living environment, so that villagers recognize the standard of living It is not only the cement road and the building but also the land and the foundation. It is the foundation of harmony between heaven and earth and people, and is the common ownership of our ancestors. Because usually heard a lot of people lament the sigh, lament the country can no longer find the shadow of the past, completely lost the rural characteristics, there are so many people in the childhood memories of the village is the kind of heart to God Chi. We as a village planning and design workers have the obligation to remind the people around: Please respect the village of our lives, do not let the local heritage landscape in our hands lost!

#### 4. CONCLUSION

The main purpose of this paper is to establish a

guiding framework for the construction of a rural landscape with a universal history, and to provide a concept support for the protection of the historical villages in the context of the new rural construction, rather than only for tourism Development conditions, or historical value of the huge historical village. In particular, the analysis of the concept of rural idvllic aesthetic, ideal society and the new native areas will help to understand the perception level and the requirements of the development level of the local landscape construction. Proposed the four major attributes of the local landscape class, innovation lies in the production of the group and the villagers of the merger, highlighting the local landscape in the relationship between man and land, and joined the "village flavor and atmosphere" elements. A questionnaire survey of tourists and residents shows that the perception of these two groups of people is of great significance to the construction of local landscapes, including aesthetic, protection and tourism perception.

#### REFERENCES

[1]Zhao Quanru, Liu Hao. Study on the Renewal and Development of New Countryside Architecture Landscape in the Process of Urbanization [J]. Urban Development Research, 2009 (11): 740–741.

[2]Zhang Donghui, Chen Min. Application of Urban Skin Care Strategy in the Protection of One-piece Street [J]. Shanxi Architecture, 2008 (14): 529–551

[3]Zeng Zhaoshan, Liang Yongguo, Zhang Haojie. To promote the harmonious development of new rural economic society with advanced cultural concept [J]. Reform and Strategy, 2008 (01): 29–51

[4]Zhu Shaohua. Landscape Design Classification and Ecological Landscape Design [J]. Journal of Northeast Dianli University, 2007: 59–61

[5]Li Wurong. Ecological service: a new concept [J]. Ecological economy, 2007 (09): 25–33

[6]Wang Yubo, Tang Ying, Wang Jing. Analysis of Land Consolidation Potential of Rural Residential Area [J]. Journal of Land and Resources Science and Technology Management, 2007 (04): 59–63

### An Empirical Analysis on Stock Option and Enterprise Performance

#### Yang Yimeng,

#### Financial Management Major, Harbin Institute of Technology (Weihai), China

Abstract: The core principle of the stock option system is based on the indicator results of the business performance of the listed companies, and the stock option system is the "gold handcuffs" binding the mutual interests of the operators and the owners. The "gold handcuffs" have three shining points: first, its incentive role is long-term, and can better solve the short-term behaviors of the operators in the company position tenure; second, it can make the interests of both parties collaborative, and improve the opportunity cost of the operator to produce moral hazard behavior; third, it can limit the job-hopping of the business operators, which is conducive to enterprises to attract talents, stabilize the human resources structure of enterprises, and reduce the human resources cost expenditures of the enterprises. As a kind of relatively scarce economic resource, the talented company managers can effectively improve the company's business performance and lead the enterprise to success. In the market, each enterprise strives for them, so that the costs paid are higher. The stock option system is an uncertain future income, and its value depends on the extent of the efforts of business operators, the height of the enterprises led by it and the value of the stock of his enterprises. For business operators, it is an earning depending on the future enterprise operation situation, and it uses the future to stimulate the current, and uses the long-term development to restrain the short-term behavior."

Keywords: stock option; enterprise performance; problem

#### 1. INTRODUCTION

#### (1)Overall Situations

According to the Resset database statistics, from March 18, 2003 to December 31, 2015, there were 248 listed companies completing stock option, in addition to the companies with the intention, the case, the resolution, the veto and the unimplemented termination. There were 378 listed companies in the implementation of stock options, of which private enterprises accounted for a large majority of the total number of companies, indicating that private enterprises are more popular in the use of equity incentives to improve the work enthusiasm of managers, hoping to retain and attract talents, which reflects the talent dependence of private enterprises from the side. And the private enterprises have relatively small scales, more flexible mode of operation, and simpler and easier equity incentive

operation.

#### (2) Conditions of Subject Matter

It can be seen from the Resset database statistics that there are 25 companies taking the incentive model as the stock option, one company Jiangxi Copper [600362] with stock appreciation right, three companies with the management shareholding, which respectively are Agricultural Products [000061], Kaidi Ecology [000939] and Xin'an Shares [600596], and 219 companies with restricted shares among the listed companies with completed stock option. Among the listed companies that are implementing the stock option incentive, there are 224 companies with incentive models as stock options, 9 companies with stock appreciation right, two companies with the management shareholding, which respectively are Gree [000651] and Sunyard [600571], two companies with incentive fund, which are SHAN DONG DONG-E E-JIAO [000423] and Meiling [000521], 138 companies with restricted stocks and three companies with other incentive models. This statistic shows that the vast majority of the listed companies that are in the process of implementing and complete take restricted stock and stock option as top two incentive methods of stock option and hope the company managers to work hard to improve the efficiency of the company, meet the corporate business performance objectives, restrict cash age limit, eliminate the short-sighted effects of the managers and unify the long-term interests of the managers and the future development targets of the company, eliminate the managers' moral hazards, and achieve the win-win situation of the company operators and managers.

#### (3) Stock Source

It can be seen from the Resset database statistics that there are 4 listed companies completed stock option and with the stock shares as the stock source, which respectively are Shenzhenye [000006], Agricultural Products [000061], Kaidi Ecology [000939] and Xin'an Shares [600596], 9 companies with repurchased shares, 2 companies with issued new stocks or repurchased stocks, namely, Baosteel [600019] and Jiangxi Copper [600362], and 2 companies with issued shares. There are 10 listed companies implementing stock option and with the stock shares as the stock source, 3 companies with repurchased which shares, respectively are KUNMING PHARMACEUTICAL Group [600422], Jianmin Group [600976] and Yongxin Stock

[002014], 7 companies with other sources and 358 companies with issued shares, all of which indicate that the vast majority of listed companies take issuing new shares as the stock source of the primary stock option incentive.

#### 2. AN EMPIRICAL ANALYSIS OF THE EFFECT OF STOCK OPTION OF LISTED COMPANIES IN CHINA

(1) Design of Empirical Method of Stock Option

As an objective economic scientific research method, empirical research only considers the law of connection between things, breaks away from the subjective value judgment of the researchers, and explains the objective law of things through the connection between the numbers. Therefore, the empirical method is a necessary method for us to research the economics, however, the regression analysis method is one of the most commonly used and effective methods in the empirical methods. It is one of the important methods to carry out empirical research.

To select the variables measuring corporate operation performance, the correlational researches use Tobin's Q and ROE at home and abroad generally. Based on the previous researches, this paper takes weighting ROE and Tobin's Q as the variables to measure the company's performance. The weighted ROE is the per centum obtained from net margin divided by shareholders' average equity, and Tobin's Q is the ratio of the purchase value of the listed companies in the market and the values created by the companies renewedly, and they are the important indicators to measure the company's performance and growth. According to the equity theory, the separation of ownership and management of the company will result in the fact that the owners and the managers have different objectives and utility functions, and pursue the maximization of respective objective effectiveness. It is difficult to reconcile the interest contradictions, and easy to generate agency and moral hazard and other issues. The popular equity incentive systems in the Western countries are regarded as the best solutions aiming at the above problems, the core idea is to take the manager as one of the owners of the company, bind the incentive income and the corporate management status, in order to connect the interests of the managers and the owners and maximize the interests of the owners and the managers. With the development of economy and society, our country has also started to gradually promote the stock option system of listed companies, and its effectiveness is still controversial, so that this paper put forward own hypothesis from Chinese stock option system:

(2) An Analysis of the Inter - year Time Series of the Correlation between Stock Option and Enterprise Performance

1. A longitudinal description of the sample data

This paper compares the weighted ROE of the 55

listed companies in 2012, 2013 and 2014 longitudinally, and compares the performance changes before and after the implementation of stock options to study the impact of stock options on the operating performance of these listed companies.

In 2013, there were 28 companies with increased weighted ROE, compared with that in 2012, accounting for 51.9% of 54 headquarters (excluding the Meihao Group with the incomplete information), and the remaining 26 companies accounting for 48.1% of the number of the headquarters have reduced weighted ROE. In 2014, there were 29 companies with increased weighted ROE, compared with that in 2013, accounting for 53.7% of 54 headquarters and the remaining 25 companies accounting for 46.3% of the number of the headquarters have reduced weighted ROE. Seen from the target samples, the quantity of the increase and the decrease of the weighted ROE of the listed companies with stock option system accounts for 50% approximately, which shows that the effect of stock option on the weighted ROE of listed companies is not clear and the effectiveness is questionable.

(3) Analysis of stock option effect in different industries

Listed companies in different industries are also very different in their main business, the operating system of different industries are different, the degree of response to the stock option system is not the same, so that this paper analyzes the stock option effects of the listed companies in different industries. The 54 listed companies in the sample are classified according to Version 2012 of classification of industry of the CSRC and concluded according to industry category names of the CSRC, there is one in electricity, heating power, gas and water production and supply industry, which is ZFET (002479); there are two in real estate, which respectively are Wanze Shares (000534) and Songdu Shares (600077); there is one in construction industry, which is Hongtao Shares (002325); there is one in transportation, warehousing and postal industry, which is FALEDA (300240); there is one in scientific research and services industry, Three-dimensional technical Project (002469); there are two in wholesale and retail industry, which respectively are Donghua Energy (002221) and Aiside (002416). There is one in water, environment and public facilities management industry, which is WELL.E (300190); there are eight in information transmission, software and information technology services industry (hereinafter referred to as the information technology industry), which respectively are YGSOFT (002063), DAS Intelligence (002421 ), Huangxing Venture (300025),Oriental Fortune (300059), Hande Information (300170), TRS (300229), BOCO (600289) and Sunyard (600571); there are two in leasing and business services industry, which

respectively are Bluefocus (300058) and Tengbang International (300178); and the remaining 35 listed companies are in manufacturing industries. As the number of sample companies in some industries is too small, not enough to carry out data analysis, so that this paper only select the manufacturing industry T

International Journal of Education and Management

and information technology industry with a relatively large number. The analysis and comparison of change situations before and after the implementation of the weighted ROE according to industry the classification are shown as the following table:

Table 1	Summary	sheet of	weighted	ROE in	different	industries	

	company	net capatal return	net capatal return	net capatal return	
	number	rate of 2012 (ROE %)	rate of 2013 (ROE %)	rate of 2014 (ROE %)	
IT	8	11.144	10.989	11.006	
Manufacturing	35	11.848	11.875	11.652	
Total	43				

Through the comparison of the weighted ROE of the listed companies with stock option system of information technology industry and manufacturing industry in different years, it can be seen that when the listed companies are in the information technology industry, the growth numbers of the weighted ROE in 2013 and 2014 respectively are -0.155 and 0.017, and the chain growth rates respectively are -13.91% and 0.15%. For the listed companies in the manufacturing industry, the growth numbers of the weighted ROE in 2013 and 2014 respectively are 0.027 and -0.223, and the chain growth rates respectively are 0.23% and -1.88%. Therefore, the annual ROE of the above 43 listed companies fluctuates, and it cannot be intuitively seen that the stock options system can obviously improve the business performance of the listed companies in the information technology industry and the manufacturing industry. It can be concluded that the effectiveness of the stock option system between different industries is still unapparent.

2.3 Multiple Regression Analysis on the Correlation between Stock Option and Performance of Listed Companies

Regression analysis is a statistical analysis means to find whether several variables (usually more than two) have the correlativity. In the field of statistics, sociology, economics and other fields, it is widely used. According to the variable numbers needing fitting, the regression analysis can be divided into simple regression and multiple regression analysis. Simple linear regression method means that the regression equation contains only one explanatory variable and an explained variable, and the corresponding coordinate relationships of the two can be fitted with a straight line approximatively, and the relevant statistical values meet the statistical distribution. Multivariable linear regression analysis method has only one explained variable, compared with the simple linear regression analysis method, but the number of explanatory variables is greater than or equal to two, the corresponding coordinate relationship of the two is still linear fitting, and the relevant statistical values meet the statistical distribution. Regression analysis method is a kind of statistics analysis method of data which is frequently used in scientific research. According to the input variable data, the internal relationship between the

data is looked for, and the regularity of the research data is obtained. The future development trend of the relevant variables can be predicted and adjusted according to the obtained results.

In this paper, the multiple linear regression model is used to analyze the correlation between the operating performance of listed companies and the stock options with quantities. The weighted ROE and Tobin's Q are taken as the explanatory variables to assess the operating performance of listed companies respectively. It is considered that the effectiveness of stock option effect of listed companies is influenced by different equity incentive modes and different industry factors. "The proportion of the underlying stocks used for stock option system accounting the total stock number (Hereinafter referred to as the proportion of equity)", "equity incentive model", and "industry" are taken as independent variables, among which the proportion of equity GQBL is taken as a fixed variable, incentive model JLMS and industry HY are taken as control variables, and the regression equation and its regression coefficients are statistically tested.

Multiple linear regression analysis model:

 $F = \alpha + \beta_1 GQBL + \beta_2 JLMS + \beta_3 HY_1 + \beta_4 HY_2 + \varepsilon (5.1)$ 

TOBIN SQ =  $\alpha + \beta_1$  GQBL+  $\beta_2$  JLMS+  $\beta_3$  HY<sub>1</sub> +  $\beta_4$  HY<sub>2</sub> +  $\varepsilon$ 

GQBL - proportion of the underlying stock with stock options accounting the total stock number of the company

TOBIN'SQ-Tobin's Q ratio

JLMS - Different stock option system incentive models

HY1 - Information technology industry

HY2 - manufacturing industry

F - the weighted ROE of the listed companies

E-error term

For the incentive model (JLMS) variable, the stock option model (11 listed companies) and the restricted stock incentive model (43 listed companies) are assigned: stock option mode = 1; restricted stock incentive mode = 0.

For industry (HY) variables, there are information technology industry (8 listed companies), manufacturing industry (35 listed companies) and other industries (11 listed companies). Respectively, they are assigned: information technology = 1, noninformation technology = 0; manufacturing industry=

1, non- manufacturing industry = 0; if they are "0", they will belong to other industries uniformly.

When researching the relationship between the stock option and the corporate performance of listed companies, the Tobin's Q value and weighted ROE of the listed companies are regarded as the dependent variables, the proportion used for the stock option plan accounting the total stock number is taken as the independent variable, and the different industries and the different stock option models are taken as the Table 2 Weighted ROE Anova in 2012 control variables, and the multiple regression model is used. Multivariate linear regression is a method of predicting the dependent variable by the established linear regression equation based on the optimal combination of multiple independent variables. In this paper, SPSS statistical software (vision: 19.0.0) is used to carry out linear regression analysis. The analysis results are shown as follows:

1. The regression analysis results of weighted ROE and Tobin's Q value in 2012

model	sum of squares	df	mean square	F	Sig.
1 regression	77.334	4	19.334	0.439	0.78
residual	2157.971	49	44.04		
total	2235. 305	53			

Table 3 Weighted ROE coefficient in 2012

model	Non standardized coefficient		standardized coefficient	t	Sig.	
	В	standard erro	Beta			
1 (constant)	11.756	2.865	3	4.103	0	
Equity incentive ratio	0.09	0.606	0. 021	0.148	0.883	
Incentive model	-2.928	2.352	-0. 183	-1.245	0.219	
IT	0.19	3.087	0.01	0.062	0.951	
Manufacturing	0.17	2.373	0.013	0.72	0.943	

Table 4 Tobin's Q Value Anova in 2012

model	sum of squares	df	mean square	F	Sig.
1 regression	1.49	4	0.372	0.184	0.946
residual	99.278	49	2.026		
total	100.768	53	3		

Table 5 Tobin's Q values in 2012

model		standardized efficient	standardized coefficient	t	Sig.
	В	standard erro	Beta		
1 (constant)	2.585	0.615		4.207	0
Equity incentive ratio	- <mark>0. 06</mark>	0. 13	-0.066	<b>-0.</b> 462	0.646
Incentive model	-0.031	0.504	-0.009	-0.062	0.951
IT	0.411	0.662	0.107	0.621	0.537
Manufacturing	0.016	0.509	-0. 005	-0.031	0.976

The regression analysis is as follows: For the regression analysis with the weighted ROE as the explained variable in 2012, the P value is equal to 0.780 and greater than 0.05, so the model is not statistically significant, and the p value of each explanatory variable is greater than 0.05. For the regression analysis with the Tobin Q value as the explained variable in 2012, the P value is equal to 0.946 and greater than 0.05, so the model is not statistically significant and the P values of each explanatory variables is greater than 0.05, so the model is not statistically significant and the P values of each explanatory variables is greater than 0.05, so the business performance of the listed companies implementing stock option in 2012 is not related to stock ownership incentive ratio, incentive mode information technology industry and manufacturing

#### industry distinction. 3.SUGGESTIONS ON IMPROVING THE EFFECTIVENESS OF STOCK OPTION INCENTIVE

(1) Improving the Relevant Laws and Regulations

The development of capital market first lies in the construction of laws and regulations, for a mature and effective capital market, the laws and regulations must be perfect, effective and enforceable. Perfecting the relevant laws and regulations of stock option incentive system and strengthening the supervision of listed company operator behavior and punishes cases are beneficial to stipulate the rights and obligations of the owners and operators of listed companies; to stipulate timely, accurate and effective relevant financial statements and disclose information of the listed company operators; to fully supervise the senior manager of the listed company not to damage the benefits of the owners for their own benefits; to fully protect the legitimate interests of the owner of the listed company and guide the senior managers of the listed company to operate in legal, strengthen the supervision organization to supervise the behavior of the managers of listed company, enable the managers to concentrate on improving the company operation performance, eliminate procuration and moral risk, and obtain normal legal earnings and incentive remuneration under the benefit convergence with the owner of the company.

(2) Strengthening the Construction of Managerial Talent Market

China's current manager talent market is not perfect, the market is quite a mixed bag, a variety of well-known managers forge academic qualifications and fictional work experience, in such time, it is difficult to find a manager, whether he has the ability to match the relevant positions, and whether he can promote the company's operating performance; secondly for many state-owned holding enterprises, their managers are not selected by the market, but by the government's administrative appointment, this government behavior is contrary to the spirit of the market economy, for some private enterprises, only relatives are employed, which is not conducive to the implementation of the stock option incentive system. It requires strengthening the construction and improvement of manager talent market, introducing the manager's competitive mechanism, forming the manager's crisis concept, and creating the manager's catch-up consciousness. At the same time, it is necessary to establish a scientific manager's qualification evaluation center and an authoritative evaluation system, which can provide a fair and impartial objective evaluation report for the manager's ability, so that the market can test the manager's ability to form the selection rules of "survival of the fittest" and "senior executives being ready to accept a higher or lower post", and enable excellent managers can stand out in the market. In the institutions of higher learning, open relevant majors to train reserve talent, and attract the managers at work to continue to learn, and constantly improve themselves, make possible efforts to enrich our manager's industry talent to the greatest extent, improve competitiveness, and improve the effectiveness of China's stock option incentive system from the source of human resources.

(3) Enhancing the Effectiveness of Capital Market

A large number of predecessors' empirical researches and objective facts prove that the efficiency of China's capital market is insufficient, or it even can be said that it is still in the weak efficiency of market stage, the stock price fluctuates greatly, and the

#### International Journal of Education and Management

speculative composition is far greater than the investment composition. China's capital market is not perfect, the stock price on the market does not fully reflect all the information and real intrinsic value of listed companies, so it cannot really measure the performance of managers, cannot reflect the real efforts of managers and their operational capacity, and it cannot be referred to limit and reward managers, and the effectiveness of its incentive has been greatly weakened.

In order to improve the effectiveness of China's capital market, it is possible to cultivate the investment consciousness of ordinary investors, advocate value investing and reduce speculation in stock market, eliminate the huge speculative risk of China's stock market, meanwhile, speed up the market-oriented system reform of capital market, reduce and cancel administrative intervention, improve and perfect the delisting provision, and proceed from entry and exit of the listed companies to capital market, further enhance the inherent quality of listed companies, improve the risk awareness of listed companies, enhance the competitiveness of listed companies in China, resolutely crack down on insider trading and market manipulation and other acts, strengthen the constraints of market to listed companies, create a healthy, legitimate and effective market atmosphere, and bring the effectiveness of China's capital market into the scientific, rapid and sustainable development.

#### REFERENCES

[1]Xu Zhongmou. Study on Application of Stock Option System in China's Listed Companies [J]. Manager' Journal, 2014(28):3-4.

[2]Chen Runxin. How to Promote the Enterprise Innovation under New Situation [J]. Shanxi Metallurgy, 2010(6):78-79.

[3]Berle, Means, The Modern Corporation & Private Property [M].Beijing: Commercial Press, 2005.

[4]Wang Jinbin, Li Zhenzhong. Internal Employee Stock Ownership Plan and Enterprise Performance----Study on Western and Chinese Enterprise cases [J]. Economic Research, 1998(05):65-72.

[5]Guo Huirong, Liu Xin. Stock Option—the Link between CEO Performance and Remuneration [J]. Business Studies, 2000(12):66-68.

[6]Wei Gang. Senior Management Incentive and Listed Company's Performance [J]. Economic Research, 2000(3):32-39.

[7]Gao Minghua. Correlation Analysis of Internal Balancing and Business performance of Chinese Enterprise Operator Behavior—Take the Listed Companies for example [J]. Nankai Business Review, 2001,4(5):6-13.

# Research on The Main Factors Affecting the Development of Police Physical fitness Education Curriculum and Direction of Development

#### Huasheng SHI Railway Police College

Abstract: Based on the current police education system, this paper points out the importance of the police physical education curriculum in the police education system. With the reform of the recruiting system, the police physical education curriculum is bound to make corresponding adjustments to adapt to the current police education.

Keywords: Police physical fitness education curriculum; police education; main factors; development direction

#### 1. INTRODUCTION.

Police Physical Fitness is a word or concept that is used in today's police fitness training and police skills. Sports is the basis of human life activities and human behavior activities, and is the carrier of people's physical and mental health and sports goals. To strengthen physical training, Can improve the health and athletic ability of the police, optimize the healthy lifestyle and quality of the police, is irreplaceable to other means of education. Therefore, the correct understanding of the basic principles of physical fitness and scientific training, to guide the police to carry out physical training and training activities Has important significance, to enhance the police constitution, improve health, enhance the combat effectiveness has a pivotal role in the police body is the police in a variety of police activities in the performance of physical capacity, including the police practice in the process of physiological adaptability and psychological adaptation Ability of physical training is to strengthen the basic training of the police body is to improve the combat effectiveness of the security forces of the important basis of one of the factors. The police's career characteristics determine the police must have a strong physique, the police shoulder a heavy responsibility, they want to fight crime, Defend people's lives, Because of violent crime more and more serious, the police have become the most sacrificed people of peace since the reform and opening up, the expense of more than 9,000 police officers, wounded more than 20 people, only in recent years, the annual sacrifice of more than 500 police, But to bring a lot of family misfortune. Although there are many reasons for the police casualties, such as skills, equipment, backward, but poor physical fitness and declining year after year is

also a very important reason in dealing with emergencies, There is beyond the ordinary people's physical strength and energy, so as to quickly act, become unfavorable for the favorable task to complete the arduous task. Therefore we can see the police physical training without delay, police fitness courses in the police education system position is more prominent, but the current police Physical education courses are generally not taken seriously in police education, and a large part of the view is that the police physical curriculum is relatively insignificant relative to other police courses or police courses[1].

#### 2. THE MAIN FACTORS

(1)The allocation and organization of Teaching Resources

After the reform of the recruiting system, the content of the police physical education curriculum has been changed from a comprehensive system of knowledge-based teaching to the subject-based knowledge point, and the content of the course is optimized and streamlined. Changes in course content directly affect the other aspects of curriculum implementation. Police physical education courses include "police physical", "police obstacle", "police practical climb", "police practical swimming", "sports" and other five teaching subjects. In the new professional training courses set to streamline the two general education classes, from the teaching hours, the large compression, a direct impact on the allocation of teaching resources, so that the deployment of teaching resources and reorganization possible. Academic education, teaching content to consider the integrity and continuity of discipline, pay attention to knowledge. And professional training more practicality, is the knowledge of the teaching and use, so the teaching content is flexible, diverse, strong times<sup>[2]</sup>. This poses a challenge to the original police physical classroom teaching. Specific performance in the following three areas:

First of all, the new "point to face" teaching content is not subject to subject restrictions, involving a wide range, rich in content, the teacher's knowledge reserves and skills are higher, teacher training and optimization of the quality of teaching a key link. Secondly, the module teaching is a special teaching form of the individual subjects of the police physical fitness course. Its purpose is to concentrate on strengthening a certain skill. With the change of the enrollment object and the change of the teaching form, the module teaching should highlight the advantages and make corresponding adjustments. Finally, classroom training is an extension of classroom teaching. In the academic education stage, extracurricular training mainly to students consciously participate in the main training content, training methods are relatively simple. With the reduction of the number of hours of classroom teaching in the police, the class # l, i / il has become the perfect development space for perfecting the physical education of the police.

#### (2)financial support

in the traditional academic education to strengthen the actual combat skills training, is bound to need to increase equipment and simulation places investment. With the gradual expansion of the scale of enrollment in police academies and the increase in foreign exchanges, we need more solid financial security. Therefore, the financial and financial protection is not only the factors that affect the police physical education curriculum system, but also the most essential and important factor.

(3)A equitable assessment of police physical fitness curriculum

Assessment refers to the activities of the assessor systematically using scientific research methods to evaluate, evaluate, and evaluate the planning, design, implementation and effect of various projects. The evaluation of police physical fitness curriculum is the middle part of the whole police education, plays a related role in the establishment of a reasonable scientific curriculum assessment system to improve and improve the quality of teaching education. First of all, the quality assessment of police physical fitness curriculum is to ensure the quality of teaching the necessary means and incentives. Motivation itself is based on competition as a prerequisite. Through the assessment will give educators and educators to bring appropriate pressure, making the police physical education curriculum is motivated and extensible for the future teaching work to improve, improve and develop a solid foundation. Secondly, the quality assessment of police physical fitness curriculum is an important way to improve the quality of teaching. Teaching quality assessment is multifaceted, not only to assess educators, but also to assess the education and teaching managers. Therefore, through the comprehensive evaluation of teaching quality, teaching can be made to become a reality, so that the level of teaching managers can be improved. Once again, the police physical fitness course quality assessment is an important channel for gathering information, accumulating information and experience[3]. The improvement of the quality of education depends on the comprehensive grasp of various information. The evaluation of the quality of the police physical fitness curriculum is the most convenient way to collect all kinds of training information. It provides scientific basis for improving the work of the police physical fitness curriculum, so

#### International Journal of Education and Management

that the good teaching mechanism is The evaluation of the reflected, the new concept of teaching in the assessment to be reflected in the scientific teaching methods are summarized in the assessment. Public security colleges are important points for college students to study in school, and they are the starting point for the training of police physical education and have a great impact on the physical activity of the whole police career. But the police physical education can not only focus on the police college students in school during the police physical education and training, and on-the-job training of the police officers of the scientific nature, guidance, effectiveness and relevance considerations such as little or no consideration, Otherwise it will lead to police college students across the school, step after the public security work, due to busy maintaining social order, rupture work and take into account personal family life and other factors, in general, continue to reduce the chance of physical exercise, or Said that there is no longer the opportunity to educate the police physical education, and over time, the police should have their physical, physical not only can not be developed, and showing a downward trend, this momentum has become a common phenomenon, can not but cause the police physical education sector.

### 3. THE DEVELOPMENT DIRECTION OF POLICE PHYSICAL FITNESS COURSE

(1) Reforming the classroom pattern

a. Lecture

Due to the streamlining of subjects and the decrease of teaching hours, the theoretical knowledge points of police physical education teaching are no longer in the same way as the learning of technical action, but the contents, purpose, significance and important theoretical part of police physical fitness Focus on teaching, in a comprehensive understanding of the subjects at the same time to deepen the understanding of the theoretical knowledge points, to reduce the technical training class theory to explain, really achieve "fine talk more practice" classroom teaching effect. Lectures can make full use of teaching resources; focus on teaching, better unified teaching content.

b. Refining the division of teaching

To knowledge-oriented teaching content changes, teaching team composition can not be fixed. According to the teaching content of the teaching team is divided into three levels, the teacher is responsible for lectures, the main train teacher is responsible for classroom teaching program design and classroom training organization, auxiliary training teachers to assist classroom training and guidance extracurricular training. This form of classroom division of labor can be a good teaching content from the class extended to the extracurricular, and can give full play to the strengths of teachers, teachers to mobilize the enthusiasm and initiative. c. physical examination

Physical education project content is relatively simple, classroom teaching and training means a single, teaching effect as extracurricular training, but the

four project training standards and each student must be achieved, so you can conduct every year through the physical test, To supervise extracurricular training and check the role of student achievement changes. (2) Strengthening extracurricular training

Extracurricular training is the extension and improvement of the classroom, the mastery of skills must have a certain intensity and a certain amount of repetitive training, so in the process of technical learning and mastery of extracurricular training is an essential part. The new forms of extracurricular training, by the classroom training teacher is responsible for, according to the needs of classroom teaching, targeted, organized to do the classroom and the combination of extracurricular, improve the effectiveness of teaching and training. But also can learn from the college sports association or the club's mode of operation, the establishment of a variety of sports club, not only can enrich the campus cultural life, but also with the relevant teaching departments, institutions and public security departments of communication and cooperation platform, Talent sharing channels.

#### (3) improving the faculty

Teachers 'strength determines the quality and level of the police physical education curriculum, occupies an important position in the police physical education curriculum, is an important factor affecting the quality of teaching and even the whole teaching system, as the producers' level and skills have the same effect on the product. The level of teacher power includes two aspects, the theoretical level and the level of experience of actual combat, it determines to some extent the success or failure of the teaching system. The structure of the faculty mainly involves two aspects, namely, the structure of knowledge and the age structure, and also has a very important influence on the police physical education curriculum system. On the one hand should be as soon as possible to strengthen the training and improvement of existing teachers; the other hand, to take a variety of forms and channels will be the industry's talented people employed to the school for academic exchanges. In essence, the way of classifying the division of teaching in the classroom is also a kind of "excellent with the new" mode of operation, which is conducive to classroom teaching, but also conducive to the exchange and cooperation between teachers, but also can solve the teaching content expansion and teachers Supply and demand. (4) carrying out teaching science research

Scientific research status and development ability to science and technology to police, science and technology strong slogan just illustrates the importance of science and technology to police work. Similarly, the status quo and development of scientific research, the quality of the police physical education curriculum and even the system itself has a direct and in-depth impact. The construction of a

strong scientific research team can promote the leapfrog development of this course, can bring the campus directly into the forefront of police theoretical research, understand the development of the world police theory. From the development point of view, excellent scientific and technological team and super scientific research ability is also the continuous development of police fitness curriculum support and protection. Teaching research is the focus of the work of teaching and research department, teaching research should be the current teaching work need to solve the problem, teaching activities must be carried out under the guidance of teaching research results to ensure the implementation of the curriculum of scientific and normative. The scientific and normative nature of police physical education teaching and research comes from the collection, collation and analysis of data. The establishment of a special data in line with the police physical information database, from the students' height, weight to the sports test results for detailed data records, not only can visually reflect the teaching effect, but also for curriculum changes to provide data information. Recruitment system reform is not only a process of integration and optimization, but also an opportunity to improve and improve the construction of scientific implementation system and improve the quality of teaching.

The basis of police physical education education is that the contents of police physical education should be in the whole process of receiving physical education from the police career, not only to highlight the police as the starting point to guide the police physical education as the main line, but also to establish a continuation To the police college students after graduation can still carry out the practical exercise value of the "easy to learn, easy to use, easy to practice." It is helpful to solve the problem of police physical fitness at all stages of the school during the school period, which is a kind of police physical education teaching system which is one of the characteristics of the police and the physical fitness of the police. Of the task of learning, but also help the police in the public security work in the police fitness training objectives. Fully demonstrated the combination of learning and use, the combination of theory and practice.

#### REFERENCES

[1]Wu Wei. the Generalization of Administrative Power in Chinese Universities. Journal of Suzhou University. 2009

[2]Wang Haiyuan. the Present Situation and Developing Trend of Police Physical Education in Public Security Colleges in the New. Journal of Hubei Police College 2009.

[3]Yuan Guanglin. Reconstruction of Police Training Model in China. Journal of Shandong Police College.2008

# Influences of Internet Finance on the Traditional Banking Businesses of Chinese Commercial Banks

#### Weiyi Ji

#### Finance Major, Wenzhou Business College, 325035, China

Abstract: This paper introduces the financial industry and its banks' payment system. In discussing the rights and wrongs of banks' doings, the author finds methods to enhance the efficiency as well as performances of these traditional commercial banks. Keywords: internet finance, commercial banks

#### 1. INTRODUCTION

In Chinese financial industry, commercial banks are playing irreplaceable roles. Without commercial banks, there will be no long-term stable development for the financial industry. If the financial industry develops stably, it will give full play to its support for the overall economy. At present, China is in a crucial phase of its reforming process. It is thus necessary to develop a stable developmental environment for the market economy to further deepen the reforming process. In recent years, Chinese commercial banks have been operating in a favorable environment, which is all benefited from Chinese financial policies. For instance, the costs paid by banks to absorb deposits are rather low, which allow commercial banks to spend less capital on more investment. For another example, the Chinese government has implemented strict measures to regulate the banking industry. That's why Chinese banking industry enjoys no vicious competitions as the banking industries in other countries do. As of today, such a status has been basically the same. In this context, the practice for China to reform commercial banks is arduous and at a standstill.

Unexpectedly, Internet finance emerged several years ago, which exerts a huge impact on traditional banking businesses in commercial banks and forces traditional banking industry to make reforms. The emergence of the Internet finance represents the general trend. In this financial wave, the key to successes lies in how commercial banks should seize the opportunity for changes. In this context, the thesis researches the influences exerted by Internet finance on the traditional banking business of commercial banks to analyze what measures should be adopted to cope with the grand trend of Internet finance.

2. INTERNET FINANCE AND DEVELOPMENT TENDENCY

At present, Chinese Internet finance is rather advanced and even takes a world-leading position. Its successes and prosperity are indispensible with the following three reasons: Firstly, the demand determines the supply. In recent years, Chinese economy has been developing fast and small and medium-sized enterprises spring up in a succession. That's why the demands of small and medium-sized enterprises for loans on credit keep increasing. However, traditional commercial banks fail to meet the credit loan demands of small and medium-sized enterprises. In this context, Internet finance occurred correspondingly. Secondly, Internet is becoming increasingly popularized and involves nearly every aspect of people's life. This creates a favorable foundation for Internet-based financial products to prosper. Thirdly, Chinese supervision departments pay a bigger emphasis over the role played by the market and thus formulate supervision measures that are more suitable for the requirements on market liberalization. At present, various modes of Chinese Internet finance have sprung up and enjoyed fast development. The thesis mainly arranges and discusses the main business modes of Chinese Internet finance and expounds on the developmental status of the business mode of Internet finance.

#### (1)Third-party Payment

Through its rapid development in the past years, the third-party payment has won favor from the masses successfully. At present, the Chinese third-party payment platforms mainly include WeChat Pay, Alipay, Quick Money and Ten Pay. Compared with traditional commercial banks, such third-party payment enjoys a myriad of advantages. For instance, people only need to carry a mobile phone with them to conduct all trade. Nowadays, nearly all stores support the payment through Alipay and WeChat Pay, which is much more convenient than bringing cash. This function alone has attracted many users for Alipay and WeChat Pay. Attracted by such convenience, an increasing number of people start to use the third-party payment in recent years and refuse to bring cash with them. As is shown by the statistical data of Iresearch, the scale of trading through Chinese third-party payment reached 8 trillion yuan in 2014, which rose by 50.3% than that of 2013. According to the analysis conducted by Iresearch, the rapid increase of the third-party payment business on Internet is mainly driven by financial innovations and the constantly improving e-commerce environment that make it more convenient to conduct network

payment. With joint efforts, they lead to a sharp increase in online payment. It is estimated that the trading scale of Chinese Internet third-party payment will reach over 2 trillion yuan in 2018. Conversely, the emergence of the third-party payment may not necessarily be a good thing for traditional commercial banks. Without using paying any capital costs, the payment business generated revenues for banks in the past. Because of this, the payment industry has always been the business that generates the highest profits for traditional commercial banks. However, the fast development of the third-party payment brings a huge impact to the payment business of commercial banks and pushes them down from the past dominating status.

(2)Investing Financial Products

When it comes to the investment and financing business of Internet finance, there is a representative product that is particularly worthv of mentioning-Yu Ebao. It is just the occurrence of Yu Ebao that allows the Internet finance to be familiar to people. Compared with the financial products offered by traditional commercial banks, the biggest advantage of Internet financial products is convenience. Whenever you are and whenever it is, a mobile phone allows you to conduct financing activities. Taking Yu Ebao for example, users not only can enjoy interest but also may make payment anytime and anywhere after saving money on Yu Ebao. It is just the convenience that helps Yu Ebao to attract limitless clients. As is shown by relevant data, Yu Ebao had accumulated over 2.5 million clients from its launch in the middle June in 2013 to June 30th 2013. Meanwhile, these users transferred 6.6 billion yuan to Yu Ebao. As of December 31st 2013, the number of clients had reached 43.03 million and its capitals scale reached 185.3 billion yuan. As of February 27th 2004, the clients of Yu Ebao exceeded 81 million and the deposits on Yu Ebao were as high as 500 billion yuan. In April 2015, the deposits on Yu Ebao reached millions of yuan against the market trend

#### 3. INFLUENCES OF INTERNET FINANCE ON THE OPERATING BUSINESS OF COMMERCIAL BANKS

In recent years, the Chinese Internet finance has enjoyed rapid development and fast popularization. For Chinese people, every aspect of their life is deeply involved with the Internet finance. Among a variety of influences brought by the emergence of the Internet finance, the most direct one is the decline of traditional commercial banks. In the great tendency of Internet finance, different scholars hold different opinions and ideas as to whether commercial banks will have a firm foothold, seek breakthroughs and enjoy further development or gradually decline. Regarding their different opinions, most scholars are divided into two schools. The first school thinks Internet finance has brought unfavorable influences to commercial banks. For instance, the Internet finance has absorbed partial deposits in the society, which make it difficult for traditional banks to absorb capital with low costs and retain their monopoly status. On the contrary, the other school believes there is no direct conflict between Internet finance and traditional commercial banks. To think from another perspective, commercial banks can seek improvement by learning from the convenience advantage of Internet finance. In fact, Internet finance and commercial banks are complementary to each other. This chapter will discuss about the influences exerted by Internet finance on the traditional banking businesses of Chinese commercial banks in details.

(1)Influences of the Third-party Payment on the Deposit Business of Commercial Banks

The main businesses provided by commercial banks are divided into deposit business and loan business. The deposit business is further divided into demand deposits and time deposits. The third-party payment mainly influences the demand deposit business of commercial banks. According to the regulations of Measures for the Custody of Clients' Reserves of Payment Institutions, the third-party payment platforms should put the payment provisions in a commercial bank. Moreover, all provisions should be deposited in a special account set up in this commercial bank, which is similar to the escrow of the securities industry. What is provision? Taking Taobao for example, the payment does not directly go to the account of the seller after the buyer purchases a product. Instead, it is put on the third-party payment platform temporarily, namely Alipay. After the buyer receivers the goods and confirms his order several days later, the payment is then transferred to the account of the seller. Generally speaking, there is a time difference between making the payment and transferring the payment to the seller, which lasts for several days or over ten days. In the time difference, the capital deposited is the provision. After knowing the regulations of Measures for the Custody of Clients' Reserves of Payment Institutions, we may notice a series of problems in the process, such as transfer demand deposits, change the deposit structure and increase the capital cost. In the following part, such problems will be discussed in details.

First of all, Measures for the Custody of Clients' Reserves of Payment Institutions stipulates that the third-party payment platform should put their capital in commercial banks. Because of this, the total capital volume in the whole banking system will not be influenced. What is the so-called transfer of demand deposits? In fact, it refers to transferring capital from one bank to another. Measures for the Custody of Clients' Reserves of Payment Institutions stipulates that every bank should and can only choose one commercial bank as the bank for placing provisions. Before Measures for the Custody of Clients' Reserves

of Payment Institutions was launched, the provisions of the third-party platform can be divided and stored in several banks. For another example, the provisions of Alipay could be deposited in different banks before the launch of Measures for the Custody of Clients' Reserves of Payment Institutions. After its launch, however, the provisions of Alipav can only be placed in one bank. The sum of provisions remains the same and the only difference is that four banks are integrated into one bank. In other words, the third-party payment will not influence the total deposits in the whole banking industry. Although the total deposits are free from impact, the third-party payment has indeed changed the structure of banking deposits and increased banking capital costs. According to the regulations of Measures for the Custody of Clients' Reserves of Payment Institutions, the non-demand deposits can be put in banks by the third-party payment for 12 months in the longest. It is apparent that the interests of time deposits are higher than demand deposits. That is why most third-party payment institutions choose to turn such capital into time deposits. In this way, demand deposits are decreased, while time deposits are increased, which changes the depositing structure of commercial banks. As is known to all, the most important capital source of traditional banks lies in demand deposits. The decrease of demand deposits and the increase of time deposits will surely increase the operating costs of commercial banks. Although provisions exert certain impact on banks, the impact remains insignificant at present and only accounts for a small proportion in the total deposits in banks. It is thus unnecessary to pay attention to its impact. In the long run, however, the proportion of provisions will keep increasing and exert increasingly huge impact on commercial banks. 4. MEASURES ADOPTED BY COMMERCIAL

#### BANKS TO COPE WITH COMPETITION FROM INTERNET FINANCE

Since Internet finance enjoyed fast development in 2013, an increasing number of people start to contact, use and research it. Although Internet finance enjoys fast development, it has a small client foundation and thus cannot replace the status of commercial banks in China. In the long-term, however, Internet finance will exert far-reaching influences on commercial banks. In all industries, Internet-basis is the grand tendency in the future development. As the Internet finance was the first to use Internet, it has taken an advance chance. However, commercial banks can also start to adopt Internet technology to speed up their transitions and learn from all the current advantages of Internet finance. For the author, commercial banks will surely win back its market. In the following part, the thesis talks about the countermeasures and strategies for commercial banks to cope with the competition from Internet finance. (1)Develop Long-term and Medium-term Loans

Generally speaking, there are three motives for

#### International Journal of Education and Management

people to hold currencies: trading motive, prevention motive and speculation motive. These three motives have determined people's demands for currencies. In recent years, the high returns and convenience of Internet financial products make them deeply loved and pursued by people. For this reason, the loss of demand deposits from commercial banks to Internet finance has been inevitable. Even commercial banks launch similar products to win back short-term flow capital, they do not have any advantage. It is thus necessary for banks to avoid their weaknesses and give play to their advantages. At present, the loss of demand deposits is unstoppable. Commercial banks thus should change their thinking and seize the medium-term and long-term deposit market. Commercial banks may give full use of their credit and high safety to absorb medium-term and long-term deposits and large-sum deposits, thereby making up for the lost capital in demand deposits. Meanwhile, banks may consider formulating differential pricing targeting at the absorbed deposits to attract long-term deposits in a better manner: Offer a common interest rate for short-term small-sum deposits and provide a suitable preferential interest rate for long-term deposits. In the meantime, more preferences may be offered to other businesses.

(2)Launch Acceptable Financial Products

As the living standards of Chinese people are constantly improved, people have increasing capital. In this context, financing is an inevitable tendency and everyone is in need of financing. For this reason, the overall financing industry has an excellent prospect. Commercial banks only need to design financial products that are suitable to the masses, safe, convenient and comprehensible to fully cope with the impact from Internet finance. At present, the dominating channels of selling financing products are still in the hands of commercial banks. For this reason, commercial banks only need to make active reforms, innovations and designs to launch products that are suitable to the masses. With their channels, commercial banks can sell products soon.

(3)Pay Attention to the Loan Businesses of Small and Medium-sized Enterprises

Seeking long-term development and valuing the security loans, Chinese commercial banks have been paying great attention to granting loans to large enterprises and companies and neglecting the loans to small and medium-sized enterprises. Naturally, big companies and enterprises are much safer and yield higher profits than small and medium-sized enterprise. Meanwhile, a commercial bank makes profits through loans and mostly conducts long-term cooperation with one or several big enterprises to make stable benefits. It is rather difficult for small and medium-sized enterprises to apply for loans from commercial banks. However, the Internet finance is targeting at the market of small and medium-sized enterprises to realize the

importance of small and medium-sized enterprises. At present, private enterprises are rather developed and commercial banks cannot neglect the existence of small and medium-sized enterprises to seek further development. The author of the thesis thinks commercial banks can seek cooperation with Internet finance, such as getting their data, mastering the status of small and medium-sized enterprises and granting loans according to the actual status of small and medium-sized enterprises. With these measures, commercial banks will cope with the competition from Internet finance at ease.

#### REFERENCES

[1]Franklin Allen, James Mcandrews and Philip Strahan. C-Finance: And Introduction[J].Journal of Financial Services Research, 2000.

[2] Suzhen Chen, Jun Zhao, Enhua Ji, Challenges and Opportunities Brought by the Emergence of Internet Finance to Chinese National Savings Bonds [J]. Southwest Finance, 2015 (2): 80–90.

[3] Xianfeng Dai. Why Internet Finance is Popular in China [J]. Financial Perspective, 2014 (3): 740–741.

[4]Chang Guo. Current Status, Tendency and Outlook of Internet Finance[J]. Estate and Science Tribune, 2013 (19), pp.36-37.

[5]Xiaolin Gong, Influences of Internet Financial Modes on Traditional Banking Industry [J].Southern Finance, 2013 (5), pp.227-232.

[6]Jia Li. Shock and Integration of Internet Finance to Traditional Banking Industry—Discussions Based on Financial Functional Concepts [J]. Journal of Yunnan University of Finance and Economics, 2015

[7]Xun Qiu. Influences and Revelations of Yu Ebao on Commercial Banks[J]. New Finance, 2013 (9),pp.36-37.

[8]Gongmeng Chen. Overview on Corporate Governance[M]. Beijing: Tsinghua University Press, 2003.

[9]Hongshan Shen and Yangyang Yan, 2014 Research Report on the Depth of Internet Finance Industry[R]. Chengdu: Chengdu Social Security Wealth Equity Investment Fund Center, 2014,6.

[10]Wang Bin. Development of Internet Finance and Responses of Commercial Banks[J].Financial Technology, 2014 (4), pp.36-37.

## The Exploration of the Reform in Teaching Mode for Operational Research in Chinese Normal Universities

#### Gao Rui, Chen Zhihui

School of Mathematics and Statistics, Cangzhou Normal University, Cangzhou of Hebei, 061001, China

Abstract: Based on the teaching practice, this paper has analyzed the problems related to the teaching of operational research in Chinese normal universities from the perspective of teaching concept, teaching form and evaluation mechanism. Some measures have been proposed to solve those problems, such as involving the students in the teaching activities, forming the professional teams across different disciplines and innovating in the evaluation methods. Keywords: Operational research; Teaching concept; Teaching form; Evaluation mechanism

#### 1. INTRODUCTION

According to the concept of operational research, various disciplinary knowledge can be utilized through mathematical methods. By building, analyzing and solving the relevant mathematical models, it can provide data support for the practical work, facilitate the decision-making as well as offer mathematical methods for the practice and applied science. Hence, it is a tool combining theory and practice. Operational research emerged in the 20th century<sup>[1]</sup>. In the 1950s, it was introduced into China by some scholars, such as Qian Xuesen. They also established the first research institute devoted to operational research in China. In the early 1960s, the courses of operational research were offered in some Chinese universities. At present, most of Chinese universities have offered the courses of operational research for those students majoring in mathematics and management. Through the joint efforts of many scholars of some generations, the education on operational research has made great progress in China. However, considering that operational research has a closer connection with the science, such as social science, technological science and military science, the traditional educational mode for the talents specializing in operational research has been no longer able to satisfy their needs. Many teachers have put forward their own constructive views on the teaching of operational research, which focus on the reform in the teaching content, teaching form and evaluation method.

2.THE FEATURES OF OPERATIONAL RESEARCH

(1)The relationship between operational research and mathematics

Operational research emerged during the Second

World War. Since then, it has been closely related to mathematics. A variety of mathematical theories have been used as the tool for operational research. The main process of utilizing operational research is as follows:

Research and analyze the problems  $\rightarrow$  Build the relevant mathematical model $\rightarrow$ 

Solve and optimize the model  $\rightarrow$  Test and adjust the model  $\rightarrow$  Implement the solution

It can be seen that the core of the process is to build the mathematical model and find the optimal solution through many methods. Hence, there is an inseparable connection between operational research and mathematics. In other words, both the teachers instructing operational research and those students studying it should have some basic knowledge about mathematics <sup>[1]</sup>.

(2)Comprehensive feature

The problems within the research scope of operational research arise from the practice. Therefore, the solution to those problems will involve the relevant knowledge of different disciplines. The integration of modern computer technologies and operational research has pushed forward the developemnt of operational research and also facilitated its application to practice. Moreover, it has also led to various branches and new algorithms of operational research, such as MRP theory, simulation technology and genetic algorithm. Due to the comprehensive teaching, it will place a greater pressure on those teachers and also discourage those students from studying it <sup>[2]</sup>.

(3)Practical feature

The emergence of operational research is mainly attributed to its strong practical value. After the Second World War, the application of operational research has extended from military use to civil use. The emergence and developemnt of various branches of operational research are also closely related to its application. For example, the American air force uses operational research to solve the problems of military planning and also propose the linear planning. When researching the phone system, Erlang who is a Danish engineer proposed some famous formulas for queuing theory. In the modern world, operational research has been widely applied to inventory management, transport, production planning, equipment repair, equipment update, engineering

optimization and urban planning management.

3.THE MAIN FLAWS IN THE TEACHING PROCESS OF OPERATIONAL RESEARCH

(1)Outdated teaching concept

Despite the fast developemnt of modern technologies, many students are still occupied in studying the textbooks full of abstract concepts. They still turn a blind eye to the fast changing world. Many teachers still focus on teaching according to textbook and improving those students' ability to do exercises. Most students have set a goal of obtaining a high mark in the examination. In a word, neither the teacher nor those students have realized the importance of applying operational research to practice.

#### (2)Outdated teaching form

The current teaching of operational research in many Chinese normal universities still takes the form of traditional instruction. To be more specific, the teacher focuses on imparting mathematical knowledge and problem-solving skills to those students in the class. Those students are supposed to listen attentively in the class and do exercises after the class. The practical feature of operational research has been neglected. Without fully understanding the essence of operational research, those students have failed to improve their problem-solving skills. As a result, it will have a negative effect on the cultivation of the talent specializing in operational research. Moreover, it will also discourage those students from studying it on their own initiative.

(3) Single evaluation method

The evaluation of operational research in most normal universities in China mainly takes the form of examination. It can only evaluate whether those students are familiar with the basic concepts and have a strong ability for mathematical reasoning. It can not reflect their problem-solving skills and the teaching effect of the course.

### 4. SOME SOLUTIONS TO THOSE PROBLEMS ABOVE

#### (1)Update the teaching concept

Those students should not only acquire the textbook knowledge changing fast with time but also spend more time participating in the innovative projects as an individual or team member. Many teachers only focus on imparting the textbook knowledge and instructing examination-related skills. They seldom encourage those students to make more practice. The digital era is featured by social cooperation, platform collaboration, mutual assistance and sharing. Waiting for the instruction is a form of passive study. The participatory experience is an active way of learning. In the modern world, the role of teachers and the objective of courses have changed. The instruction of those teachers is not the only way for those students to acquire knowledge. More importantly, the teachers should study together with those students. Moreover, those students have also become important resources

for those teachers in the class. The comprehensive education involving various disciplines, such as mathematics, computer and management, should be encouraged and implemented. It can represent the development tendency of the education. In a word, the integration of various knowledge will stimulate the learning initiative and creative power of those students.

#### (2)Innovate in the teaching form

Firstly, classroom teaching is the main part of higher education in China. Hence, the research should focus on how to fully improve the practical ability of those students in the class, change the teaching mode to realize the creativity of those students, involve those students in the teaching process as well as stimulate the learning initiative of those students. For example, when explaining the feasible solution, basic solution and optimal solution for simplex method, the teacher can ask those students some questions. Those students can be divided into some groups to discuss the relationship between the three concepts. After drawing a conclusion and summarizing some questions, those groups give feedback to the teacher and also further discuss it. The teaching method enables those students to participate in discovering and creating the knowledge. Hence, the passive learning mode can be overcome. After comprehending the knowledge, those students will be encouraged to apply it to practice. In a word, the learning mode featured by study, comprehension, application and innovation can be created.

Secondly, operational research is only offered for those students majoring in mathematics, management and computer in most Chinese normal universities. The teaching of operational research is made separately. In this case, those students majoring in mathematics will focus on the problem-solving skills while those students of management focus on the theoretical study. Those departments from different departments can gather to study in the same classroom. When forming a team to make practice, those students can cooperate with each other for mutual progress. If those students majoring in mathematics, computer, management and economics can study together, they will take advantage of their professional knowledge to analyze various problems, adopt different methods and use computer technologies to solve problems. In this way, their practical ability and innovative skill will be improved greatly. The interdisciplinary talent who can adapt to the social requirement will be cultivated.

Thirdly, the development of modern education aims at improving the teaching efficiency and helping those students acquire more knowledge more efficiently. Many teaching methods are based on this educational concept. Among many modern teaching methods, flipped classroom is highly suitable for operational research. To be more specific, the teacher will make a teaching video and upload it to an online platform. Those students will watch the video and study independently. After that, those students will form a team to finish a case. Besides evaluating the case, the teacher should also offer some guidance if necessary.

As seen above, the teacher can turn the learning content into a courseware or video on the online platform. It will be sent to those students for independent study. The solution to those problems will be also provided. The teacher will instruct the students in the class. Thanks to flipped classroom, the assignment which should be made after the class can be finished before the class. It will not cause more learning burden. Therefore, it can not only improve the learning ability of those students but also stimulate their learning initiative. The influence of the difference between different students on the learning effect will be offset.

(3)Establish a new evaluation mechanism

Curriculum evaluation is an important means of assessing the teaching result and arousing the learning awareness of those students. However, the curriculum evaluation for operational research in most Chinese normal universities still mainly takes the form of examination, which can not reflect the practical feature of operational research and problem-solving skills of those students. Hence, a new evaluation system should be established and improved. The evaluation consists of independent learning, problem-solving skills, classroom performance and academic learning. As to independent learning, the evaluation will be made in accordance with the reading time and amount of the teaching video or courseware. The problem-solving skills should be determined through the scoring of the solution for each case. The classroom performance is scored according to case analysis and completion degree. The theoretical learning should focus on the evaluation of basic knowledge. They have accounted for 30 percent, 20 percent, 20 percent and 30 percent of the total score respectively. It can assess the mastery of basic knowledge and problem-solving skills of those students.

4. CONCLUSION

With the wide application of operational research to the practice, the reform in the teaching of operational research has become an urgent task. This paper has discussed the reform in the teaching of operational research in Chinese normal universities from the perspective of teacher's quality, course setting, instruction mode and evaluation method. It hopes to explore new methods for cultivating the talent specializing in operational research.

#### REFERENCES

[1]Chen Juan. The Reflection on the Reform in the Teaching of Operational Research [J]. Academic Journal of Jimei University. 2012, 13(3):109-120.

[2]Huang Jipin and Chen Feng. The Discussion of the Reform in the Teaching of Operational Research [J]. Science&Technology Information. 2011, 32:583-585. [3]Luo Ronggui and Yuan Haiying. The Reform and Exploration of the Teaching of Operational Research [J]. Journal of Technology College Education. 2005, 24(3):49-57.

[4]Zhang Xiangsun. The Application of Operational Research to the Analysis of Community Structure of Complicated Network [J]. Operational Research and Management. , 2013, 22(5):1-11.

[5]Zhang Senlin. The Application and Practice of Flipped Classroom to the Course of Management Operational Research [J]. Science Education Article Collects. 2016, 347:81-83

[6]Li Daqian. The Integration of the Thoughts of Mathematical Modeling into the Main Mathematical Courses[R]. College Mathematical Curriculum Report Forum. 2005:15-19.

[7]Zhang Changqing and Liu Fangliang. The Discussion of the Teaching Content and Method Form for Operational Research [J]. Academic Journal of Mudanjiang Normal University (natural science). 2011, 4:59-62.

## Difference Analysis and Countermeasure Study of the Value Orientation of College Sports Dance Teaching

#### Xiaoyun Shi\*

Department of Physical Education, Guangdong University of Foreign Studies, Guangzhou 510420, Guangdong, China

Abstract: Sports dance sport is a combination of sports, sports and art in the national colleges and universities are favorite, at the same time, along with people living standard rise, demand for fitness healthy heart class movement is also increasing, the corresponding sports dance movement by the favor of people. In order to meet the needs of the people and the market, many colleges have set up professional sports dance, therefore, the professional quality of college study, relationship with people's life. This article is under the above background, the research on the fitness value of the sports dance movement, the healthy heart value and market value, and in colleges and universities sports dance professional level of teachers, teaching, students' learning ability and graduate employment situation and market demand has carried on the questionnaire survey, and through the survey data is obtained to improve the present situation of sports dance teaching method today.

Keywords: sports dance teaching, body building and heart building value, difference analysis, market demand.

#### 1. INTRODUCTION

For sports dance teaching effects research, lots of people have made efforts, just by which let sports dance teaching levels to be constantly improved, let graduates qualities strengthen year by year, from which, Liu Chun-Ying(2013) put forward create university sports dance teaching teacher and student win-win course, in order to let sports classroom full of vitality, it made requirement that teachers should develop professionally[1];Xing Xin-Li(2014) Applied document literature and other research method, analyzed sports dance and line dance origins and development, simplified dance forms. standardized textbooks, strengthen pass on theory, act according to circumstances, select teaching contents, strengthen advertisement, establish communication platform[2];Wang Yan etc.(2013) made lots of investigation and survey on sports performing major social demand status and employment market, with marketing and marketing management modes, it did market survey on partial provinces, utilized computer technique to statistical handle and analyze survey data, it got sports performing major employment market and prospect status, it provided suitable count

measures to sports performing major social demand development [3-5].

This paper on the basis of previous researches, it analyzes sports dance teaching and learning, and makes detailed analysis of the major improvement path and employment prospects with university and the major market demand as examples, in the hope of making contributions to China sports industrial development.

#### 2. SUMMARY OF SPORTS DANCE VALUES

The origin of sports dance is folk dances around the world, these folk dances form into current sports dance through history selecting and compiling. From the perspective of historical origin, dance is a form that interpersonal body language communication, it meets the artistry and also body building, and can function as body building and delight people's mood. With China reform and opening-up, sports dance also connects with market mechanism, through market mechanism and market operation, it let sports dance constantly develop, while China sports theoretical workers start from sport development practical demand, they also organize theoretical researches on sports market and sports dance market in successive; the chapter carries out synthesis analysis from body building value, psychological health value and market demand value these three perspectives, in the hope of providing aims guiding for sports dance learners.

2.1 Body building value analysis

Sports dance can build stretching, tall and straight, elegant and dignified body shapes, and it can play positive roles in body proportion balance, which is helpful for men spotters, form two triangles opposite vertex connection, and women sorters' two reverse curves with spine as center line become more obvious, it can make a beauty building, healthy brand new disposition with full of vigor.

Sports dance generally appear in pair or collective form, under collective and pair cooperation training, it can cultivate decent manner and civility fashion, and it is helpful for improving dancers' body shape literacy and dispositions. In sports dance process, it can propel to cells metabolism that possesses of higher function in keeping fit.

2.2 Psychological health value analysis

Sports dance can relieve sorters' psychological stress

through venting and communicating emotions, so as to achieve psychological demands, the event influences on spotter's psychological factors reflect in the following four aspects:

It is helpful for dancers to produce good mood and emotional experiences;

It is helpful for training dancer's willpower quality;

It is helpful for dancers establishing positive self-concept;

It is helpful for dancers improving interpersonal skills.

According to sports dance effects on psychological health investigation, it is clear that athletes that join in sports dance, their psychological health total levels has significant differences by comparing with common people, let their abnormal psychological reaction detection rates are also relative lower, meanwhile dancers that participate the event, and significant differences exist between their somatization, interpersonal sensitivity, depressed, anxious and hostility as well as other factors healthy levels and these of common people; besides, Chen Li-Nong(2004)proposed that sports dance is a kind of public sports activities that beneficial to people psychological health, through sports dance learning and practical activity, it can let sorters' psychological health level get improved[4].

To sum up, sports dance influences on psychological health has its own special functions and values.

2.3 Market demand value analysis

Through China sports dance event market-oriented SWOT analysis, it is clear that in sports dance market development process, it faces both opportunities and challenges as well as difficulties and hopes; if it can fully play sports dance body building, heart building,

#### International Journal of Education and Management

body shaping, entertainment and organization forms diversification as well as industrial strong co-movement advantages, then it can greatly excavate sports dance produced market potentials.

With China market economy constantly perfection, sports industrialization and marketization is development inevitable trend, at this time sports dance event is integrating with market economy, only cultivate and exploit sports dance market, it can better make better use of marketization achievable resources to propel to undertakings' development.

People's life has been gradually improved, let them put more emphasis on sports and health, which is the main reason of market demand, the purpose of sports dance fitness and entertainment market is to scientific and reasonable make use of market mechanism, provide sports dance material goods and spiritual goods as well as their relative organization management services and so on, therefore sports dance has its own market and it will constantly expand.

#### 3. SPORTS DANCE TEACHING AND LEARNING EFFECTS ANALYSIS

3.1 Teacher resources status analysis

This paper randomly samples 14 university sports dance teachers, from which men teachers have 9 while women teachers have 5, and carries out questionnaire survey on them, the survey contents are teachers' age and teaching seniority, teachers education backgrounds and titles as well as teacher's scientific research capacity, it implements analysis of sports dance teacher resources from above three aspects, in the hope of exploring teacher resources state improvement way.

Table 1 Teachers 'age and teaching seniority investigation result

Number	Teachers age (years old)				Teachers' teaching seniority(years)			
of people %	20~30	30~40	40~50	50more	2~4	5~7	8~10	10more
Number of people	4	2	5	3	4	5	4	1
%	29%	14%	36%	21%	29%	36%	29%	6%

From Table 1 data, it is clear that sports dance major teachers age of 40 to 50 years old covers the maximum proportion that is as high as 36%, while 20 to 30 years old young teachers cover 29%; in teaching process, middle-aged and older teachers have relative rich teaching experiences; young teachers, though they have gap in teaching experience aspect by comparing with middle-aged and older teachers, they have more professional knowledge and can better communicate with students, therefore teacher resources status is young and middle-aged teachers are the hard core in school sports dance teaching; number of instruction teachers with 2to 4 years' teaching seniority cover 29%, 5 to7 years' teaching seniority cover 36%; so that it is known short teaching seniorities teachers are generally young

teachers, the group of teachers have stronger teaching professionalism, their teaching levels and experience will also constantly be improved; according to China excellent sports teachers growth gradualness rules, it is clear that teaching growth process needs to go through adaptation preparation period, adaptation development period, creation improvement period and stable development period these four stages, ages that young teachers become excellent teachers are generally concentrated on 36 to 45 years old, that is to say, teachers' teaching seniorities only arrive at 12.3 years ,they may develop into the fourth stage, therefore Shandong province sports dance teachers' levels are relative reasonable, it development requires that young and middle-aged teachers take more important responsibilities.

Table 2 Teachers' education backgrounds and titles investigation result

International Journal of Education and Management

Number of	Hig	Highest title					
people %	Undergraduate	Postgraduate	Doctoral student	Assistant of lecturer	Lecturer	Associate professor	Professor
Number of people	9	5	0	6	5	2	1
%	64%	36%	0%	43%	36%	14%	7%

From Table 2, it is known that sports dance teachers highest education shows the status that supplement a focus on undergraduate with postgraduate and doctoral student, different education backgrounds' teachers reflected scientific research levels and training levels have great differences; recently years China universities ask higher and higher requests for teachers education backgrounds, and it gradually forms into the model with doctoral students and postgraduates as backbone and undergraduates as basis, therefore sports dance teachers education degrees are lower by comparing with national levels, it needs to bring into higher education degrees teachers' group, while titles distribution status shows relative healthy development level.

Random sampled 14 sports dance teachers scientific research capacities can be measured by teachers published article numbers, which can be reflected as Figure 1 showed statistical chart, in the chart, horizontal coordinate represents published article numbers, vertical coordinate represents number of people correspond to article numbers.

From Figure 1 showed statistical chart, it is clear that sports dance teachers' scientific research capacities are lower, while scientific research capacity is an important indicator to measure profession and Table 3 Teachers' teaching syllabus selection frequency discipline development level, therefore, if it is expected to be based on teaching, it should carry out scientific researching, only scientific research capacity get improved, it can provide more widely development road for profession.



Figure 1 Published article number statistical chart 3.2 Professional training status analysis

Sports dance professional training status analysis can make questionnaire survey from professional university teaching syllabus, teaching satisfaction degree, school influences, students' physical quality demand necessity and professional development factors as well as theoretical knowledge learning time investigation these six aspects, and learn sports dance professional training status by questionnaire survey, in the hope of giving guidance on healthier professional training.

Table 5 Teaching synabus selection frequency					
Teaching syllabus project alternatives	Selection frequency	%			
Without unified teaching syllabus	4	29%			
School unified practical textbook	8	57%			
School unified audio and video graphic textbook	2	14%			

From Table 3 data, it is clear that each university shows uneven schooling levels phenomenon, its perfection degree of mating teaching assistive tools is also not the same; if teaching process without single standard teaching syllabus, it will cause unclear Table 4 Teaching efficiency satisfaction degree investigation result

teaching objectives, unscientific methods phenomenon, so educational structure should make scientific unified compiling on sports dance teaching syllabus, provide necessary conditions for the profession development.

uole + reaching enterency satisfaction degree investigation result									
Item	Teaching content	Teaching method	Technical level	Teaching efficiency	Teaching attitude				
Very dissatisfied	0%	0%	0%	0%	0%				
Dissatisfied	2%	2%	2%	2%	7%				
Basic satisfied	21%	29%	37%	21%	33%				
Relative satisfied	35%	43%	34%	35%	38%				
Very satisfied	42%	26%	27%	42%	22%				

From Table 4 data , it is clear that in teaching content aspect, 42% students are very satisfied, 35% students are relative satisfied on teaching content, 21% students are basic satisfied, while only 2% students are dissatisfied, from investigation result , it can be found that most of students are satisfied with sports dance teaching content, therefore ,for teaching content status, it is a relative healthy situation; In teaching method aspect, evaluation on teachers are also relative satisfied, meanwhile in technical level and teaching efficiency the two aspects, their evaluation results are relative satisfied, however in teaching attitude aspect ,only 22% students are very satisfied, it even appear7% students dissatisfied with teaching attitude, which indicates that Shandong province teaching efficiency overall is in healthy

situation, but it should to make improvement in Table 5 School influences investigation result

Evaluation degree	Very good	
%	28%	
Due to campus recreational activitie without dance, in school large activi	1	
orformanage grants dange is also the h	in quanti from for a	

performances, sports dance is also the big event; from Table 5, it is clear that sports dance has relative Table 6 Investigation on students' physical quality improvement demands for sports dance

teaching attitude, and improve students positivity.

	Good	Normal B		Bad	
	43%				
1		in universities,			0
influe	ence in internal	school it plays	nrot	helling	roles

ence in internal school, it plays propelling roles for sports dance professional student's interpersonal communication and corresponding community rising.

Evaluation degree	Very necessary	Necessary	Unnecessary	
Numbers of students	66	39	7	
Percentage	59%	35%	6%	

From Table 6, it is clear that sports dance has an important effect on students' physical quality improvement; the demands are very huge, which Table 7 Professional development factors investigation result

reflects sports dance body building value from one aspect.

able / Froiessional development factors investigation result							
Number of	Teacher	Field	Textbook	Leader			
people %	resources	facility	conditions	attentio			

Number of	Teacher	Field	Textbook	Leader	Other
people %	resources	facility	conditions	attention	factors
Number of people	11	7	6	4	0
%	39%	26%	21%	14%	0%

From Table 7 data, it is clear that most teachers think that teacher resources are the most important factor in Table 8 Sports dance professional theoretical knowledge learning time investigation result

sports dance development, therefore strengthen teacher resources is the main path to improve status.

ruore o oporto dunee proression	ai meorene	ai iiio iiiea	ge rearining	time mites	ingution i	estant		
Term	1	2	3	4	5	6	7	8
Number of people	8	8	6	7	2	3	2	2
%	21%	21%	16%	18%	5%	9%	5%	5%

From Table 8 data, it is clear that it should fix sports dance professional theoretical knowledge learning time as term 1 to term 4, which is also freshman year and sophomore year.

3.3 Students' learning status analysis

Sports dance major students learning status can be analyzed from learning motivation, learning interests, adept dance and extracurricular training status total four aspects, in the hope of exploring students' learning status causes, and provide guidance for students better learning.

Motivation refers to one forms a kind of thinking and purpose temptation in psychology when it wants to accomplish something, is also an intention that one produces when doing something that promotes people to go in for some activities, therefore a good sports dance learning motivation is of great important influences on professional theory and practical technology learning; It is known that it suffers greater influences by personal hobbies and easier passing prestigious test, easier passing prestigious test is the principal motivation factor that students' registering for sports dance major examination, which is because of lower requests of general knowledge course performance and major course level easier promoting in short time, personal hobbies factor ranks in the second motivation, indicates students' motivations are very healthy, on a whole , students' motivations are relative healthy, but it still needs to constantly cultivate sports dance interests in learning process, and finally arrive at love degree. It is clear that boy students and girl students exist certain differences in

sports dance major interest degree, girls have stronger interest by comparing with boys; On a whole, students' sports dance major learning interests are very healthy, but in actual learning process, it should deepen interest, so that it is helpful for professional technology as well as theoretical knowledge learning efficiency improvement.



Figure 2 Sports dance adept investigation result statistics

From Figure 2 showed statistical chart, it is known that in modern dances, Waltz is well received by students, the secondary is Vienna Waltz and Tango, in Latin, Rumba is well received by students, the next is cha and Samba; for above dances, Walt z and Rumba are famous for soothing music and soft motions, while Tango and cha are mostly famous with speed, Students like brisk rhythm simple steps or soft music slow motion dances. It is clear that select self-training students cover around 60% of total amount, needs teachers' organize and tutor or register in tutorial class students totally only cover nearly 20% of total amount, in extracurricular training, boy students' self-awareness is higher than that of girl students, it should improve girl students' extracurricular training frequency.

#### 26

#### 4. CONCLUSIONS

This paper carried out analysis targeted sports dance movement value and market demand status , it summarized the event body building value, heart building value and market demand value, which provided basis for the event professional talents cultivation necessity; analyzed university sports dance major teaching and learning efficiency, and received statistical data by questionnaire survey, gained sports teaching status merits by statistical data, and put forward teaching levels improvement methods.

#### REFERENCES

[1]GUO Yanhua. Analysis of the Feasibility of Dancing Course in College Girls' Physical Education[J]. Journal of Hubei Sports Science, 2012, (2):234-235. [3]Liu Rong, Chen Qin. Analysis on Factors Affecting College Duo Latin Dance Teaching and Experimental Research into the Solo Latin Dance Teaching[J]. Journal of Chengdu Physical Education Institute, 2009, 35(9).

[4]LI Rong. Action Arrangement Elements on Public Physical Education of Street Dancing Option in Regular Institutions of Higher Learning[J]. Bulletin of Sport Science & Technology, 2011, 19(3):56-58.

[5]LI Chen. Research on Strategy Improving the Level of College Sports Dance Teaching[J]. Bulletin of Sport Science & Technology, 2012, 20(5):82-83.

# Xinjiang Modern Logistics Professional Skills Education Research

Yun Cao\*

School of Vocation and Technology, Xinjiang Education Institute, Urumqi 830043, Xinjiang, China

Abstract: "Area" strategy has brought new opportunities for professional education, xinjiang agricultural vocational and technical college, vocational college with countries such as Russia, Kyrgyzstan, exchanges and cooperation, and actively promote to study abroad and overseas internship project cooperation, to a certain extent, to promote the modern logistics professional skill education provides a strong support. Therefore, this article will base on logistics problems of vocational education in xinjiang, on the basis of resource integration and optimize reinforcement logistics professional courses, the construction of teachers and training in xinjiang, using "area along the" political and economic opportunities to build collaborative education mechanism, strive to develop modern logistics professional skill talented person, to create conditions for promoting the development of modern logistics industry in xinjiang.

Keywords: Xinjiang logistics; Modern logistics; Career skills education

#### 1. INTRODUCTION

In the construction of "One Belt and One Road", xinjiang has a unique geographical advantage and is widely supported by the government, and its strategic position and its advantages are obvious. In particular, the city of course, located between Eurasia and xinjiang, has a unique advantage. The rapid development of modern logistics industry in xinjiang has greatly increased the logistics professional skill talented person's demand, and to take measures to optimize logistics vocational education mode, to cultivate in conformity with the market demand of logistics professional skill talented person for the purpose of further strengthening modern logistics professional skill education in xinjiang.

2. THE PRESENT SITUATION AND PROBLEM ANALYSIS OF EDUCATION IN XINJIANG LOGISTICS PROFESSION

2.1 xinjiang logistics professional skills education status quo

The "One Belt And One Road" strategy has greatly contributed to the development of the modern logistics industry in xinjiang, and also promoted the importance of the government to the logistics professional skills education. Logistics professional skill education in xinjiang has received the unprecedented attention, to build consistent with modern logistics industry development mode of logistics professional skill talented person, must be based on market demand to promote logistics vocational skills training. However, although the location advantage and resource superiority in xinjiang, but the infrastructure, logistics system, the limitation of management system and training pattern, unique advantages have not been excavated in xinjiang. Logistics professional skill education mode at present, xinjiang cultivated skill talented person and the market demand gap still exist, there is no combination of logistics enterprise talent needs further strengthen vocational education training, overall logistics professional skill education content and the curriculum lack of practicality and scientificness, courses and tutorials for insufficient grasp market demand. Moreover, lack of training in logistics professional skill education and vocational education standards, it is difficult to meet the "area" strategy under the background of the development of modern logistics industry requirements.

2.2 Analysis of problem in education, xinjiang logistics professional skills

In the process of the education, the problem of the problem is mainly in three aspects. One is the insufficient logistics skills education and cooperation between enterprises, logistics companies not to open inclusive mentality to accept students, visiting, for logistics enterprises in the process, enterprises difficult to invest time and effort to strengthen staff training, vocational education on the social logistics did not maintain a positive attitude, employees retraining costs is higher, students to grasp the lack of social logistics enterprise production order. Second, logistics professional skill education lacks of training room construction in xinjiang, the lack of public training center, logistics professional skill talented person lacks of opportunity to practice, to solve the field of logistics enterprise operation skills. Vocational education school are three logistics professional skill training curriculum development is insufficient, lack of specific training course standard, logistics professional skill education teaching mode and teaching content is difficult to meet the needs of the modern logistics industry vocational skills education.

### 3. THE CHOICE OF THE EDUCATION MODEL FOR MODERN LOGISTICS IN XINJIANG

To clear modern logistics professional skill talents training target, optimize logistics technical curriculum system, based on the cognitive

characteristics of strengthening professional skill talented person in line with the modern enterprise logistics distribution operation teaching, from three stages of cognition, training and practice to analyze the modern logistics professional skill education mode in xinjiang.

#### 3.1 cognitive teaching

To develop logistics professional skill talented person, the most critical stage is the early stage of the cognitive teaching to make students professional skills of logistics enterprise operating skills form perceptual knowledge, from stimulate students interest in logistics vocational skills learning as a starting point, to the theoretical knowledge to promote logistics professional skill guidance for practical skills. To focus on training students' intuitive understanding of logistics professional skill education, based on the strategy of "area" all the way to improve students' understanding of logistics professional skill learning cognitive characteristics, innovation vocational education study way, with the help of multimedia, video like logistics professional skills to student's process. To strengthen the logistics professional practice teaching, guide students to clear each operation process, such as warehousing and distribution of the modern logistics operation firsthand information management and technical management, further promote modern logistics training simulation information system.

#### 3.2 training stage

During the education training phase, the students are actively engaged in simulation practice. To enhance students' awareness of the logistics requirements, starting from the local unit knowledge training, professional integration of logistics in the field of the operation, strictly according to the logistics process students' vocational skills training, optimize the structure of logistics professional skills, it through to the logistics management professional learning of each work task, based on the actual situation of vocational skills match. To let the students a of comprehensive understanding distribution operation process operation, starting from the key working procedure, in strict accordance with the goods collection, storage, sorting and the order of distribution operation guide students to operate training, to ensure that students fully understand and master the logistics distribution operations in the process. Based on the logistics operation and operation, fully respect the xinjiang regional resources endowment and the existing infrastructure, to understand the difference between the logistics management process and workshop, further strengthen the logistics information system operation and training, thereby combining logistics enterprises management process, the operation and improve logistics professional skills of students.

#### 3.3 practice stage

Must strengthen the logistics professional skill

education, we must grasp the role of a good school position, strengthening students' practice, through exchanges and cooperation between schools and logistics enterprises to provide students with chance to field work. In students' understanding of logistics enterprise preliminary form post skills, on the basis of to combine theoretical knowledge and operation experience to optimize student learning environment and humane environment, strengthen the training room construction stimulates the student to the logistics enterprises on the basis of the judgement, based on the needs of society to promote the student to carry on the self-psychological adjustment, so as to produce suitable for logistics enterprise environment, model of vocational education.

#### 4. THE COUNTERMEASURES OF EDUCATION XINJIANG MODERN LOGISTICS PROFESSIONAL SKILLS

Under the background of "area" strategy to speed up the development of modern logistics industry in xinjiang, beneficial to optimize the structure of industry of xinjiang region, asset structure and technical structure, extend the range of services in xinjiang on the basis of further driving the development of transportation and warehousing enterprises, with the help of a "region" strategy to optimize the investment environment of xinjiang region, the need to strengthen the xiniiang vocational skills education, modern logistics based on market demand to create ability, knowledge and vision of logistics professional skill talented person. Logistics professional skills training, however, is a long-term systematic project, learning mode, to fully ensure the need for government led by strengthening logistics industry association, logistics companies and vocational schools to participate.

4.1 The government will take the lead in strengthening policy encouragement and support

To grasp the strategy of "area" all the way to the leading role of xinjiang, led by an implicit government guarantee to strengthen logistics vocational education policy to encourage and support, to include logistics professional education in xinjiang regional economic cooperation and development, to promote xinjiang product structure optimization and regional resources sharing. Must strengthen the national government support for the development of logistics industry in the xinjiang region, and have the ability to attract more knowledge, level of personnel to join the logistics professional skill education, on the basis of promoting the development of modern logistics industry, promote the students' employment ability, in order to promote infrastructure construction and service industry development of the third industry development, to achieve regional resources sharing and create jobs. Moreover, must strengthen the cooperation between the government and social third party strength, increase investment and support for logistics professional skill education, starting

from the policy guidance to develop logistics management professional teaching standards, build form a complete set of logistics training room equipment, on the basis of strengthening logistics professional skill education propaganda guide logistics enterprises to join in the vocational education system, and establish a system of tax cuts for the logistics professional skill education.

4.2 Strengthening the construction of logistics training room

It is necessary to establish logistics training center based on modern logistics industry, and can learn from the experience of German workshop construction in the process of logistics professional skills education. To establish a matching experiment based on the logistics management professional training rooms, and establish the school-run internship company cooperation, economic entity as unified direction to ensure that the logistics enterprises and school education, let the staff, teachers and students to learn coordinate, through rolling field, field observation and work to be responsible for the logistics operation management. Can combine xinjiang region resources endowment construct information "virtual company" logistics management system, focus on building a logistics information platform and the need of logistics and information technology design and development personnel training mode, combined with logistics operation and management and operating procedures strengthen logistics informationization to construction and management of the cultivation of professional talents. Moreover, with the help of the government and vocational college strength scientific planning and layout of the logistics industry training quantity and variety of chamber construction, from financial capital investment to expand public training center, build school-run entity, guide the logistics enterprises and teaching of teachers and students to participate management, form a trinity logistics vocational education mode.

4.3 To strengthen the exchanges and cooperation between vocational schools and logistics enterprises in the region and across regions

To build the unified standard of logistics professional skill teaching, must play a good government, logistics companies and schools between logistics the synergy of vocational education, forces the social from all walks of life to join the logistics in the process of vocational education, and work together, under the background of the strategy of "area" all the way to set up innovation consciousness, will own resources endowment advantage actively through the development of modern logistics industry into the talent competition advantage, the market competitive advantage, management mechanism and strategic advantages, etc. First, to give play to the role of good government led by the leadership, based on the logistics related to establish a unified professional

#### International Journal of Education and Management

qualification appraisal standard, from the aspects of policy to encourage and support student learning, under the perfect professional qualification appraisal system to optimize logistics professional training curriculum standards, strengthen students' vocational skills training and education. Secondly, to actively communicate with the logistics enterprise. organization staff and students to the guidance and learning, training center, the school vocational skills training center to develop logistics professional skill appraisal center, enterprise staff training in reducing logistics cost and the student studies the cost at the same time, actively organize and conduct training rooms simulation training game activities, according to the regional logistics industry development in xinjiang and to optimize the design of the training content system, forming a set of perfect logistics professional skill education design competition, enhance pertinence and effectiveness of logistics professional skill education. Thirdly, on the basis of government policies to guide to strengthen communication and cooperation between vocational school and in other areas, according to the actual situation for logistics management knowledge lectures, logistics system simulation game design competition, the logistics management technology and trans-regional vocational colleges logistics professional skill education exchange seminars. through the guidance of logistics industry association to participate in and guide logistics enterprises and schools perseverance, unity cooperation, common develop logistics professionals of high professional skill levels.

#### 5. CONCLUSION

"Area" strategy to promote the development of the modern logistics industry in xinjiang has brought new opportunity, the logistics professional skill education, and infrastructure construction is also put forward new and higher requirements. Area along with the development of the society and the competition between countries and regions have not simply economic competition and resources, but depends on the talent competition, the competition to obtain advantages in aspects of management system. Therefore, to base on xinjiang logistics infrastructure, logistics system, management system and personnel training mode to xinjiang unique location advantage into competition advantage, talent led by an implicit government guarantee to strengthen the logistics professional skill education policy to encourage and support, to strengthen the construction of logistics training rooms, strengthen vocational school and the region and trans-regional exchanges and cooperation between logistics enterprises, actively organize logistics management knowledge lectures, logistics professional skill education exchange seminars and other activities, to further explore and promote the innovation of the modern logistics professional skill education mode in xinjiang.

#### ACKNOWLEDGMENT

Xinjiang Uyghur autonomous region social science fund project: xinjiang modern logistics professional skills education research, project number: 2015BJYX117. National social science fund project: "One Belt And One Road" in the context of the development strategy of modern logistics industry in xinjiang, the project number: 16BGL198.

#### REFERENCES

[1]LIU Bao, HU Shan-lian, XU Hai-xia, GAO Jian-hui. Indices of the equality of essential public health services in China. Chinese Journal of Health Policy, 2009, 2(6):13-17.

[2]ZHANG Da-chao, LI Min. Studies on Evaluation Index System of Public Sports Facilities Development Level in China. China Sport Science, 2013, 33(4):3-23.

[3] HE Ying, XU Ming. Theoretical and empirical

study on evaluation mode of sports service satisfaction degree in city community. Journal of Wuhan Institute of Physical Education, 2007, 41(11):40-42.

[4]Wang Guo-hong, Zhang Wen-hui. Construction of the Evaluation Index System of City Community Sports-Taking Shanghai as an Example. Journal of Chengdu Physical Education Institute, 2010, 36(2).

[5]ZHANG Jie, WU Ying. The Evaluation Index System of Extracurricular Sports Activities in Secondary Schools in Shanghai under the Background of "Sunshine Sports". Journal of Shanghai Physical Education Institute, 2012(6):80-82.

[6]HE Ying, XU Ming. Study on Evaluating System of Sports Consciousness of Community Residents in Southwest Cities. Journal of Chengdu Physical Education Institute, 2007, 33(2):43-45.

### An Asian Male Soccer Power Based on Competitive Record Data

#### Xiao-wei Du

Institute of P.E, Henan Polytechnic University, Jiaozuo 454000, China

Abstract: Football was the integrated embodiment of its competitive strength, in this paper, the Asian men's soccer, the Olympic Games and the World Cup in the club World Cup against the result data statistics, analysis of the Asian men's competitive strength in the world of accurate positioning, discusses the gap between rival in Asian football, puts forward the basic way of the reform of Asian football. The results show that the overall competitive strength is poorer, Asian football in the world is poor performance in the football match, and Asian countries have a relatively low level of the development of the domestic league. In addition, from the perspective of achievement and foundation, reference and foundation and innovation, the real development motivation of Asian men's foot is discussed.

Keywords: Asian men; Integral ranking; Competitive strength; Reform measures

#### 1. INTRODUCTION

Football practice proves that the interval of the football game areas interact, to promote the development of football sports technology improve essential [1], and the embodiment of the interaction is a football match competition as a result, therefore, is analyzed, the result of the football sports can dig football development and the related factors affecting the development of football. Football feast in the world is mainly composed of three kinds of activities to World Cup, Olympic Games and the World Cup to render [2], the analysis of the three activities are also more can objectively evaluate the competitive power of the teams. Asian football is very embarrassing in the world, and it is necessary to identify and explore its path of development.

Yonghe (2011) pointed out that at the beginning of world football still present situation in Europe and South America two supremacy, North America, Africa, Asia and Oceania between levels very close, with Europe and South America gradually narrowing the gap between [3]. Fatt (2013) analyzed the situation of Chinese super powers in the previous afc champions league, and comparing from four aspects, and concluded, in east Asia, Japan and South Korea, the three major league in the Chinese super team obvious disadvantage [4]. Jun-bin zhang (2011) pointed out that in the process of football professionalization, China, South Korea and Japan walk in the forefront of the Asia, west Asia countries except Saudi Arabia, in many countries is still in a state of semi professional league [5-7]. The scholars, mostly from the world football development and discusses the status of Asian football in subjective opinion, rather than from the Angle of mathematical objective for Asian football positioning, also there are few discusses from the Angle of the contradictory relations, based on the contest of Asian men in the world record in the data analysis as the foundation, the positioning of Asian football, and discusses its development strategy, provides direction for the development of Asian football.

2. RESEARCH SUBJECTS AND METHODS OF RESEARCH

2.1 study subjects

Based on Asian men in the world series performance as the research object, analyzed the 2001-2013 world states soccer team integral situation analysis, also in 1998-2014 parts of five states in the World Cup group stage performance, the group performance, 16 and their distribution are analyzed, in addition, from 2004 to 2012 in the three games men's soccer match group scores, part of the National Football League IFFHS world ranking in 2013 and 2009-2013 FIFA world club cup finals performance are analyzed. The objective is to clarify the position of Asian men's football in the world and to explore the strategies of Asian football reform.

2.2 Research method

The literature data method: the knowledge net is searched for the Asian men's soccer strength and the rank and the relevant literature 15 articles. Based on the research methods, theoretical basis and the discussion level, the results of the World Cup, the Olympic Games and the World Cup were analyzed.

Mathematical statistics: nearly a few World Cup and Olympic Games and the club World Cup soccer competitions has carried on the data collected, and on the mathematical statistics, the total number of statistical indicators, percentages and averages, etc., in order to pass the data objective evaluation of the competitive strength of Asian football and standing in the world.

Logic analysis: based on the results of mathematical statistics, the conclusions about the competitive strength of men's football are derived by using logical analysis.

3. RESULT ANALYSIS

3.1 based on the Asian male foot strength analysis of the table

The integral is FIFA for comprehensive evaluation of
the national soccer team, the evaluation result is a score for the game, the game coefficient, rival coefficient and coefficient of regional comprehensive characterization. Therefore, the analysis of the Asian men's foot strength based on the table is objective. Table 1 shows the integration of national men's football teams from 2001 to 2013.

Table 1 the statistics of national football teams from 2001 to 2013

Area		County	Aggregate	Average
		County	score	score
	1	Spain	16508	1269.85
Europe	2	Portugal	15910	1123.85
	4	Germany	14397	1107.46
	3	Brazil	14772	1136.31
America	5	Argentina	13898	1069.08
	6	Uruguay	11577	890.54
	7	Cameroon	10032	771.69
	8	Ivory Coast	9765	751.15
Afrian	9	Nigeria	9679	774.31
	10	Algeria	7733	594.85
	11	Ghana	7634	587.23
	12	Japan	9088	699.08
	13	Australia	8570	659.23
Asia	14	Korea	8533	656.38
1 1010	15	Iran	8251	634.69
	16	Saudi Arabia	6878	529.08
Australia	Inine	d the Asian for	thal confederatio	n in 2005

Australia : Joined the Asian footbal confederation in 2005

Through the 16 national men's football team in table 1 integral statistics shows that Japan football team of the highest in Asia area, but the team's total score is 9088 points, while Europe area - the team's total score is 16508 points, America area of Brazil team total score is 14772 points, calculation of total points available Japan team accounts for only 55.1% and 61.5% of - and the Brazil team, reflects the phenomenon from the two data is Asia regional teams with America and Europe area of qualitative difference between the men's soccer teams. In addition, the Asian powerhouse Japan is lower than the teams in the African region, the Ivory Coast team and the Nigeria team. Asia region of the total points of the top five teams generally available for 41320 points, the total average score of 8264 points, the two Numbers are below the Africa region of the top five teams respectively, therefore, the overall level of Asia area is Africa region also exists a certain gap.

List of known through the integration of the calendar year of [6], Japan team in Asia region in 2011, has the highest annual integral, reached 884 points, but the score only account for 46.1% of the 2012-1917 points team, accounted for 56.3% of the 2009 Brazil team 1568 points, even lower than they were in 2006 the team's 1244, 2006 annual Cameroon team 2006 points and Ivory squadron teams of 919 points and 2009 Ghana team of 908 points. In terms of rankings, the team topped the list in 2008-2013, with the lowest

33

ranking of the team in 2006. The team topped the league table in 2002-06, with the lowest ranking of the team in 2012. The Asia regional top ranked only the Japan team in the top 20 in 2005, 2006 and 2011, all of which were not in the top 20.

To sum up: from FIFA to assess the statistical results, the national team integral Asia regional football level is in the position in the world, the integral is a prominent feature of reflects the team's overall strength, reflects the overall weak characteristics of Asia regional football level.

3.2 is based on the Asian men's foot strength analysis of the world series

Reveal the countries around the world football team competitive power the World Cup and club World Cup and Olympic Games, is the biggest stage in the three world-class national men's football team in the football match record can characterize its competitive strength. Based on this, this section analyses the results of the five world cups in 1998-2014, the three Olympic Games in 2004-2012 and the World Cup in 2009-2013. As shown in table 2:

From table 2, the data is known:

1) South America team five World Cup in 1998-2014 period, the group's winning percentage is 52.1%, the team are single session of 5.96 points, the team goals are single annual average 5.44; The European team has a winning rate of 42.9%, with the team averaging 4.7 points and averaging 4.24 goals per team. The meso-america team has a winning rate of 38.6%, with the team averaging 5.47 points, averaging 3.18 goals per team. The success rate of the Africa team is 22.6%, with the team averaging 2.88 points, and the average goal is 3.20. Asia, winning percentage is only 17.5%, teams are single session at 2.24 points, team are single annual goals scored an average of 2.48 a, Asia team and other states case compared (see table 3), Japan and the Chesapeake group winning percentage is 22.6%, single annual average of 3.0 points and 3.0 points, the single goals scored an average of 2.8 and 3.4 respectively, numerical is lower than that of Brazil, -, British, and they were slightly better than American team. The results from the overall and individual cases, the single-session and the single-session averages are known to be the bottom of the team.

2) during 1998-2014 in five World Cup group stage the team statistics. Europe with a total of 41, 16 of the teams entered the South America with a total of 19 teams into 16 columns, Meso - America a total of nine teams into 16, Africa only a total of five teams into the last 16. In three games during 2004-2012 the group appeared team stats, America altogether into the top eight of the nine teams, Africa has eight teams rank among the top eight, "influenza a total of 6 teams rank among the top eight, four teams in Europe rank among the top eight, Asia, only four teams rank among the top eight. The Asia team remains at the bottom of the list from the group stage.

3) the South America team won 83.3 percent of the three Olympic Games between 2004 and 2012, and the team averaged 7.5 points, and the team averaged 6.67. The European team has a winning rate of 53.8%, with the team averaging 3.15. The meso-america team has a winning rate of 58.57%, with the team averaging 3.71 points and the team averaging 2.71. The success rate of Africa team was 37.0%, the team averaged 4.67 points, and the team averaged 3.78. The success rate for Asia is 26.7%, with the team averaging 3.3 points and 3.10 goals for each team. The Asian teams are at the bottom of the list, judging by the percentage of the games in the games, the single points of the team Table 2 the results of the World Cup.

#### International Journal of Education and Management

and the number of goals scored by the team. 4) the European club won a total of 90.0% of the World Cup in 2009-2013, with an average of 2.8 goals and four championships. South America had a winning rate of 60.0% and averaged 2.33 goals per game. The Asia team had a winning rate of 42.9% and averaged 1.76. Meso-america scored 33.3% and averaged 4.75. The Africa team had a winning rate of 33.3% and averaged 1.08. The Asia club and Europe club have both played twice and this has ended in negative territory, with the America club playing seven times with a 2-2-4, with the Africa club four times 3-1 to gain the upper hand.

Table 2 the results of the World Cup	, the Olympics and the World Cup
--------------------------------------	----------------------------------

	Classes		Europe	South America	Meso- America	Africa	Asia
		Wins	92	36	22	17	11
	Group game	Wolves	58	18	14	21	14
		Draws	64	15	21	37	38
World Cup	Goals scored	Total	302	136	54	80	52
	Goals scored	Average	4.25	5.44	3.18	3.20	2.48
	Score	Total	334	149	59	72	47
	Score	Average	4.7	5.96	5.47	2.88	2.24
		Wins	10	15	6	10	8
	Group game	Wolves	8	0	8	12	9
Olympic		Draws	12	3	7	5	13
Game	Goals scored	Total	41	40	19	34	31
Game		Average	3.15	6.67	2.71	3.78	3.10
	Score	Total	44	45	26	42	33
	Score	Average	3.38	7.50	3.71	4.67	3.30
	Group game	Wins	9	6	4	4	9
Club World		Wolves	0	0	2	0	1
Club world Cup		Draws	1	4	6	8	11
Cup	Goals scored	Total	28	14	19	13	37
	Goals scoled	Average	2.80	2.33	4.75	1.08	1.76
		1998	10	1	1	1	0
		2002	9	2	2	1	2
World Cur	Downd of 16	2006	10	3	1	1	1
World Cup Round of 16		2010	6	5	2	1	2
		2014	6	5	3	2	0
		Total	41	19	9	6	5
		2004	1	2	1	1	2
Olympic Com	ne Round of 16	2008	2	3	0	3	0
Orympic Gan	ic Roulia of 10	2012	1	1	2	2	2
		Total	4	6	3	6	4

All told: the overall level of the men's football team in Asia is not high, the overall performance in the world series is poor, and the domestic league is low in development.

#### 3.3 Asian men's football reform

For the development of Asian football, want to have a rational understanding, need to be on the basis of the objective evaluation of the Asian football competitive strength, to find its weaknesses, to have the confidence to catch up with the development of football advanced countries in the world. In order to realize the true development and prosperity of Asian football, this paper discusses three aspects:

1) achievement and foundation: the achievement of the Asian men's athletic performance, the foundation is the protection of technology, facilities and talents. Is there is a connection between grades and foundation, only a solid foundation, can have a good record, and the result of the football is football infrastructure. Development of Asian football's ultimate goal is to realize football sports popularization, and competition performance is only the ultimate goal of a form of expression, handle the relationship between the competition results and solid foundation, the key is to consolidate the basis for this, attention to the cultivation of school-age players, increasing investment in youth system and policy support, make more love and to be engaged in football teenagers, significant population base, the increase of football competition for excellent results obtained provide a steady stream of high quality human security.

Reference and self-reliance: reference refers to the learning and means of the other, which refers to the principle of self-development. Development is the purpose of reference, and the merits of the

development is by no means a reference can decide, only suitable is the best, therefore, reference should be established on the basis of the suit, if negate itself, completely follow the winning team's development strategy, it will inevitably lead to the phenomenon of "water". In the process of reference and autonomy, we should learn from the principle of autonomy, and the key is self-development.

3) foundation and innovation: this foundation is different from the foundation in 1, which refers to basic training, and innovation is the ability to innovate. Basic training is the basis of football sports competitive ability and the determinants of outstanding athletic achievements, basic training of quality directly affects the competitive level of football, and an important factor of innovation ability in football, in some special time may also become the decision factor about competition. Asian football should be actively innovation basic training methods and ideas, to improve the benefit of the basic training, at the same time pay attention to the cultivation of innovation ability, promote the player's observation ability, thinking ability, memory ability and the development of imagination, in order to have more creativity and vitality in a football game.

#### 4. CONCLUSION

Asian football competitive power with the world advanced level, there are very big difference, but the momentum of the development of Asian football more rapidly in recent years, especially in Japan and Korea football competitive level. The premise of developing a strategy for Asian football is to make it clear that it is in the world, and only if it is to be found to be defective. The results showed that the overall level of the Asian men's football team was weak, and the weakness was mainly reflected in the world series and the ranking of FIFA's points. There were many factors that affect competitive record, including: basic training, infrastructure, experience learning, independent development and technology innovation are important influence factor, only the influence factors of internal coordination, to make the scientific organic power for the development of Asian football team.

#### REFERENCES

[1]yan hua. China, Japan, South Korea after the Olympic Games sports policy development and changes of comparative study [J]. Journal of sport and science. 2009, 30 (6) : 11-17.

[2]liu tongji, ye wei. Research of the training mechanism of Japanese U15 football players [J]. Sports and science. 2012, 33 (1): 65-69.

[3]The World Cup of Asian football in South Africa. [J]. liaoning sports technology. 2011, 33 (1) : 81-84.

[4]yellow light. The Asian football club champions league match the level [J]. Sports technology. 2013, 34 (3) : 54-57.

[5]zhang junbin. Asian football development analysis [J]. Journal of sports culture. 2011 (9) : 70-72.

[6]Du Yongqing, xiao-feng zhao. Under the background of World Cup defeat Brazil rational thinking on development of Asian football football [J]. Carey college journal. 2014, 32 (6) : 78-82.

[7]Li Guoli,Zhu Weiyong, Luan Ming, "EDA and digital system design," China Machine PRESS,2005.

# Investigation and Analysis of the Development of Tennis Coaches in Huangzhou District

#### Feng Li, Lu Liu\*

Institute of Physical Education, Huanggang Normal University, Huanggang 438000, Hubei, China

Abstract: With the rapid development of tennis in China, this challenging new sport is being enjoyed by more and more people. Tennis coaches have played an important role in the popularization and development of tennis sport culture and tennis. The study, conducted by tennis coaches in Huang Zhou District, uses the many kinds of methods to investigation and analysis for tennis coach's troops in Huang Zhou District and puts forward the existing problems and development proposals.

Keywords: Huang Zhou District; tennis coaches; current situation

#### 1. INTRODUCTION

Tennis is one of the most popular sports projects in the world, and it is a sport of fashion, fitness, and interaction. With Huang Zhou District's economy and living standards improving, the awareness of the participation of the masses and the intensity of participation in physical activity has increased, tennis sport got unprecedented rapid development [1]. So people chose to join the tennis club, through the guidance of tennis coaches, to be more efficient and secure to enjoy the pleasure of tennis. The study, conducted by research and analysis on the status of tennis coaches in Huang Zhou District, knows the reality of tennis coach's troops [2, 3]. To regulate the behavior of tennis coaches in training, to optimize tennis coaches structure, and continually improve the Table 1 tennis coach sex and age list business skills of tennis coaches, to contribute more power to Huang Zhou District's tennis industry.

2. RESEARCH OBJECTS AND METHODS

The study was conducted by tennis coaches in Huang Zhou District, which uses the literature material law, questionnaire survey method, mathematical statistics and other methods to study the present situation of tennis coach's troops in Huang Zhou district.

3. RESULT AND ANALYSIS

3.1 Basic analysis of tennis coaches

3.1.1 The gender and age structure of tennis coaches As shown in table 1: among the 26 tennis coaches in Huang Zhou District, men have 24, 92.31 percent; women have two, 7.69 percent. The number of male tennis coaches is high. This is due to the preference for male tennis coaches when most students learn to play tennis. Male tennis coaches not only have a sense of force, but they also return to the point of accuracy and speed in the process of learning can help students experience the competitive charm of tennis. The men's tennis coach is also the best choice for women. Because male tennis coaches are more athletic and sporty in tennis. Another tennis professional college students, the boy is very obvious excess girl, and that leads to one of the reasons why men tennis coaches are significantly higher than women. Therefore, the proportion of female tennis coaches in Huang Zhou district is also small.

Table 1 tennis co	ach sex a	nd age list	t					
	sex struc	cture	ag	e structure				
	male	female:	under years	2020 years of years old		3031 years old, years old	-4041 years old - years old	50age more than 50 years
number of people	e 24	2	0	21		4	1	0
percentage	92.31%	7.69%	0%	80.77	%	15.38%	3.85%	0%
Survey shows t District aged 20 people, account years old tennis 11.54%, in the s tennis coach, acc show that the t younger and disadvantages advantage is that active in teachin technical skills. teaching experi students' ability Table 2 tennis co	years, -: ing for coaches survey, 50 counting ennis coa younger, of youn young to g, new to The disac ence and to corr	30 years of 84.61%.31 , 3 people of a second for 3.85% aches in The g coach ennis coac eaching m dvantage 1 d the do ect mista	old, a to l years e, accou over the b. The al Huang 2 advantag advantag ethods a lies in the efficiency tkes in	tal of 22 old, -40 nting for age of 1 oove data Zhou are ges and xist. Its energetic, and better the lack of of the learning.	coad tenr 3.1. bacl Edu the is a skill mus have deve	ches reflects the nis coaches to a la 2 Analysis of kground and prof icational backgro cultural level of n important crite l level of tennis st not only have e high professio	nalization of the business vitality arge extent f tennis coach fessional skill leve bund is the stand tennis coaches, ar erion to measure coaches. As a te professional know nal skills, so as mpetitive econor	and potential of n's educational el dard to measure nd the skill level the professional ennis coach, we wledge, but also to survive and

	Educati	onal backgroun	d	profess	sional level		
Jı	unior	highunder	graduate	1.0-2.0	2.5-3.5	4.0-5.0	6.0 above

International Journal of Education and Management

	school and belo	w graduate	and above				
number of people	0	25	1	0	23	3	0
percentage	0%	96.15%	3.85%	0%	88.46%	11.54%	0%

From table 2 can be seen: in the survey of 26 tennis coaches, there is no specialist, high school education coaches; undergraduate education coaches 25, accounting for 96.15%; graduate or above tennis coaches 1, accounting for 3.85%. This shows that the higher education level of the tennis coaches in the Huang Zhou district is of great benefit to the improvement of the overall quality of the tennis coaches in Huang Zhou district. But the number of tennis coaches with graduate degrees is so small that most coaches are reluctant to pursue further education.

Huang Zhou tennis coach's professional skills level (according to the NTRP classification system), 2.5-3.5 level coaches have 23 people, accounting for Table 3 table tennis coaches participating in the highest 88.46%; 4.0-5.0 levels of coaches have 3 people, accounting for 11.54%; The data show that: first of all, the skill level of the tennis coach in Huang Zhou district is mostly at intermediate level, and high level coaches is less, tennis coaches professional level needs to improve; We should strengthen training and study to improve our skills.

Tennis coaches participating in the competition will help to strengthen the competition between tennis coaches, and more conducive to tennis coaches learn from each other exchanges and skills, In order to achieve excellent results in the competition, coaches will pay attention to the improvement of their skills, which can enhance the overall skill level of tennis coaches.

Table 3 table tennis coaches	participating in the highest level game schedule (	n=26)
Temaia	i- <i>d</i> i	

	regional club competition	,municipal competition	provincial level	National competition
number of people	14	6	6	0
percentage	23.08%	50%	26.92%	0%
A 1 ' F'	2 171 147	1	· · II 771 1'	1 1

As shown in Figure 3: There are 14 tennis coaches in Huang Zhou district who have competed at the highest level and the regional tennis association, Accounting for 53.84%; there are 6 tennis coaches participating in municipal competitions, accounting for 23.08%; There are 6 tennis coaches at the provincial level, accounting for 23.08%; No tennis coaches in the national level. Thus, the Huang Zhou district tennis coaches to participate in high-level tennis events are too small, lack of exercise in the event of their own opportunities, this is not conducive to improve the skill level and comprehensive ability of the tennis coaches.

3.2 Analysis of employed current situation of tennis coaches

3.2.1 Analysis on the degree of tennis coaches' professionalization

The level of teaching full-time can reflect the general situation of the tennis coaches in Huang Zhou district. The investigation shows that 25 coaches are part-time, accounting for 96.15%, and 1 full-time coaches, accounting for 3.85%. There are very few professional coaches, a part-time tennis coach is a school teacher or a tennis major in junior and senior grades, they are not currently working full-time as a professional, but as a hobby or work-study program for free time. Part-time tennis coaches are more mobile, which is not conducive to the sustained, stable and healthy development of the coach's troops. So the construction of tennis coaches should arouse the attention of the association and the relevant administrative departments, and actively develop a full-time tennis coach's preferential policies to Attract and encourage more tennis coaches to work full-time coaches. With a certain number of tennis coaches and a number of quality tennis coaches, the development Table 4 average monthly income list of tennis coaches (n=26)

of tennis in Huang Zhou district has been sustained. 3.2.2 Analysis on qualification certification of tennis coaches

According to the investigation, there are five people who hold tennis coaches in the Huang Zhou district, accounting for 19.23 percent of the tennis coaches. There were 21 people who did not have the corresponding qualifications, accounting for 80.77%. It shows that the professional qualification rate of the tennis coaches in Huang Zhou district is low. Government related management departments and associations should step up their oversight of whether or not they hold posts, provide more qualifications, training opportunities and resources for tennis coaches, and enhance the professional ability and skill level of coaches troops

3.2.3 Tennis coaches coaching fixed number of year to participate in the competition analysis

According to the investigation and analysis, it can be concluded that there are 15 people who have coached tennis coaches in Huang Zhou district for less than 2 years, accounting for 57.69%; there are 7 people in charge of 2-5 years, accounting for 26.92%; over five years have 4 people, accounting for 15.38%; the coaching time of tennis coaches is short, most coaches do not define the position of tennis coach as a career plan for a long period of time. This phenomenon is closely related to the general youth of tennis coaches, the young coaches are unstable, lack of determination and perseverance, in addition, the coaching period is too short, but also with the tennis coach part-time staff too much, there are inextricably linked, for time, wages, unstable position of part-time coaches, will be in a shorter period of time to choose jobs.

3.2.4 Analysis of monthly income of tennis coaches

Under 500 Yuan 500-1000 Yuan 1001-1500 Yuan 1501-2000 Yuan 2000 above	0						
		Under 500 Yuan	500-1000 Yuan	1001-1500 Yuan	1501-2000 Yuan	2000 above	

number of peop	e 15	6	2	2	1
percentage	46.15%	34.62%	7.69%	7.69%	3.85%

As shown in Table 4: tennis coaches for a monthly income of 500 Yuan has 15 people, accounting for 57.69%; monthly income of 500-1000 Yuan 6, accounting for 23.08%; the monthly income of 1001-1500 Yuan 2, accounting for 7.69%; the monthly income of 1501-2000 have 2 people, accounting for 7.69%; 2000 Yuan more than 1 people, accounting for 3.85%. Because of the low economic level of the Huang Zhou district and the fact that part-time coaches have fewer full-time coaches, the overall salary wage for tennis coaches in the Huang Zhou district is generally low. the people working in tennis coaches lack of enthusiasm. In addition, we should strengthen the standard management of tennis coaches' class hour fees, so as to avoid disrupting the order of training market. This is not only conducive to the healthy competition between tennis coaches, but also to make tennis coaches consciously improve their skills and professional ability, and ultimately optimize the service level and industry environment Table 5

38

3.3	Tennis	coaches	the	education	training
ana	lysis				

of tennis training industry.

3.3.1 Analysis of coaches' recognition degree of continuing education

Through the "continuing education training course" regular degree survey: 16 of people considered to be very important, accounting for 61.54%; 4 of people think is important, accounting for 15.38%; 6 of people think the importance of the general, accounted for 11.54%; there is no coach who believes that regular education training courses are not important. This shows that Huang Zhou District tennis coaches attach great importance to the promotion of business ability, and are also very willing to receive regular training opportunities to improve their coaching ability and comprehensive skills.

3.3.2 Tennis coaches obtain training information and participate in training analysis

- TT - 71	$\mathbf{D}^{*}$	1	,	· c	1	(
Hilang Zholl	District tennis	coaches access	fraining	inform	ation list (	n = 261
/ ITuung Lilou			nanning	monin	ation not	(n 20)

	training organization	Internet	Tennis Magazine	TV, radio	else
number of peopl	e 5	14	5	0	2
percentage	19.23%	53.85%	19.23%	0%	7.69%

Today is the era of rapid development of information technology, people access to information more and more widely, which is conducive to tennis coaches to acquire more knowledge to improve their knowledge structure. As shown in Figure 5: the coaches to get information through a variety of training to 5 people, accounting for 19.23%; obtain training information through a network of 14 people, accounting for 53.85%; by 5, tennis magazine, magazines to get training information accounted for 19.23%; through TV, broadcast obtain training information of 0 people; from the other side of the 2 people, accounting for 7.69%. According to this, the tennis coaches in Huang Zhou District obtain extensive training information, and more than half of them receive training information and knowledge updates through the network.

According to the survey, there is not much coaching training for authorities such as ITF and PTR, and no such opportunities as the tennis peak BBS. This is directly related to the overall business level of the coach in Huang Zhou district, in addition, there are also some influences on the part-time coaches of college students.

#### 4. CONCLUDES

4.1 There are many male tennis coaches in Huang Zhou District, the age is younger, and the educational background is generally higher, both students and master degree, but the overall skill level needs to be improved.

4.2 96.15% of the tennis coaches in the Huang Zhou district are part-time tennis coaches, more college students and only 1 full-time tennis coaches. Few professional coaches (19.23%); The length of teaching is about two years; the deviation of monthly

income and the mobility of part-time coaches indicate that the professional level of tennis coaches in Huang Zhou is not high and their professional ability is common. Relevant departments and associations should strengthen the construction and development of tennis coaches.

4.3 The tennis coaches in Huang Zhou have many ways to obtain training information, and more than half of them receive training information and knowledge updates through the network.

4.4 There is a lack of performance appraisal mechanism and effective training system in the construction of the district coaches. The relevant parts and associations should conform to the development needs of the times, to improve their professional ability and teaching level, and actively establish a long-term and effective training system and performance evaluation mechanism, finally for the tennis training market to create a good environment, contribute to the popularity of sport development.

#### REFERENCES

[1]Can Qiao Ya. The Research of Tennis Technical Instructor in Xi'an [D] Xi'an Physical Education University 2014.6(1-3)

[2]Zhu lei, Chao Yu. Research on the current status of the tennis coaches in Jia Xing city and the research of the countermeasures [J] journal of PanZhihua University 2012.4, Vol. 29. No. 2, (104-106)

[3]WU Wen-jia. A Study on Developing Status of and Countermeasures for Amateurish Tennis in the City of Zhangzhou [J] Journal of Zhangzhou Normal University(Nat. Sci.) 2010 General No.68, (133-136)

### The Evaluation of the Innovation Ability of Chinese Sports Industry

#### Hua-wei Liang

Institute of P.E, Henan Polytechnic University, Jiaozuo 454000, China

Abstract: By using the method of data statistics and statistical model constructing fuzzy comprehensive evaluation system, with an emphasis on sports product manufacturing enterprises for independent innovation, establish the enterprise independent innovation module. This paper studies the development environment of the independent innovation of Chinese sports products industry, and finds out the problems existing in the self-creation of research institutes, universities and enterprises. Conclusion: the independent innovation ability of Chinese sports industry is still in the early stage and the system is not perfect. To better the development of sports industry, in order to drive economic development, it is necessary to stand in the Angle of the innovation, promoting the common progress of the production, study and research, has been completed in the sports industry research institutions, colleges and universities smoothly, enterprise innovation and development.

Keywords: Sports scientific research; Fuzzy evaluation; Sports industry

#### 1. INTRODUCTION

The present situation of research and innovation in sports industry in China contains two points: first, r&d investment level is not high. Mainly in R&D activities, R&D activities are at the core of the enterprise. Therefore, R&D activity has become the target of many sports industry enterprises at home and abroad, which will improve the research productivity of enterprises [1-3]. The R&D expenditure in the sports industry was from 11.3 million yuan in 2007 to 346.57 million yuan in 2010, with the majority of the funds in basic research and applied research. Independent innovation is the support of the national economy, promoting the formation of intellectual property, especially the independent innovation of the sports industry in the open era. Second, there is a shortage of skilled people in the industry [4-6]. From 2010 to 2014, the sports system, scientific research institutions have been at no growth, although the innovation and development of sports industry in China is speeding up. However, due to the short start-up time, the limitation of the development resources of sports innovation has resulted in the lack of relevant personnel of the sports industry research and innovation.

The reasons for the poor innovation in China's sports industry are caused by the lack of innovation in

sports related enterprises; The research institutions of the sports industry have not paid enough attention to research and development. Sports industry companies lack the incentive to innovate. In this paper to evaluate scientific research innovation ability of the sports industry in China, consider the sports industry related enterprise utilization of scientific and technological achievements, number of independent intellectual property rights licensing, the proportion of R&D spending accounts for income, R&D institutions, proportion of scientific research personnel in the enterprise, the proportion of science and technology personnel of employee compensation etc., and on the basis of the main factors to evaluate scientific research ability of sports industry.

### 2. RESEARCH AND INNOVATION ABILITY IN SPORTS INDUSTRY

2.1 The status of scientific research in sports industry For the classification of sports related industries, the sports industry is divided into three categories according to the main sub-division of the sports industry: sports and construction; Commercial sports; Leisure sports. Contains the content of the sports industry widely, and its main industry trading object is sports labor and service, including the sports competitions, training, fitness, entertainment, consulting, training, such as market, related industries, including sporting goods market, sports media, sports venue management, such as sports betting.

The overall trend of the development of the sports industry is growing year by year, especially in the economically developed cities, which have higher requirements for the sports industry. What is certain is rapid economic development of the city, the city sports industry is very developed, sports industry can be as an important economic pillar in some cities, is also an integral part of a national industry.

In China's national statistics, the number of people in China's sports system from 2010 to 2013 has changed, as shown in Figure 1. China statistical year sign data show that from 2010 to 2013 sports system, scientific research institutions have been at no growth, no matter from provincial, or municipal sports system of scientific research, the total there were no significant changes in recent years, the figure 1 shows that the Chinese sports system of scientific research personnel to maintain the upward trend. In China in the structure of subject of sports research and development, the number of sports research accounts for 3% of total national science and technology activity subject, that can mean, now, China's fasten the innovation strength is very weak.





Figure 1 changes in the number of people who study in sports systems

2.2 The innovation capacity, innovation input and innovation output of the sports industry

Social development cannot leave the innovation, the development of sports industry is dependent on the innovation ability, rely on science and technology, knowledge, economic, human, combining the development of the sports industry is constantly, transformation, eventually forming a strong ability to innovate. Can for combining these factors, the first to go through the main body of innovation, in the sports industry innovation, its main body includes universities, enterprises and scientific research in colleges and universities, etc., through the main body to complete the germination of industrial innovation, the innovation input and output of the sports industry. Innovation in the development potential the innovation ability reflects the scientific research and for the evaluation of industrial scientific research innovation ability is a basic content, the innovation and can be divided on the financial and human inputs. Innovation output can be the embodiment of the innovation ability, reflects the benefits and the results obtained in the process of innovation, in the sports industry structure, innovation output is included in the patent, formed in the scientific research institutions and universities of innovation mode, education methods, also contains the sports industry related enterprise research and development of new technology, process, etc., in the manufacturing industry of sports is especially obvious.

3. FUZZY EVALUATION MODEL

Based on the fuzzy mathematics, this paper gives the following relationship to the independent innovation of Chinese sports industry.

Target: the research and innovation evaluation of Chinese sports industry.

Criterion layer: research innovation input, scientific research innovation output situation.

Solution layer: the utilization of scientific and technological achievements related to sports industry enterprises, scientific research and the number of intellectual property, R&D spending accounts for income situation and relevant institutions of research and development spending, the proportion of

#### International Journal of Education and Management

scientific research personnel in the enterprise, the nature of the work of science and technology personnel, innovation industry sales proportion, the proportion of science and technology personnel and employee average compensation, get pass class hierarchy, to established indexes of correlation is the main factor to establish indicators, correlation study can guarantee to establish indicators do not overlap in data query and the phenomenon of missing, so we can ensure indicators of scientific, complete, eliminate harmful interference. Establish a level analysis diagram, as shown in figure 2.



Figure 2 hierarchy build diagrams

Evaluation result is scientific and stability in data acquisition, since a few years ago for sports innovation related data collection is not very comprehensive, and statistical system is incomplete, to find a scientific and reasonable is more difficult to statistics. But after 2006, the state general administration of sports and the national bureau of statistics jointly improve the statistics of the sports industry policies, and comprehensive and systematic review of sports industry has carried on the detailed data, until 2013, an increasingly large databases for the sports industry, on the basis of the scientific data, this paper makes the reasonable process of empowerment.

We can get to reach the company independent innovation, independent innovation input and output accounted for independent innovation should be 0.75 and 0.75, however, is now the enterprise independent innovation input and output for independent innovation is not very optimistic. Therefore, for China's sports manufacturing industries, should increase enterprise efficiency of scientific and technological achievements, scientific research and intellectual property licensing, R&D funds input, R&D institutions, scientific research and technical staff accounted for the proportion of enterprise employees, the proportion of scientific research personnel factors such as ratio of income.

We should increase the scientific research and innovation, the government should consciously increase investment, and promote the common development of relevant industries, now want to better development of sports industry, in order to drive the economic development, it is necessary to stand in the Angle of the innovation, promoting the common progress of the production, study and research, has completed the sports industry in scientific research institutions, smoothly, enterprise innovation and development of colleges and

#### universities.

#### 4. CONCLUSION

Independent innovation is beneficial to support of the national economy, promote the formation of the intellectual property rights, promote scientific research institutions of scientific research ability, is to improve China's capacity for independent innovation and the main factor of competitiveness of enterprises. In the open era, the innovation of sports industry, however, the research innovation of sports industry contains many factors. Want to establish a good model to analyze China's sports industry, need to build in a scientific, comprehensive data on the basis of considering the independence of the various indicators and correlation. Therefore, we should use a lot of experience to accurately grasp the different level of innovation ability of the sports industry, and evaluate the independent innovation of the sports industry in many ways. Sports material industry is the important branch of sports industry enterprise, is also an integral part of a national economy industry, China's sports industry present situation is not optimistic, therefore, to analyze status of Chinese sports industry, the author of this paper, based on the fuzzy mathematical model obtained independent innovation input and output accounted for independent innovation, make a analysis of the situation, and in the future development plan.

#### ACKNOWLEDGMENT

Science and society project of Henan Province: Research on the inheritance model of sports intangible cultural heritage in the micro era in Henan Province; Project number: 2016G016.

#### REFERENCES

[1]shucheng li, zhiyong. Research on the innovation ability and development strategy of Chinese sports industry [J]. Journal of sports culture, 2007.5:41-44.

[2]zhang jianyong. The problems and countermeasures of the development of Chinese sports industry[J]. Journal of sports culture, 2005, (2005) : 10-12.

[3]Zheng Meiyan, xue-feng wang, Su Xinrong. Industry-university-institute cooperation education: open the key to innovative talent training sports industry [J]. Journal of sport science and technology literature bulletin, 2014, 6 (22). 37, 38, 86.

[4]The research of the application of QFD in the management of sports industry management [J]. Technology management research, 2012, (4) : 114-117.

[5]von lobe, lunatic, parada. Government - university -enterprise collaborative cooperation mode of production, exploration and practice [J]. Science and technology progress and countermeasures, 2012, 29 (22): 67-70.

[6]tie-li Yang, Meng Zhaorui li-juan ren. Theory of sports industry development strategy of Beijing [J]. Journal of capital institute of physical education, 2010, (2) : 22-26, 39.

# Application Strategy of "Cooperative Learning" Teaching Mode in Physical Education

Zhen Li

#### Institute of P. E, Henan Polytechnic University, Jiaozuo 454000, China

Abstract: Cooperative learning is a form of autonomous learning. As a new way of learning, cooperative learning generally includes three major forms: peer cooperation, cooperative learning, group cooperative learning, and whole team cooperative teaching. This paper expounds how to carry out cooperative learning in PE classroom teaching from the following aspects: the origin and development of cooperative learning, the classification, and the problems that should be paid attention to in the process of using cooperative learning teaching mode". we hope to bring new inspiration to our colleagues and make the cooperative learning more rational and scientific.

Keywords: physical education; cooperative learning; learning methods; learning methods

#### 1. INTRODUCTION

Cooperative learning is one of the new way of learning the curriculum reform and the state emphasized and advocated, is a bright spot in the new curriculum reform, and it is also one of the teachers in the teaching practice is widely used teaching method, As a kind of teaching method of physical education, it can effectively solve the contradiction between teachers face, class teaching and the new curriculum requirements for learning, so that cooperative learning should strengthen the research and use of summary, in order to play its biggest effect [1-3].

First. The origin and development of cooperative learning. Cooperative learning is a form of autonomous learning [4]. In 1970s the rise in the United States, and in 80s in the world were of concern, in 80s was introduced into China, in 90s began to try to use in some schools, but it has been paid attention to in our country since the beginning of the national basic education curriculum reform this century. The< State Council decided that on basic education reform and developmen>, "encourage cooperative learning, promote mutual exchanges and learning between the common development of teachers and students Teaching benefits teachers as well as students. "Cooperative learning is a relatively "individual learning", refers to the students in the group or team in order to accomplish common tasks, with mutual learning in a clear division of responsibilities. t is between the two cooperation, can

also be multi person cooperation. The use of cooperative learning teaching model can help students cultivate cooperative spirit and group consciousness, and help to improve their cooperation ability; Cooperative learning helps to enlarge the intelligence, improve the learning efficiency, thinking resonance, each one airs his own views in the cooperation, to overcome the one-sided, inspire each other benefit by mutual discussion, mutual evaluation, inspire each other, learn from each other; Can also be used for the exchange of information, sharing of resources; Cooperative learning is conducive to teaching students in accordance with their aptitude [5]. There are objective differences among students. In cooperative learning, teachers pay attention to the whole class by paying attention to the whole class, and then pay close attention to the individual in the group;Cooperative learning has greatly expanded the opportunities for students to participate, and each student in the group has more opportunities for speech, performance, communication and evaluation, thus making up for the limitations of the classroom teaching system;Cooperative learning can improve the students' communicative ability; Cooperative learning can make students more inspiration, benefit innovation, get more income, get better experience, and help students develop a lifelong sports view. It has been greatly advocated and widely used in the sports teaching after the curriculum reform.

Second, Classification and use of cooperative learning. In PE teaching, cooperative learning can be divided into three types:

(1) Cooperative learning between two people (also called cooperative learning among peers). In the practice process of sports teaching, two good friends is the typical form of collocation of cooperative learning, cooperative learning is easy to form this organization, and the teaching effect is ideal. Good friends, whether in time or in space, are the most intimate and the easiest to communicate with each other. For example, radio gymnastics, martial arts teaching materials review class, so that students free pairing, learning from each other, error correction, and finally the two people together to study the results of the show, the teaching effect is very good.

(2) Cooperative learning. At present, the most familiar is the cooperative learning with most PE teachers in primary and middle schools, it can

effectively solve the teachers face large class teaching problems, at the same time, also in line with the learning mode of the new curriculum requirements. The key is how to guide them to the division of groups within the group, how to choose a leader, how to carry out group activities and the group leader. The following describes the commonly used grouping mode: According to different teaching contents, different grouping modes are adopted, and the following three grouping schemes are generally used. 1, stable group. Group after a longer period of time, according to the student's health, gender, physical fitness, sports scores and other factors, divided into stable group, can be used as a semester or academic year. This grouping is characterized by basically the same physical fitness, hobbies and skills may be different, but easy to use the same plan for the same group, but also easy to distinguish between different groups.

#### 2. STAGE GROUPING

The stage group lasts for a relatively short period of time, and is generally used only in one teaching unit. Once the unit is finished, the group is dissolved. There are three groups of ways:

(1) grouping according to skill level is characterized by the same skills and the difference of love. For example, in the swimming teaching unit, the tourists and beginners are divided into two groups, teachers with different requirements for their class, the ability to raise the level of the visitors is higher, but the use of time is short, with more teaching time to teach beginners, so that beginners ability to improve faster.

(2) According to the same hobby grouping, the characteristics of the same hobby, skills are not nearly the same. For example, in the ball game teaching unit, basketball, football and volleyball are given at the same time, so that students can choose their favorite ball games according to their own preferences, in order to fully mobilize the initiative of students, stimulate their interest in sports, excavate students' learning potential, skills and physical fitness will greatly improve the teaching, The basic idea of <new curriculum standard this the > is student-centered development, pay attention to the dominant position of the students, pay attention to individual differences and different needs, to ensure that every student truly reflects the benefit.

(3) match groups according to skill level. Its characteristic is sports skills, hobbies are different. The purpose of this grouping is to expand intra group differences, let the good help poor skills, make a deep interest in cultivating interest in light, play a role Bangdai between the students, let the students become the main body of the class, It strengthens the communication among the students, trains the students good cooperation spirit, and improves the interpersonal relationship.

#### 3. FLEXIBLE GROUPING

Flexible grouping is similar to phase grouping, and

the effect is the same. The difference is that the duration is shorter. It occurs only in one class, and then it is dissolved.

There are three main grouping methods:

(1) Grouping according to skill level can improve students' enthusiasm and competition. For example, in the high jump teaching, there are four different heights in the four high jump areas: 90 cm, 100 cm, 110 cm, 120 cm, from low to high. The teacher asked to skip the height of 90 centimeters to jump to the next height, And so on, three times in a row can not jump past, go back to jump a lower level of height. This temporary grouping can train students to be aggressive and dare to work hard, and they also activate the atmosphere of the class. In the process of using this grouping, we should guide the students to learn how to deal with the relationship between competition and cooperation.

(2) According to the skill level, good or bad grouping can improve the teaching effect. For example, in learning a broadcast gymnastics teaching, The teacher intends to form a group of students who have been mastered and who are not proficient, so that they will not be able to teach, The students in the group between mutual help, mutual learning and mutual assistance, can shorten the teaching time, students cultivate the spirit of cooperation.

(3) Random grouping, . This group also appeared in the first lesson, generally take off or random free combination, can achieve the strength between groups were basically the same situation by random grouping number, . Easy to carry out teaching, competition or competition between groups; And free combination can make the same hobby, the relationship between good friends in a group, and their coordination more tacit understanding. Such as ball games, games, jumping rope activities and so on. 4. ALL ROUND COOPERATIVE TEACHING

It refers to the development of teaching activities between teachers and the whole class in a good cooperative relationship. It takes all the members of the teaching class as the cooperative object, emphasizes the cooperation between teachers and students, the students' cooperation, the division of teachers' cooperation, and forms the teaching process of participation and cooperation among all the members of the class. Commonly used in textbooks difficult new teaching.

Third, We should pay attention to the problems and strategies in the use of cooperative learning.

From the current cooperative learning methods used in primary and middle school classrooms, there are still some general problems in understanding and implementation:1, It failed to make good use of teaching materials and failed to combine teaching materials with other curriculum resources well; 2, Teachers' guiding role and guidance is not enough; 3, The validity of the discussion is not high; 4, Group cooperative learning becomes a mere formality; 5, Exchange and production in the classroom is not enough, the students gain little. In view of these problems, I propose the following suggestions and strategies: 1, Strengthen guidance, teach students how to learn cooperative learning. In cooperative learning, and cooperative learning method to clarify the requirements. How to determine the role of the small group leader and the group leader, and how to divide the roles of the team members. What individual responsibilities do they undertake, how members communicate with each other, how to evaluate the results of the study, and how to deal with unexpected problems and unexpected incidents in group activities, how to guide the students learning achievement report and so on, organized, in order to complete the task efficiently. 2, We should not only emphasize the form, but also strengthen the study of the method and manage it well. We should study the teaching materials, select the scientific teaching model according to the characteristics of the teaching materials, not all the teaching materials can adopt the mode of cooperative learning teaching. What forms of cooperation should be adopted in the new course, and what kind of cooperation model should be adopted in the review class, and the teaching mode of cooperative learning should be chosen accordingly. In addition, we should consider the following factors: the preparation before the cooperation, the setting of time, the choice of content, the arrangement of the number, the structure of the group, the way of cooperation, facilities, environment protection, classroom discipline, process monitoring, guidance, results feedback, assessment, security issues. Only by choosing the scientific cooperative learning model, considering and arranging properly can the cooperative learning model play a higher role. 3, We should strengthen the training of students' other qualities while using the cooperative learning mode. Cooperative learning is a part of the way of teaching, must reflect the curriculum goals. Therefore, cooperative learning can not stay in the vigorous form, nor can it remain in a single goal. Through cooperative learning, teachers should pay attention to the following qualities of students: Be good at listening to other people's opinions, learning from others, respecting others, and setting up equal and democratic consciousness; Actively cooperate with

#### International Journal of Education and Management

and coordinate other people's activities, and have strong communication skills; Independent thinking, good at using divergent thinking, critical thinking, both dare to put forward their own opinions, but also to accept the criticism of others, not only dare to uphold the truth, but also the courage to correct mistakes, in the completion of the task, dare to innovate, perseverance, forge ahead, pragmatic, excellence, and the courage to overcome the difficulties of the spirit;On the collective, highly responsible for work, for others, don't worry about personal gains and losses, earnestly fulfill their obligations, are helpful, willing to sacrifice spirit. 4, In the process of cooperative learning, we should not only face all students, but also pay attention to individual differences.

Recognition of individual differences is the premise of individualized teaching. In cooperative learning, we are bound to find that there are various imbalances in group activities, . If some people are always the first to speak, compete for performance, while some students always lose the opportunity, or sit quietly. For all kinds of imbalance, we must act as specific research and analysis, come up with solutions, take turns as team leader, put forward the specific and specific requirements of each participant, and ensure that each student has the opportunity to participate. Therefore, in cooperative learning, both the whole and the individual differences should be paid attention to.

#### REFERENCES

[1]Wang Tan. Cooperative learning theory. Beijing: Science Press, 1994. 18.

[2]Wang Tan. Research on the basic concept of [J]. education of cooperative learning, 2002. 2.

[3]People's Republic of China, the Ministry of education, sports and health curriculum standards. Beijing Normal University press. 2001. 7.

[4]Li Jingcheng, Sun Wei. Cooperative learning theory and practice of sports cooperative learning. Journal of Capital Institute of Physical Education, . 2001.

[5]sports curriculum and teaching methods. Li Weimin Xinhua press. 1998. 1.

# Based On the Goal Orientation Teaching Method in Badminton Teaching Effect of SPSS T Test

#### Yi-qiang Mai

Institute of P.E, Henan Polytechnic University, Jiaozuo 454000, China

Abstract: In order to get the systematic specialization will study common class of the badminton, based on the two classes of badminton elective course students of a university as the research object; design the target teaching method and traditional teaching method of experimental scheme. And use SPSS software for statistical analysis of experimental data through the experimental results, the target teaching in training students' level of task orientation and badminton technology level has great advantages than traditional teaching methods, from scoring, members of the experimental class students significantly better than that in comparative classes. Keywords: Badminton teaching; Significant

Keywords: Badminton teaching; Significant advantage

#### 1. INTRODUCTION

For badminton teaching and learning researches, lots of people have made efforts, just their efforts, let the event to achieve more extensive audiences group, it builds certain base for masses fitness and national fitness development. Among them, Xu Mei-Hua combined with author years' badminton teaching actual combat experiences, summarized a set of badminton chopping technique teaching methods, and tried to briefly discuss badminton chopping technique application in competition[1-2]. Sun Hua etc. started from author actual combat experiences, went deeper into analyzing badminton technical and tactics training contents and methods [3-6].

The paper on the basis of formers research, for universities badminton optional course teaching methods, it makes research, designs goal orientation teaching method teaching plan, by teaching experiment method, it researches goal orientation teaching methods superiority by comparing to traditional teaching method, in the hope of providing theoretical references for badminton techniques professionalization popularization and teaching.

### 2. GOAL ORIENTATION TEACHING METHOD SUMMARY

Goal refers to one specific behavior criterion that a person tries to achieve in one specific time. In view of history, goal refers to human all behaviors destination, is people established link for more clearly recognizing things movement and Table 1 Trichotomy and quartering concrete expression development. In one significance, goal is most direct motivation to trigger behaviors, set proper goal will let people to generate honor demands to arrive at the goal, therefore it has fiercely stimulation effects on people.

By far, relative theories in sports field, it mainly has mechanism and cognitive theory two kinds, as following shows:

Locke Latham put forward mechanism thought that goal setting influences on sports activities mainly reflect in guidance quality, motivating individual behaviors, propelling to efforts and helping task completion four aspects.

Burton proposed cognitive theory mainly highlighted goal was related to motivation, self-confidence and anxiety.

Nicholls pointed out that people went in for all kinds of achievement activities purposes was to promote or display individual ability, acquire sense of qualification, every people had different opinions on ability, his judgment and evaluation qualification force criterion would also be different, in achievement situation, there were two kinds of main goal orientations or people subjective determined success main base, one kind was task orientation, the other was self-orientation. Dweek called Nichiolls proposed two kinds of goal orientations was learning goal orientation and performance goal orientation, Ames called the two kinds grasping goal orientation and performance goal orientation [6].

Elliot and others advocated classifying goal orientations into three items that was rule of thirds, Elliot and Pint rich on the basis of tracheotomy, proposed quartering. As Table 1 show.

Lian Rong and others in senior high school students achievement goal inclination and mental health status relations research, pointed out that purely divided orientations into task orientations goal or self-orientations two independent type was improper, because the two kinds of goal orientations generally their motivations on the same thing had no differences, only had levels differences, as Table 2 showed emotion, cognition and behaviors three aspects discussion two goals motivations effects differences.

Table 1 Trichotomy and quartering concrete expression tableMethodClassification

Concrete expression

	Grasp goal orientation	In case such goal orientation, individual focuses on grasping tasks, developing ability, acquiring a kind of self-referencing-based feeling of competence.
Trichotomy	Get closer to goal orientation	In performance-approximate to goal, individual focuses on how to get good results, cares about feeling of competence that compares to others and good ability evaluation.
	Avoid goal orientation	In case performance-avoiding goal, individual focuses on how to avoid ability evaluation that is bad for it, avoids failure.
	Grasping-approximate to goal orientation	Individual focuses on mastering task, learning and understanding, according to self-progress and task understanding depth to evaluate self-performance.
	Performance-approximate to goal orientation	Individual focuses on how to surpass others, show himself to be the cleverest, the best, according to norm standard, he evaluates self-performance, such as examination result is the best in class.
Quartering	Grasping-avoiding goal orientation	Individual focuses on how to avoid cases that cannot understand or grasp tasks, judge success criterion is correct fulfilling tasks on the basis of self-comparison.
	Performance-avoiding goal orientation	Individual focuses on how to not himself to be reflected as inferior, stupid than others, evaluates self-performance according to norm standards, such as examinations results is not the worst in class.
Table 2 Tw	vo kinds of goal orientat	tions motivations and cognition result table

Table 2 Two	kinds of goal orientations motivations and cognitio	in result table
	Task orientation	Self-orientation
Attributes to winning or losing	Winning or losing attributes to whether making efforts or not, it is thought that result is up to personal efforts conditions	Winning or losing attributes to ability, it is thought that result is up to self-innate ability.
Emotion	Feel satisfied with feeling of achievement after making efforts, feel guilty of not making sufficient efforts, own positive attitudes towards learning;	Care for comparing to others, feel that being stronger than others is success; it is easy to generate anxiety and be afraid of failure.
Cognition	It is thought that there are no differences among people, difference is whether making efforts or not, goal completion is unrelated to others	Regard surpass others as success, even regard others errors as self-success, it is thought that spending more efforts than others means self -ability is low, so is unwilling to make efforts.
Behaviors	No matter what personal ability is, will select more challenging tasks, adventurous, despite of difficulties, and work harder	Select easy tasks, unwilling to risk, or select more difficult tasks, and use it as excuse of failure, effort extent is lower, lack of durability.
2 DECEADO	II ODIECTS AND DESEADCH aslf	officease information for individuals and then

### 3.RESEARCH OBJECTS AND RESEARCH METHODS

#### 3.1 Research objects

The paper random selects two classes from one university grade 2012 badminton public sports classes, from which one class is experimental class, it adopts goal orientation teaching method, the other class is control class, it adopts normal teaching method. Experimental class students are totally 36 people, schoolgirls are nine while schoolboys are 27, control class total amounts and proportions of genders are completely the same as experimental class.

#### 3.2 Research methods

Experiment method experiment steps are as following:

Preparation link: Firstly, carry out task orientations and self-orientations teat on two classes research objects, experimental class and control class students are both selecting badminton course in the first term, original level distributions are the same, and arrange a same teacher to teaching two natural classes, two classes teaching contents are the same, but teaching methods are different.

Experiment process: the process divides into students participate in goal selection and make goal commitment, teaching organization methods selection and timely provide feedback information.

Locke and others thought that timely feedback information and reward could provide relative Table 3 Teaching efficiency evaluation table self-efficacy information for individuals, and then encouraged individuals to work harder, so guided students to arrive at task-oriented goal, but to avoid damaging students' learning internal motivations, when providing feedback and reward, it should highlight feedback information functions, highlight the purposes of providing feedback is to let individuals to understand their achieved performances and learning schedules status to provide a reference for next step activities contents and orientations, when students appeared in adaptation in goal learning, provided information feedback on students adjusting self-learning strategies, by these feedbacks, students could better carry on independent learning and then better complete teaching goal.

The paper takes experiment method as subject, applies SPSS to make mathematical statistics analysis of experiment data, in preparation link's task orientations and self-orientations levels research, adopts questionnaire survey, totally releases 72 pieces in experimental class and control class two classes, from which 36pieces are for experimental class, and 36 pieces for control class, return rate is 100%, by consulting two classes scores average value, standard deviation, t test value and significance probability, it reflects two groups of members levels.

In teaching effects evaluation process, required evaluation contents are as Table 3 shows.

Tuble 5 Teach	ing efficiency				
Evaluation	Evaluation	Secre oritorion			
item	content	Score criterion			
Learning	Attendance	Totally ten points, deduct two points when absent per one time, the ones that absent 5 times an above			

attitude	status	will be cancelled rights of examination.
	Class	Totally ten points, whether learning attitudes are positive and serious or not, whether striving to train
	performance	or not, they are evaluated by students' self-evaluation, group mutual evaluation and learning notes
	After-class	After-class training cards record conditions, totally 10 times and 20 points, deduct 2 points when
	exercises	lacking per time.
Technical	Forehand clear	<ol> <li>Qualified requirement: Two person plays every one rally will get 1 point, 10 points are full score.</li> <li>Stroking techniques evaluation:10points-technical motions are smooth, normative, grasp singles competition rules, in competitions, used technical motions are reasonable, tactics are properly applied, progress range is large;8~9points-technical motions are smooth, correct, basically grasp singles competition rules, techniques and tactics are well applied, progress is relative remarkable;6~7points - technical motions are competition rules, tactics, have certain knowledge about singles competition rules, can apply some techniques and tactics, have certain progress;4~5points – technical motions are basically correct, techniques and tactics awareness is stronger, progress range is not remarkable;2~3points- technical motions are normal, don't know apply techniques and tactics, have no progress.</li> </ol>
		1) Qualification requirement:Require ball landing point to be between front service line and net, one
measurement		ball obtains two points.
	Forehand drop	2) Stroking techniques evaluation:10points- technical motions are smooth, normative, grasp singles competition rules, in competitions, used technical motions are reasonable, tactics are properly applied, progress range is large;8~9points-technical motions are smooth, correct, basically grasp singles competition rules, techniques and tactics are well applied, progress is relative remarkable;6~7points -
		technical motions are correct, have certain knowledge about singles competition rules, can apply some
		techniques and tactics, have certain progresses;4~5points – technical motions are basically correct,
		techniques and tactics awareness is stronger, progress range is not remarkable; 2~3points- technical motions are normal, don't know apply techniques and tactics, have no progress.
Physical	Men1000met	ers, women800meters Score according to "Chinese students' physical health scoring table"
quality		ling long jump regulations
T 1 1 /	1 75 / /	

Independent sample T test principle and steps are as following:

T test is used for measurements statistics on two different overall average values, with an aim to judge tested whether two independent samples derive from same average value entirety or not, if it tests on two groups of samples statistics, it should meet following three requests:

Tested two groups of samples are mutual independent from each other, no matching relationships;

Two groups of samples all derive from normal entirety;

Average value is significant descriptive statistics on testing.

When two groups of independent samples meet above three demands, next step should enter into T test actual operation steps, T test operation steps are as following show

STEP1. Establish original hypothesis and alternative hypothesis

Two independent samples T test original H

hypothesis  $H_0$  represents two entireties average values have no significant differences, mathematical expressions are as formula (1) show

$$H_0: H_0: \mu_1 - \mu_2 = 0; H_1: \mu_1 - \mu_2 \neq 0$$
(1)

In formula(1),  $\mu_1$  and  $\mu_2$  respectively represents the first entirety average value and the second entirety average value.

STEP2. Select test statistics

For two entirety average value difference deduction basis is two entirety samples average value difference, which adopts two groups of samples average value differences estimated entirety average value difference, at this time it should focus on two samples' average value sampling distribution, if two entireties distribution are respectively  $N(\mu_1, \sigma_1^2)$  and  $N(\mu_2, \sigma_2^2)$ , then two samples average value differences sampling distribution is also normal distribution, its average value is  $\mu_1 - \mu_2$ , variance is  $\sigma_{12}^2$ , but in different conditions,  $\sigma_{12}^2$  has different calculation ways, when the two conditions are respectively  $\sigma_1 = \sigma_2$  and  $\sigma_1 \neq \sigma_2$ , the former represents two entireties variance are unknown and equal, the latter represents two

entireties' variance are unknown and not equal, therefore the former can adopt combined variance as two entireties variance estimation, their mathematical definitions are as formula(2) show:

$$Sp^{2} = \frac{(n_{1} - 1)S_{1}^{2} + (n_{2} - 1)S_{2}^{2}}{n_{1} + n_{2} - 2}$$
(2)  
$$S^{2} = S^{2}$$

In formula(2),  $S_1$  and  $S_2$  are respectively the first group of samples variance and the second group of samples variance,  $n_1$  and  $n_2$  respectively represents the number of first group of samples and the number of second group of samples, then at this time two samples average value difference sampling distribution variance  $\sigma_{12}^2$  is as formula(3) show:  $\sigma_{12}^2 = \frac{Sp^2}{n_1} + \frac{Sp^2}{n_2}$ (3)

The latter case, it needs to respectively adopt their own variance, at this time two samples average value difference sampling distribution variance  $\sigma_{12}^2$  can be calculated by formula(4):

$$\sigma_{12}^2 = \frac{S_1^2}{n_1} + \frac{S_2^2}{n_2} \tag{4}$$

Therefore two entireties average value differences

test statistics mathematical definition is as formula(5)show

$$T = \frac{\overline{X}_{1} - \overline{X}_{2} - (\mu_{1} - \mu_{2})}{\sqrt{\sigma_{12}^{2}}}$$
(5)

In case  $\sigma_1 = \sigma_2$ , T statistics conforms to  $(n_1 + n_2 - 2)$  pieces of freedom degrees t distribution, in case  $\sigma_1 \neq \sigma_2$ , it conforms to revised freedom degree t distribution, revised freedom degree mathematical definition is as formula (6) show

$$f = \frac{n_1 n_2 (n_2 S_1^2 + n_1 S_2^2)^2}{n_2^3 S_1^2 + n_1^3 S_2^2}$$
(6)

STEP3. Calculate testing statistics observation value and probability P value

The purpose of the step is calculating F statistics and T statistics observation value and their corresponding probability P value, applies SPSS software, it can automatically get F statistics and probability P value according to single factor variance analysis, and can automatically input two groups of samples average value, numbers of samples and sampling distribution variance into formula(5), it gets T statistics observation value and corresponding probability P value.

STEP4. Given significance level  $\alpha$  , and makes decision

At first, make use of F test to judge two entireties variance is equal or not, and according to two variances numerical relationships, it decides sampling distribution variance and freedom degree calculation method and result, if F testing statistics probability P is less than significance level  $\alpha$ , then it should refuse original hypothesis, it gets the conclusions that two entireties variance have significant differences, on the contrary, it is thought that two entireties variances have no significant differences.

Then, it applies T test to judge whether two entireties average value exists significant differences or not, if T test statistics probability P value is less than significance level  $\alpha$ , then it should refuse original hypothesis, it gets two entireties average value has significant difference, on the contrary, it is thought that two entireties have no significant differences.

At last, according to statistical objects differences, it gets corresponding conclusions.

#### 4. RESULT ANALYSIS

Before experiment experimental class task orientation average score is 18.47, and control class is 18.12, score difference is 0.35 points, by two classes T test

#### International Journal of Education and Management

result, it is clear before experiment, two classes of learner's task orientation score differences have insignificant significances.

Before experiment experimental class self-orientation average score is 15.25, and control class is 16.74, score difference is 0.51 points, by two classes T test result, it is clear before experiment, two classes of learner's self-orientation score differences have insignificant significances.

Experimental class before and after experiment task orientation level average score difference is 2.05points, T test value is 1.24, significant probability is 0.047, the probability value is less than 0.05, evaluation in scores, after experiment experimental class learners task orientation level is obviously superior to before experiment experimental group learners.

Control class before and after experiment task orientation level difference is 1.24points, T test value is 1.88, significant probability is 0.87, the probability value is larger than 0.05, evaluation in scores, after experiment control class learners task orientation level is lower than before experiment control class learners, due to probability value is larger than 0.05, such difference is thought to be of insignificant significances.

From T test result, after experiment experimental class and control class learner's physical quality items' medium and long distance running have no significant difference, similarly in standing long jump, it also doesn't have significant difference. In view of scores, for medium and long distance running event and standing long jump event, experimental class is slightly lower than control class physical quality level.

In view of technical test result T test result, experimental class and control class both have significant differences, and experimental class learners technical level is significantly higher than control class learners.

#### 5. CONCLUSION

The paper on the basis of reviewing goal orientation teaching method, provides research objects and research methods, establishes orientation goal teaching plan and traditional normal teaching plan, by teaching experiment and mathematical statistical method, it gets following showed conclusions:

Before experiment, carry out task orientation and self-orientation level test on research objects, test results indicate that two classes have insignificant differences that they are fit for using as teaching experiment samples.

After experiment, two group learners' task orientation levels have significant differences, and experimental group learners are significant superior to control group learners that goal orientation teaching method is superior to traditional normal teaching method.

Experimental class has significant differences in before and after experiment task orientation levels,

while control class has no significant difference; it shows goal orientation teaching method is helpful for greatly promoting students' task orientation level.

After experiment, two classes have no significant differences in physical quality aspect, they have significant differences in badminton technical level, and in technical test two test goals, experimental class is superior to control class; it indicates goal orientation teaching method is very suitable to badminton teaching, is helpful for significant promoting badminton technical and tactics level.

#### REFERENCES

[1]Chen Yi-Qin. Briefly discuss badminton teaching's multiple balls training effects [J]. Economic research guide. 2012, (18):292-294.

[2]Xu Mei-Hua. Badminton chopping technique teaching method and its application in competitions [J]. New generation. 2012, (444):5-6.

[3]Sun Hua. Badminton technical and tactics teaching training contents and methods exploration [J]. Journal of Changsha aviation occupation technology college. 2012.12(1):21-23.

[4]Christopher Gringo & Herve Le Bars. Achievement goals in Aikido and Judo: a Comparative study among beginner and experienced practitioners [J]. Journal of Applied Sport Psychology. 2000(12):168-179.

[5]Elliot, Harackiewicz. Approach and avoidance achievement goals and intrinsic motivation: a mediational analysis [J]. Journal of Personality and Social Psychology, 1996(70): 461-475.

[6]Lian Rong and others. Senior high school students' achievement goal inclination and mental health status relations research [J]. Mental development and education. 2002 (1):67-70.

# Chinese School Physical Education Examination System Construction Development Trend Study

#### Ling-xian Yan

Institute of P.E, Henan Polytechnic University, Jiaozuo 454000, China

Abstract: At first, by making statistics of nationwide partial provinces and cities school physical education examination scores and their examination events, it studies Chinese physical education examination mechanism, and gets approaches to improve Chinese physical education examination mechanism; finally the paper studies Chinese school physical education examination relative historical data by logistic curve method, makes prediction on China school physical education in future years, and gets the conclusion that future Chinese physical education examination will further develop, which plays a crucial role in advancing school physical education reform and impelling Chinese sports undertakings development. FPGA; High-speed Keywords: Information Processing; Physical education examination; school physical education; logistic curve

#### 1. INTRODUCTION

Cun De-Qin in the article "China senior high school entrance examination physical education examination survey", researched on present Chinese schools' physical education examination systems, pointed out that China suffered 'exam-oriented education' impacts under contemporary special circumstance, it should make further reform on physical education examination system, should organize nationwide schools' students to carry out entrance physical education examination, only then could let every student to lay emphasis on physical education, let body to harmonious develop so as to build firm foundation for Chinese teenagers healthy growth in future and provide talents guarantee for China future development [1-3].

Liu Shi-Rui in the article "Comparative study on China central city junior high school entrance physical education examination plans from 2010 to 2012", from the perspective of China central cities junior high school entrance examination, further learnt China entrance physical education examination Table 1 Nationwide partial provinces, direct-controlle system, pointed out that China must transfer from traditional educational thought to let teenagers' physical quality, moral quality, aesthetic quality and others to be all-around and stable developed, only then could not let Chinese teenagers to lose at the starting line, and only then could let China to stand erect in the world [4-5].

Ying Shu-Juan in the article "General institutes of higher learning major entrance examination mode research", thought that healthy body was the important guarantee of future teenagers becoming the pillars of state and serving country, teenagers' physical quality evaluation was top priority in Chinese education that must not be ignored. The thesis presented valuable opinions for China future physical education examination development, and made prediction on China sports undertakings future development trend. The thesis provided theoretical guarantee and intellectual support for Chinese teenagers' all-around development of morality, intelligence, body, aesthetics and labor.

The paper references formers' research results, and consults lots of literature, interviews with relevant scholars and experts in Chinese physical education circle, makes specific research on Chinese physical education undertakings, and gets several important results that provides valuable opinions for Chinese sports undertakings development.

#### 2. MODEL ESTABLISHMENT

2.1 Chinese physical education examination recent years' system criterion

Sports undertakings are top priority in Chinese education, and formulation and implementation of systems in physical education are the key points, therefore it must strengthen focus on Chinese systems. Below Table 1 are nationwide partial provinces, direct-controlled municipalities, autonomous regions' entrance physical education examination scores, project testing methods and assessment methods of junior high school graduate.

Table 1 Nationwide partial provinces, direct-controlled municipalities, autonomous regions entrance physical education examination of junior high school graduate

•••••••••••	adeation examination of junior ingh beneon graduate						
Province	Examination score	Project testing method	Assessment method	Province	Examination score	Project testing method	Assessment method
Sichuan	30	5	Unified	Zhejiang	30-40	1+X	Unified
			examination				examination
Anhui	>=30	1+X+Y	Unified	Hubei	30	3	Unified
	<u> </u>		examination				examination

International Journal of Education and Management

Beijing	30	2+X	Unified	Hunan	30	3	Unified
			examination				examination
Tianjin	30	1+2X	Unified examination	Guangdong	30	3	Unified examination
Shanghai	30	1+2X	Unified examination (10)+ process scoring(20)	Guangxi	30	3X	Unified examination (10) process scoring(20
Chongqing	50	3	Unified examination	Hainan	30	2+X	Unified examination
Guizhou	50	1+2X	Unified examination (40)+ process scoring(10)	Yunnan	50	1+3X	Unified examination (40) process scoring(10
Henan	30	3Y	Unified examination	Gansu	30	3	Unified examination
Hebei	30	3	Unified examination	Shanxi	50	2+Y	Unified examination
Fujian	Grading system Actual scoring system	1+2Y	Unified examination	Inner Mongolia	30	3	Unified examination
Jiangsu	40	3X	Unified examination(20)+ process scoring(20)	Shanxi	30	3Y	Unified examination(20)+ process scoring(20

According to above partial school entrance examination's sports scores assessment criterion, it is clear that most of Chinese provinces still adopt nationwide unified examination, only the cities as Gansu, Shanxi, Hunan, Jiangsu and else adopt independent examination system that is helpful for Chinese physical education development. direct-controlled municipalities graduate entrance examination events statistics

Chinese graduate entrance physical education examination events are increasing, from track and field events to body coordination; all are correspondingly increasing events, below Table 2 is China partial schools used events list in physical education examination:

2.2 Nationwide all provinces, autonomous regions, education examination: Table 2 Nationwide partial provinces, direct-controlled municipalities, autonomous regions junior high school graduate entrance physical education examination events statistical table

Province	Event	Selective frequency	Province	Event	Selective frequency
1	1000m( schoolboy)	14	19	Long jump	8
2	800m( schoolgirl)	14	20	25m*8 shuttle running	2
3	Sit-up	14	21	Height/weight	1
4	Standing long jump	18	22	Lung capacity	4
5	Medicine ball	13	23	Sit and reach	5
6	Pull-up	10	24	Grip	6
7	Basketball surrounding marker 15m shuttle running	2	25	50m*8 shuttle running	2
8	50m	10	26	Shuttlecock kicking	1
9	Rope skipping	1	27	200m	2
10	Swimming	2	28	100m	1
12	Basketball	8	29	3minutes 25m shuttle running	3
13	Football	9	30	High jump	1
14	Mat exercises	6	31	Martial arts	1
15	Bars exercises	1	32	Table tennis	1
16	Support-jumping	1	33	Badminton	1
17	Step test	1	34	Aerobics	1
18	Rope skipping	3	35	Push-up	1

From above statistical table, it is clear that many schools still select traditional events as running, long jump, standing long jump, medicine ball, pull-up and others, and add table tennis and so on. It provides foundation for Chinese physical education examination system development.

2.3 School students' selection mode on students' optional examination events

Physical education examination has gradually changed from previous exam-oriented education to students' optional examination, the examination form change is a breakthrough progress.



Figure 1 Students choose to choose examination way of statistics

By above bar figure 1, it is clear that recent two years

that are 2013 and 2014 shows that students' collective orientation selection has been increasing by year, while students' option has been decreasing, which reflects contemporary physical education examination restricts students development to a certain extent that must get more attention from school.

2.4 Sports teachers attitudes towards senior high school entrance sports events

Teachers are the most important strength in school, they have their unique opinions on teaching, their years' experiences are of extremely important reference significances in physical education development.



Figure 2 Physical education teachers to senior high school entrance exam sports attitude

From above bar figure 2, it is clear for us that teachers are relative satisfied with current stage Chinese physical education examination mechanism, which also conforms to contemporary Chinese physical education examination system development trend, but still some parts are to be improved, country should even increase investment in Chinese physical education examination.

2.5 Regarding physical education examination validity

Only when Chinese physical education examination really achieves teachers, parents and students satisfaction then it could let Chinese physical education examination to be normal developed:



Figure 3 (1)Physical education teachers to mid-term exam sports attitude

Above Figure 3 are sports teachers' job title levels, by analyzing, it is clear that most of sports teachers are higher vocational and deputy higher vocational. Therefore, it further analyzes their satisfaction with senior high school entrance sports.



Figure 4 (2)Physical education teachers to mid-term exam sports attitude

#### International Journal of Education and Management

From above ring statistical figure 4, it gets that contemporary Chinese teachers, students and parents are basically satisfied with physical education examination system, but there are still partial people have doubt s, therefore academic circle should consider their thoughts that will helpful for China future physical education examination development.

3. LOGISTIC GROWTH CURVE-BASED SPORTS SYSTEM INSTITUTIONS STAFF AMOUNT PREDICTIONS

By above several figures and tables investigation, researches, according to Chinese teachers, students, parents and experts' satisfactions statistics, it is clear that as time passing, the number of Chinese school sports teachers, students and parents that support physical education is constantly changing, now use Logistic growth curve method to analyze and then make prediction on school physical education satisfaction in 2015~2019.

#### 3.1 Logistic growth curve guiding thoughts

Chinese sports system institutions staff amount change trend is uncertain with time passing, here, introduce Logistic curve (growth curve) that has very wide application in such kind of uncertain development trend problems description. Its mathematical model is:

$$\frac{dy}{dt} = ry(1 - \frac{y}{L}) \tag{1}$$

y is predicted value, L is its limit value, r is growth constant, and r > 0. Solve the differential equation, finally it gets:

$$y = \frac{L}{1 + ce^{-rt}} \tag{2}$$

In the following, record Logistic curve general form as:

$$v_t = \frac{1}{K + ab^t}, K > 0, a > 0, 0 < b \neq 1$$
(3)

Among them, in Logistic curve, parameter estimation

$$y'_{t} = \frac{1}{y_{t}},$$
  
makes following changes: that:  
$$y'_{t} = K + ab^{t}$$

Part one:  $y_1, y_2, y_3, \dots, y_m$ ;

Part two: 
$$\mathcal{Y}_{m+1}, \mathcal{Y}_{m+2}, \mathcal{Y}_{m+3}, \cdots, \mathcal{Y}_{2m}$$

3.2 Logistic curve data handling and conclusion



Figure 5 After logistic curve data

Then by formula(8), it gets:  

$$b^1 = 1.867, a^1 = -0.005111, K^1 = 0.35468$$
  
 $b^2 = 1.6999, a^2 = -0.0001453, K^2 = 0.1281$   
 $b^3 = 1.5128, a^3 = 0.000796, K^3 = 0.0748$ 

Therefore, obtained sports system institutions staff amount logistic growth curve mathematical model is:

$$\begin{cases} y_{t}^{1} = \frac{1}{0.35468 - 0.00511 \times 1.867^{t}} \\ y_{t}^{2} = \frac{1}{0.1281 - 0.0001453 \times 1.6999^{t}} \\ y_{t}^{3} = \frac{1}{0.0748 + 0.000796 \times 1.5128^{t}} \end{cases}$$

When predicting Chinese sports system institutions staff amount development changes in future five years after 2012, only need to input t value into

#### above formula, for example predict $\mathcal{Y}_{2013}$ .

Draw above predicted number of people into following broken line figure 6, analyze different groups' satisfaction tendency:



Figure 6 The number of sports system institutions

By above broken line statistical figure 6 analysis, it gets the conclusion that teachers, parents and students' satisfactions with physical education examination system have increased, which predicts that future Chinese physical education examination system will enter into the track and develop that is helpful for teenagers' growth.

#### 4. CONCLUSION

The paper firstly analyzes Chinese physical education examination's provinces, autonomous regions and direct-controlled municipalities specific scoring methods, partial schools sports events selection status when carrying out sports exam during junior high school graduate entrance exam, and gets that traditional sports events still take superior positions, and new events of body coordination are added, which is helpful for teenagers healthy and all-around progressive development. Secondly, the paper through investigating on the three main groups teachers, parents and students' satisfactions with sports exam, and further gets that current stage sports examination system has basically reached effects of satisfaction, but there are some people show doubts that puts forward valuable opinions for with it physical education development. Finally, the paper through logistic curve, researches data after changing so that makes prediction on China future years, and gets conclusion that Chinese sports undertakings will enter into rapidly development stage, physical education examination system improvement will be approved by more people in China, which provides guarantee for Chinese future teenagers' development.

#### REFERENCES

[1]Wang Xiaoguang.Thoughts and Analyses of the Construction of Harmonious Enterprises in China. Research On Development, 2007, (5):57-60.

[2]CHEN Nan - yue.Harmonious Society Calls for Society Harmonious GDP. Journal of Yunnan Finance and Trade Institute, 2005, 21(6):81-85.

[3]LIU Chang-ming, GUAN Bin.Power of Harmony-Against the Background of Chinese Culture. Journal of Tianjin University(Social Sciences), 2009, 11(5):453-457.

[4]Fan Liwei, Liang Jiyao.The Development of the Economy and Society Calls to Create the New Mode of Economic Development--"Green and Harmonious" Development. Value Engineering, 2006, 25(5):29-31.

[5]SUN Yi-kai.Lao Zi: the Father of Chinese Philosophy. Journal of Anhui University(Philosophy & Social Sciences), 2006, 30(6).

# A Study on the Influence of Square Dance on Sports Consumption of Middle Aged and Old Women

#### Dongwei Zhang

Institute of Physical Education, Huanggang Normal University, Huangzhou 438000, Hubei, China

Abstract: This paper fits from the square dance and old female sports consumption with the analysis of the characteristics of the square dance, square dance and value on middle aged and old women sports consumption concept renewal, positive effect on participation in sports consumption behavior. To provide theoretical guidance for promoting the harmonious development of the middle aged and old women and the square dance of sports consumption, in order to promote the sports consumption level of China's growth.

Keywords: square dance; middle aged and old women; sports consumption

#### 1. INTRODUCTION

1.1 Square dance characteristics:

With the rapid development of the square dance, square dance in the city has become a beautiful landscape. The square dance is not affected by age, gender, ethnicity, social class and other factors, as long as a suitable venue, audio equipment, people can dance with music, and perform wonderful posture, be temporarily away from life and devote to the square enjoy fun which brought by square dance, and dance [1,2]. With the rise of the square dance hot, elderly women on the square dance sports consumption consciousness is more and more strong, middle and old aged women to participate in square dance can not avoid the need to buy square dance clothing, shoes and sports activities in elderly [3,4]. For women Square dance sports consumption has gradually become an indispensable part of daily life consumption.

1.2 The value of square dance:

#### (1) Fitness value

Square dance is a set of "health, power, beauty" in one of the sports activities, has good fitness value of exercise. We insist on participating in the square dance, the waist, hip and body twist, stretch, stretch action in jumping square dance movements can effectively improve the physical exercise the level of cardiopulmonary function in improving exercise, cardiovascular exercise levels and improve balance ability, coordination ability, flexibility and other aspects have a very good role in promoting.

#### (2) Health value

Square dance participants of physical and mental edifying influence, has important value. People

participate in the healthy heart square dance, can temporarily go to the trouble of the life, into the heart of the square dance activities. With beautiful music, dancing beautiful dance, participants will be fully integrated into the physical and emotional dancing and charming the music rhythm to achieve high self relaxation, entertainment realm, so as to effectively enable participants to relax, purify the soul, help to alleviate the pressure of participants participants, to eliminate the trouble.

#### (3) Performing value

Square dance with beautiful music and dancing, has a strong ornamental value. With the performance of the square dance little apple and the coolest integrated version of folk style most unusual small apple in 2015 on the CCTV Spring Festival Gala stage, square dance performance value was mining, will also square dance this mass sports activities to a climax. The people involved in the middle and old aged women by participating in the square dance, through continuous training, can be up on the stage, which not only enriches middle aged and old women's amateur cultural life, also helps promote older women's sports consumption growth.

2. THE INFLUENCE OF SQUARE DANCE ON THE SPORTS CONSUMPTION OF MIDDLE AGED AND OLD WOMEN

2.1 Square dance can meet the needs of middle-aged and old women.

Square dance spread information, especially the spread of the square dance new things to help individuals to new concepts, new ideas, understanding and selection of new skills, it can satisfy people's understanding of new ideas, the development of emotional and behavioral needs. With the square dance gradually penetrated into every corner of the country and the people life for popularization of square dance and the occurrence of a hitherto unknown change. New concept of life, way of life, living standards are constantly changing [5].

2.2 Square dance to stimulate the enthusiasm of middle-aged women to participate in sports consumption.

Based on the needs and motivation on the basis of the social demand is the power source of all human activities, sports consumption demand of residents is directly caused by the people of all the motivation of sports consumption behavior. The square dance with

its own unique charm, attracts the majority of the middle aged and old women to participate in square dance activities. The square dance sports consumption, such as the square dance clothing, shoes, audio equipment, and the relevant needs of the square dance CD facilities supplies demand increase dramatically. The square dance in the middle and old aged women gradually increased, which can have a good propaganda effect on the square dance, can make the public square dance on the role, function, significance in the step of understanding. Awareness of the concept of change, effectively stimulate the elderly women actively to participate in sports consumption enthusiasm, with the idea of "buying health" is becoming more and more popular. The sports consumption demand will be growing, middle-aged women have become accustomed to the square dance exercise, entertainment and leisure constantly reinvent yourself.

2.3 Square dance to promote the increase in the number of sports population.

With the improvement of living standards, and the increase of lifestyle change in demand, especially in 1995 the State Council formally promulgated the "National Fitness Program"), the national fitness hot emerging in China. As a square dance originated from the masses, which serve the masses of the mass sports project, and has become a popular mass people in sports activities, promote physical health, mental and physical pleasure, plays a major role in enriching people amateur cultural life and constructing the harmonious society. Under the influence of increasing popularity of the total sports population is in the square dance and promotion, has undergone fundamental changes. According to the China masses The current situation of Sports Development Survey ,which shows that in 1996 people aged over 16 in China in 34.35% participated in one or more sports, the sports population reached 15.5% (according to the provisions of the standard of sports population in 1997);by 2000, the number of participated in one or more sports population over the age of 16 I in China reached 35%, higher than that of 1996 0.65%. sports population reached 2.8% 18.3%. growth than in 1996; if the course of sports population statistics, in 2000 China's total population in sports at the age of  $70 \sim 7$  The proportion of the total population of 33.93%. than in 1996 increased by 2.53%.

Square dance spares no effort in promoting the new concept of China's national fitness and sports consumption. Square dance constitutes an important part of stimulating sports consumption in China. The values, different consumer fashion, lifestyle overnight spread throughout the city, countryside, high streets and back lanes, more and more people through the mass media on the dissemination of different taste of square dance local square dance charm. Influence of elderly women's sports consumption level is the new concept of life and the way, gradually developed to a higher level.

#### 3. CONCLUSION

Square dance as a popular mass sports activities, which has played a significant role in promoting physical health, mental and physical pleasure, enriching people's amateur cultural life . With the further popularization and promotion of the square dance, more and more elderly women participate in square dance activities, stimulating the elderly women about the square dance sports consumption, which contributes to the further growth of China's sports consumption level.

#### REFERENCES

[1]Chen Lixin, Fu Wei. Analysis of the current situation and Countermeasures of sports industry in China [J]. sports science research, 2003, (6).

[2]ZHANG Da-chao, LI Min.Studies on Evaluation Index System of Public Sports Facilities Development Level in China. China Sport Science, 2013, 33(4):3-23.

[3]HE Ying, XU Ming.Theoretical and empirical study on evaluation mode of sports service satisfaction degree in city community. Journal of Wuhan Institute of Physical Education, 2007, 41(11):40-42.

[4]Wang Yongxiang. The contribution of residents' sports consumption to the development of national economy in the process of urbanization [J]. productivity research, 2014, (10).

[5]LIU Bao, HU Shan-lian, XU Hai-xia, GAO Jian-hui.Indices of the equality of essential public health services in China. Chinese Journal of Health Policy, 2009, 2(6):13-17.

# Assessment of Body Composition through Sports

Ting Zhang

Sports College, JiLin University, ChangChun, JiLin, 130012, China

Abstract: The objective of this subject was to compare several methods of assessing body composition: dual energy X-Ray absorptiometry (DEXA), air-displacement plethysmography (ADP), skinfold measurements, and bioelectrical impedance analysis (BIA). It was hypothesized that the parameters of body composition determined by the four methods would be similar. This hypothesis will be tested by comparing results obtained from DEXA, ADP, skinfold measurements, and BIA.

Keywords: Body Composition; Skinfold; Body Fat

#### 1. INTRODUCTION

The body composition of NUTR 301 students was assessed using various methods. This subject will focus on a 19 year old female subject, and the results of the subject will be compared to the class average.

Prior to the DEXA scan, all female subjects provided urine samples to test for pregnancy, as DEXA uses very low dose x-rays that may potentially harm a fetus. To prepare for the test, subjects removed metals and clothing, and then changed into a paper gown. A technician conducted the DEXA scan, which was approximately five minutes in duration [1]. Body composition was also tested using ADP. Students were instructed to avoid food, drink, and exercise for two hours before the test. Directly before, they also voided their bladder and changed into a bathing suit and swim cap. Subjects then sat quietly for five minutes inside a chamber, which measures body composition through small pressure changes [2-4].

In the NUTR 301 lab, students conducted skinfold measurements on each other. Subjects were instructed to be relaxed, and a caliper was applied to the following areas: triceps, subscapularis, biceps, iliaccrest, and front thigh. All skinfolds were completed in triplicate, with the mean used for evaluation. Body composition was then calculated from the skinfold measurements using the following predictive equations: Sloan, Durnin and Womersley (DW), and Jackson and Pollock(JP).

The value obtained from each equation was then identified in Tables 1 and 3 to determine the percentage body fat of the subject. Sloan:

Body density = 1.0764 - 0.00081 (3.33) - 0.00088 (2) = 1.0755

Percent Body fat =  $((4.95/1.0755) - 4.5) \times 100 = 10.3\%$ 

Durnin and Womersley:

 $triceps + biceps + subscapular + iliac \ crest$ 

2 + 3 + 4 + 3.33 = 12.33mm

This value was not on Table 1.

The smallest value of 15mm was used to find % body fat. 10.5%

Jackson and Pollock:

iliac crest + triceps + front thigh

3.33 + 2 + 1 = 6.33mm

This value was not on Table 3.

The smallest value of 23mm was used to find % body fat. 9.7%

Students also measured body composition using BIA. Prior to the test, subjects were instructed to avoid alcohol for 48 hours, refrain from eating, drinking and exercise for four hours, and empty the bladder immediately before. Subjects then removed metals and stepped onto the BIA unit with bare feet to obtain optimal results.

2. RESULTS

Table 1 Subject and Class Average Body Fat using Various Methods.

	Method		Subject (%)	Class (%)
	DEXA		20	29
	ADP		22	27
ſ	Sloan		10	22
	Durnin	and	11	27
Skinfold	Womersley			
	Jackson	and	10	23
C	Pollock			
	BIA		15	26

DEXA: Dual X-Ray Asorptiometry. ADP: Air-Displacement Plethysmography. BIA: Bioelectrical Impedance Analysis. Sloan, Durnin and Womersley, and Jackson and Pollock are equations used to calculate body fat based on skinfold measurements. Subjects are NUTR 301 students (n = 33 females, age =  $23 \pm 4$  y), subject is a 19 year old female from this class.

Table 2 Body Fat Assessment of Subject using Reference Percentiles.

Method	Measurement	Percentile
Triceps Skinfold	2 mm	5 <sup>th</sup>
Subscapular Skinfold	4 mm	5 <sup>th</sup>
BIA	15% body fat	5 <sup>th</sup>
DEXA	20% body fat	10 <sup>th</sup>

BIA: Bioelectrical Impedance Analysis. DEXA: Dual X-Ray Absorptiometry. Percentiles were determined from reference tables in the Laboratory Manual. Subject is a 19 year old female from the NUTR 301 class.

Body composition assessment of the subject varied greatly between the four methods. ADP reported the highest value of 22% body fat, while skinfolds reported the lowest value, only 10% (Table 1). For the class, skinfolds also reported the lowest body fat (24%), while DEXA was the highest at 29% (Table 1). Body composition assessment for the class did not vary as drastically between the methods than it did for the subject. Interestingly, the class average showed that even within the skinfold method, there was some variance between the three body fat DW was at 27%, while Sloan and JP equations. were 22% and 23%, respectively (Table 1). In addition, BIA was 7% lower than ADP in the subject, whereas the class average reported that BIA was only 1% lower than ADP (Table 1).

Using reference tables in the Laboratory Manual, it was determined that the triceps skinfold, subscapular skinfold, and BIA results of the subject all fell into the 5th percentile from fat mass.

#### 3. DISCUSSION

In the subject, DEXA and ADP were quite similar, but BIA and skinfolds were much lower. The greatest difference in the methods was 12% body fat (DEXA 22%, skinfolds 10% - see Table 1), which is quite a large variance considering these tests were all done within the same week, and this does not give the subject enough time to change body fat mass so substantially. The class results varied by at most 7% body fat.

A possible reason for why skinfolds in the subject was much lower than the rest of the methods is that the subject and lab partners were inexperienced at taking skinfold measurements. They reported having trouble with distinguishing between muscle and fat tissue. Even with a trained technician, there is usually 3-4% error. In addition, the subject was ticklish and may have tensed up during the application of pressure, which can skew the results. However, the skinfolds of the subject were measured so incorrectly that the measurements obtained were not even on Tables 1 and 3. As such, the smallest values on these two tables were taken as it is very unlikely that the subject had a lower body fat than 10%, which is already far lower than results from DEXA, considered the gold standard of body composition assessment.

In the subject, ADP reported the highest amount of body fat: 2% higher than DEXA. It is possible that the subject was not wearing a completely skin tight bathing suit, or had some hair poking out from underneath the swim cap, changing body volume and air displacement. The subject also reported rushing to fetch a bathing suit right before the test, and therefore was not relaxed, and small movements may affect the accuracy of ADP.

For both the subject and the class, skinfolds reported the lowest body fat. Other than inexperience, a factor that may have played a role was simple courtesy. As high body fat seems to be undesirable in modern society, it is possible that lab partners underreported measurements so as not to be rude to their classmates. With regards to skinfolds, both the subject and the class reported that DW gave a higher body fat than did Sloan and JP (Table 1). This may be due to the way the equations were structured. because DW used four measurements as opposed to three in JP. In addition, a given sum of skinfolds in DW corresponds to a higher percentage body fat than that same sum in JP. For example, a skinfold sum of 25 mm in DW corresponds to 16.8% body fat in females aged 16-29, whereas a skinfold sum of 25 mm in JP corresponds to 9.9% in females aged 23-27. Finally, the JP equation uses front thigh skinfolds. Lab partners of the subject reported that this measurement was very difficult to take and may have caliper struggled to apply the correctly, underreporting the true sum of skinfolds for JP.

BIA was lower than DEXA and ADP in the subject, likely because the subject did not follow protocols and ate two hours instead of four hours before the test. The BIA value of subject is likely to be inaccurate, because it can have an error of 3 - 5% even when all pretest protocols are strictly adhered to. Although the skinfolds and BIA measurements suggest that the subject is in the 5th percentile, if the DEXA value was used in Table 4, the subject would be in the 10th percentile. This means that 90% of healthy white adults aged 15-24 have a higher percentage fat mass than the subject.

Overall, every method has advantages and DEXA is the most precise and has disadvantages. no pre-test protocols, but it is also the most expensive to purchase (> \$150 000), and it cannot be used by pregnant women. ADP is quite accurate with an error of 1-2% body fat, but is expensive to buy and maintain, and has some protocols to follow. BIA is less expensive (\$200) and easy to run, but it has a higher error of 3-5%, and many pre-test protocols to follow Skinfolds have 3-4% error and requires a trained technician for best results. It also involves being touched by another person which may not be very appealing to many people. However, skinfolds do have an advantage over all the above methods - it can be used by pregnant women or people with pacemakers, and is inexpensive and portable.

#### 4. CONCLUSION

Contrary to the hypothesis, the percentage of body fat determined by each of the four methods turned out to be quite different. If an accurate body fat value is desired, then DEXA or ADP may be a good choice. If those units are not available, or only an approximate estimation of body fat is needed, then BIA and skinfolds would be appropriate. However, it is imperative that a trained technician is taking the skinfold measurements because as seen in the subject, inexperience can cause drastically inaccurate results. Each technique has its own benefits and drawbacks, so it is best to consider one's own circumstances when selecting a method of assessing body composition.

#### REFERENCES

[1]Biondo T. Lab: Assessment of Macronutrient Intake. In: Wilke M, ed. Lab Manual for Nutrition Laboratory NUTR 301. Edmonton, AB: University of Alberta Press, Fall 2012:15-22.

[2]W.Z. Song, Study on the analysis and simulation of fosbury flop technique based on the sports biomechanics. Biotechnol. An Indian J. 8(10), 1331-1336(2013).

[3]C. Chen, G. Lu, E. A. Ghaffar, Mathematical model of nonlinear distortion and linear error correction for soccer robot vision system. Biotechnol. An Indian J. 8(6), 733-737(2013).

[4]T.h. Liang, Based on the statistics of the long jump athletes three-dimensional force analysis of jumping. Inf. Technol. J. 12(15), 3345-3348(2013).

**Appendix 1** 

Body Composition Results of								
the Class			Skinfold	s				
DEXA (corrected)	BODPOD	BIA	Sloan	Durnin & Womerley	Jackson & Pollack			
35.0		26.7	29.1	29.7	29.3			
35.8		33.7	31.0	37.8	36.3			
32.9	28.4	27.6	19.0	26.5	18.6			
22.6		22.2	19.1	23.4	17.2			
17.1	16.6	18.5	17.0	24.5	19.3			

International Journal of Education and Management

33.0	)	30.1	11.7	10.5	9.7
39.4	34.8	34.0	24.6	33.7	31.7
29.9	,	18.6	17.0	21.5	18.6
34.1	33.3	29.5	21.3	27.8	22.7
27.5		24.3	19.3	26.5	20.6
23.6	26.5	17.3	21.4	25.0	19.5
25.5		25.8		29.1	27.5
35.1		21.0	22.8	31.2	22.7
20.2	21.2	21.8	17.3	19.5	16.0
20.6		21.2	18.4		18.3
27.9	,	19.3	12.6	29.1	20.0
31.3	6	26.6	30.6	35.6	32.5
33.4	29.3	34.0	22.8	27.8	27.8
21.6	24.1	20.9	24.5	30.2	23.7
37.6	27.8	29.6	30.6	26.9	32.5
21.5		12.5			
24.3	19.8	23.9			9.9
32.3		28.5		28.7	27.5
25.3		22.3	15.4	19.5	17.2
33.5	30.3	31.5	27.6	34.0	25.9
36.6		36.6		33.1	28.4
35.3					23.2
25.4		20.7	19.4	25.0	20.
32.0		24.5	20.4		20.0
26.4	25.4	27.2	32.2	35.6	
Verages	22 27				
20 27		22			

29 27 22 27 23

Data is % total body fat. All subjects are NUTR 301 students (females, n=33, age =  $23 \pm 4$  y).

### Analyzing of The Promotion of Police Physical Ability By The Badminton

#### Sun Zhaohua

Liaoning police academy, police training department, Dalian, liaoning province, 116036 China

Abstract: Physical fitness is the basis of all tactics. When the people's police on-site enforcement process, good physical fitness is to use all the police police tactics to carry out law enforcement basis. The contents and methods of domestic police physical training has been seriously lagging behind, monotonous, the original training system has seriously hindered the enthusiasm of the police in the police physical training, so that the police physical lose its proper role. According to this situation, the author tries to present the most popular sport in exploring for police content of physical training, and then through the badminton to attract the majority of police re into the police physical training.

Keywords: police physical ability; badminton; promote

### 1.CURRENT SITUATION OF PHYSICAL TRAINING OF POLICE

With the construction and development of China's economy developing continuously, all kinds of deep-seated contradictions emerge in an endless stream, with all kinds of violence unrelated people and the people's police cases have occurred, which put forward a very severe test for the people's police law enforcement ability. So how to improve the ability of police enforcement has become an important part of the national public security organs at all levels are studied emphatically. In general, when encountered violent resistance to law or attacks, police skills can best embody the ability of law enforcement of police is the law enforcement police scene. While physical fitness as the foundation and core of all skills, physical fitness level of law enforcement law enforcement police largely determine the status of implementation of policing skills, thus affects the ability of law enforcement law enforcement police scene. Therefore, the police must work as an important physical police daily training to carry out. However, the current public security organs at all levels of training on police physical fitness is still in the primitive stage, namely long endurance exercise, push up exercise power, 100 meters sprint exercise speed. This kind of boring training project has been severely hampered by the local police to join the relevant physical training. At the same time. Because the project more boring, repetitive content seriously, make the training should have lost its scientific nature, leading to the grassroots police mistakenly think that physical training is very simple, you can practice, and resist the teaching content teaching instructors, the police physical fitness courses become chicken ribs. Aiming at this The status, content and form of physical training of the police must make targeted adjustments, otherwise the police physical training teaching and training work will lose its essential meaning, but also unable to improve people's ability of law enforcement police at the scene to help[4-6].

2.THE ADJUSTMENT OF POLICE PHYSICAL TRAINING

How to adjust the content and method of the police physical training? According to the current situation of police physical training, enthusiasm to participate in physical training should first establish the people's police. In order to achieve this goal, we must adjust the physical training content. To carry out targeted teaching through the selection of grassroots police love sport, the sport and the police on-site enforcement physical demand related factors were refined, and give full play to the sport for police physical fitness promotion, enthusiasm can more effectively improve the police Guang Daji engaged in sports and from which to realize improve the police physical fitness purposes. According to the current development of Chinese sports participation situation and the masses, the badminton movement has great attraction for the 20~40 age of grassroots police. Therefore, to fully explore the badminton movement for police physical role, not only to attract the majority of related to the age of the police actively involved in training, but also promote their related training in their spare time.

### 3.THE PHYSICAL CHARACTERISTICS OF BADMINTON

Badminton is a set of running, jumping, strength, agility, flexibility in a comprehensive sports, so the badminton sport, has certain requirements for the participants comprehensive physical fitness.

(1)Badminton's requirement for power

Because badminton is flying ball games is the fastest sport, so in the badminton competition, participants must have a certain power to move quickly and swing to hit a fast flying badminton. This requires the participants must move quickly the explosive force exercises, in order to meet the need.

(2)Badminton's requirement for reactive

The badminton flight speed, participants must have the ability to respond quickly to the judgment in the game, motion analysis and motion trajectory of the ball to each other, and prepare accordingly. If the reaction is a little hesitation, unable to effectively deal with the ball, and then make themselves in a passive and eventually lost.

(3)Badminton's requirement for the strength of power upper and lower limbs

In the badminton competition, with each other in the ball, you need to have sufficient leg strength move faster. In the ball back, also need to bounce, running and waving strength. Therefore, badminton has higher requirements for the limbs strength. Not enough leg strength can not be effectively moving; and not enough arm strength and waist strength can not be strong back to the ball.

(4)Badminton's requirement for endurance

Badminton is a fast reaction and fast moving sports, participants need to move quickly to catch the ball and go back in a very short period of time. While the badminton is 21 points, so it takes a long time, the high demands on the participants' endurance.

(5)Badminton's requirement for volitional quality

Badminton is a sport requiring stamina project. Especially in rivals, it is difficult to finish the race in a relatively short period of time, so in the process of competition will resist fatigue is very high quality requirements for the participants. In addition the key process in the ball, but also for the confidence and the psychological quality of the participants put forward higher requirements.

### 4. THE PROMOTION OF POLICE PHYSICAL ABILITY BY THE BADMINTON

The badminton movement has a very high demand for the players physical fitness, which leads to war in order to improve their badminton technology, will take the initiative to physical training. This training is a kind of active training, the trainees will not because of the site conditions, the objective conditions of climate environment restrictions and give up training. Therefore, this training has great promoting effect on human can improve the level of teaching in the training process. If you can make a reasonable guide, which will have a huge role in promoting the police physical fitness. Specifically for police physical fitness promotion mainly in the following respects:

(1)The need of erupt to implement the power of policing skills

The people's police enforcement process, if you need to use the police skills to suspect uniforms, often need to strike the enemy, so that the needs of law enforcement officers have a very strong explosive force. It is extremely easy to cause the skills to use failure or failure, leading to a law enforcement failure or increased enforcement costs. Badminton for explosive force requirements similar to police

#### International Journal of Education and Management

enforcement needs. For example the fast moving leg power, fast ball arm explosive force, which can be applied to the police in the process of law enforcement.

(2)The need of power to implement of policing skills As long as the use of police skills for law enforcement must meet the needs of power, or whether to strike or control, can effectively control the suspect. In badminton sport, whether mobile or shot, all need a certain strength, otherwise there is no effective way to complete this action, and police enforcement needed strength is similar. Therefore in the badminton training process, with strengthening the consciousness of the trainee's arm strength, is not only beneficial to improve the trainees' badminton technology, more conducive to improving the absolute power needed in the process of law enforcement.

(3)The need of endurance to implement of policing skills

The police in the enforcement process, we hope you can trick the enemy. But in some cases, law enforcement officers must undergo a substantial movement of the body after the opportunity to subdue suspects, the police law enforcement endurance put forward higher request. If there is no need for endurance as a guarantee, law enforcement must be blocked. Similarly, badminton must also need endurance. If in badminton training, trainees scientific increases the number of games and time, will continue to enhance the trainee's endurance level, which will effectively promote the participation of the police to the scene in the process of enforcement of the muscle endurance.

#### REFERENCES

[1]Lin X uebo, "The special physical characteristics and training strategies of Youth Badminton," theories of sport training,2015

[2]Luo le," The role of physical training in Badminton Teaching," theories of sport training,2013

[3]Song liang, "Study on the physical training of Badminton Athletes," modern Science,2010

[4]Wu, B., & Shen, H. (2017). Exploiting Efficient Densest Subgraph Discovering Methods for BigData. IEEE Transactions on Big Data.

[5]Wu, B., & Shen, H. (2017). Exploiting Active Sub-areas for Multi-copy Routing in VDTNs. IEEE Transactions on Vehicular Technology.

[6]B. Wu, H. Shen and K. Chen, DIAL: A Distributed Adaptive-Learning Routing Method in VDTNs, Proc. of the IEEE International Conference on Internet-of-Things Design and Implementation (IoTDI), April 4-8, 2016, Berlin, German

#### Shuai Yang<sup>1,\*</sup>

<sup>1</sup> Zhuhai College Of Jilin University, Zhuhai 519041, China <sup>2</sup> City University Of Macau, Macau, China, *China* 

Abstract: With the development of urbanization process, the city has brought great damage to nature, and the relationship between man and nature has become increasingly uncoordinated. In today's society, the development of the city is often at the expense of the environment to win the economy and the scale of development, and now people are aware of this, slowly this process to the development, destruction, protection, and transformation of this process. While advocating the natural standard, while the city is the development of disorderly, urban design is reduced to obedience, which led to the embarrassment of the city side of the situation. Urban natural landscape design is different from the traditional urban design, not only the development of the city is based on the destruction of natural destruction and the sustainable development of the background, it is a landscape based on the improvement of urban environment and the city as a whole attempt, pay more attention to the connotation of the connotation of the city and connotation, the establishment and development of the city's internal culture, to achieve harmony with the natural environment.

Keywords: natural landscape, landscape urbanism, urban planning

#### 1. INTRODUCTION

China's modern urban design principles, often to break the natural ecological balance to achieve the purpose of urban development, and for the study of urban natural landscape design, it is mainly through human efforts to continuously improve and shadow the existing biosphere situation. That is, with extremely delicate details and careful, to try to maintain the balance of natural ecology order. "Urban natural landscape" hopes that through the establishment of urban landscape system, in accordance with the laws and patterns of natural ecology to reproduce the natural environment, to maintain the natural ecological environment of the original dynamic balance, to ensure that the city's overall victory cycle, to minimize the destruction of fragile natural ecological environment by human activities and to reduce the use of all kinds of non-renewable resources, including energy, land, water resources and biological resources, by improving the efficiency of use.

In recent years, the negative impact on the ecological environment in the urbanization process has become more and more serious. The development of the city has been fully exploited in the pursuit of space. At the same time, it has neglected the connection between people and people. For the demand of space, the development of the city lacks the support of the natural landscape, while the semi-natural landscape tends to be broken, the continuity is poor and the accessibility is seriously restricted and hindered the self-repair and development of the natural ecological environment. Artificial landscape due to its urban construction and design of the external dependence, which consumes resources, including steel, resources are mostly non-renewable, so the lack of a set of independent internal self-contained operating mechanism and system, so once exhaustion and depletion of external resources will also mean that urban development is terminated, with a sustainable, non-renewable, serious destruction of resources in urban design development model and design concepts. And once the development of the city from the natural, bound to be a node in the future stagnation, so the development of the city must be back to nature, the natural elements into the urban design and planning in order to ensure the sustainability of urban development. The development of human civilization has caused irreversible effects on natural resources and ecological environment. The frequent occurrence of natural disasters also requires human beings to seek new breakthroughs and innovations in the process of urban development, thus transforming the situation of the past and the natural environment into a win-win situation. Therefore, the natural landscape city as an important trend in the future design and development of human cities, not only can effectively alleviate the contradiction between human and natural environment, to improve the living conditions of human beings while protecting the natural ecological environment. The natural landscape city actually has its own set of intact mechanisms for urban development that are fully capable of reaching the city's day through the exchange of internal resources and the exchange of each other. In the process of urban construction at the same time to improve the living standards of the residents, but also stressed the gradual improvement of the spirit of living standards. Change the original values of urban residents and the world outlook to form a new sense of conservation and symbiosis for the natural ecological environment. The layout and planning of

the city is more reasonable and humane, to meet the different needs of different groups, classes for urban life, in strengthening the city for the use of a high degree of space at the same time, but also to strengthen the use of the width and breadth of the city, to eliminate the barriers between the human and the natural environment of the logs, to reduce the useless organization and structure within the city, so as to effectively improve the efficiency of urban development.

#### 2. THE IDEA OF LANDSCAPE URBANISM

Landscape urbanism originated in the United States in the 1970s, when the United States also faced many social problems, such as urban decentralization, industrial waste land, economic and demographic decline, ecological damage, faced with these problems, American urban landscape designers put forward the landscape as a means to reshape the urban space design theory "landscape urbanism". "Landscape urbanism" is more inclined to the ecological problems of serious urban or urban areas, the scope is relatively wide, and there are no geographical restrictions. "Landscape Urbanism" originates from the West, and its main means is the aid of the theories of landscape design and ecology. In the face of various urban problems caused by "building leading" for a long time, landscape urbanism has undoubtedly become a hot topic in the field of landscape design and architecture. In the "landscape urbanism," the beginning of the book, "landscape urbanism" to do such a full release: landscape urbanism is the current urban landscape design disciplines re-positioning, landscape elements will replace the building space as the basic unit of urban space development, which is a harmonized discipline and theoretical practice, focuses on the process of landscape growth and the reshaping of the site. Its core view is: to ecology as the starting point, from the perspective of landscape design to solve the multi-level urban problems, the organization of urban space. Thus, support the "landscape urbanism" theory of the three points, one is the theory of landscape design, the second is the theory of ecology, three is the theory of interdisciplinary and so on.

Over the years, landscape research has been deepening, and the area and scope of its use have been gradually expanded. The original target was the revival of central cities in Europe and America. Later, it has confirmed the transformation and renewal of urban industrial waste land. Today, the rapid development of the background of the new city development and other issues, but also puts forward the landscape of the guiding significance. "Landscape Urbanism", this book summed up the following three aspects of the practice: the restoration of waste land, the natural process as a form of design and landscape as a green infrastructure. Here the "abandoned", mainly refers to those abandoned industrial land, military land and slaughterhouses and so on, these

#### International Journal of Education and Management

sites to a certain extent have suffered pollution, and people's lives will have a certain impact. However, they also have great potential for development. In the concept of landscape, the designer restores the vitality of these sites by introducing natural elements such as plant communities. In terms of landscape urbanism, its design philosophy focuses on "design is a process." That is, in full respect for the inherent evolution of the site at the same time, do not deliberately design some artificial landscape. The landscape as a green infrastructure is to find the relationship between urban public infrastructure and natural systems, hoping to build a landscape with a landscape infrastructure network to complete. It includes water conservancy landscape infrastructure, traffic landscape infrastructure, agricultural production landscape infrastructure, waste management landscape infrastructure and other aspects.

### 3.THE METHOD OF URBAN NATURAL LANDSCAPE DESIGN

The city as a whole landscape space system, it is a natural society of a society in line with the community, with non-balance, multi-scale, level, uncertainty and randomness. "Landscape Urbanism" as mentioned earlier, it refers to the "landscape" alternative to "building" and become a new round of urban development in the process of basic media, is the green infrastructure concept theory pioneer. Its purpose and purpose of the study are more consistent, are designed to the city through the landscape to the city, and restore harmony with nature, improve the lives of urban residents and the city's air, water and other environments. The difference is that, but urban design makes the city reflect both aesthetic and humanistic characteristics, the city not only into the natural scenery but also has a regional characteristic of the landscape design.

The design of the "natural landscape city" is not intended to require specific landscape patterns, nor to stay in a static urban space pattern, instead, the design of the "natural landscape city" is focused on the protection and use of natural resources throughout the design, specifically, under the guidance of scientific and rational planning, inheritance of historical context and landscape characteristics, protection of the natural environment, highlight the national and regional style, reasonable and effective use of space, reasonable planning, integration of resources, so that the city natural landscape optimization, for the public and tourists to create a safe, comfortable and efficient urban life experience system is to obtain high quality urban life experience of the basic guarantee, and high quality, diverse urban public space, the city will bring high quality of talent and adequate development funds to promote the city's long-term economy to achieve sustainable development and prosperity.

#### REFERENCES

[1]SunMing, Chinese Traditional Environmental Aesthetics and Modern Urban Landscape Design, Journal of Beijing Institute of Civil Engineering and Architecture.(2004)

[2]YangRui, On the Theory and Practice of Landscape Metropolis, Chinese Landscape Architecture .(2009)

[3]Ebenezer Howard, Garden Cities of To-morrow ,The Commercial Press.(2010)

[4]YangRui, On the Theory and Practice of Landscape Metropolis, Chinese Landscape

Architecture .(2009)

[5] ZhangJingxiang, A Brief History of Western Urban Planning Thought,Southeast University Press or Southeast University Publishing House .(2005)

[6]YuKongjian, The Culture Being Lgnored and The Beauty of Weeds, China Architecture and Building Press .(2003)

[7] YuKongjian, The evolution of Greenways in China,Landscape & Urban Planning.(2004)

[8]YuKongjian, The Landscape Architecture

,China Architecture and Building Press.(2012)

# Introduction to The Cultivation of The Primary School English Core Literacy

#### ShanDan

#### Traffic school Neimenggu Tongliao 028000, China

Abstract Analysis in primary school English teaching to cultivate students the importance of core literacy, from the speech materials, classroom environment, teaching methods, extracurricular reading and so on four aspects in the primary school English teaching specific cultivating strategies of core literacy. Points out that teachers can improve the ability of students to obtain information, using heuristic story type teaching to help students form a scientific thinking system, create a good learning environment, make full use of the extracurricular reading way to improve the students' humanities cultivated manners to cultivate core literacy of students.

key words the primary school English; The core accomplishment; Extracurricular reading; The teaching method

#### 1.STRENGTHENING THE STUDENTS THE IMPORTANCE OF CORE LITERACY TRAINING

With the rapid development of social economy, the social demand for talents is more and more big, the demand for talents is becoming more and more high. This requires teachers in the process of teaching activities, help students to lay a solid foundation of professional knowledge, improve students' comprehensive qualities, so it can improve their competitiveness in the future employment. The cultivation of the core literacy needs to start small, the teacher must in the primary school English teaching combined with the cultivation of core quality to carry out teaching activities. Core literacy seepage can not only cultivate the students' good moral character, improve the comprehensive quality of students, also can improve the students' moral sentiment, social responsibility, help them set up the correct outlook on life.

New revision of the "high school English curriculum standard" will subject inductive core literacy in English language ability, culture character and quality of thinking and learning ability from four aspects. In the information age, people's language ability and learning ability can affect a person's ability to obtain information, active screening of the ability of the information needed.

Thinking quality mainly include personal logical thinking and image thinking, etc. Cultural character requires individuals have certain consciousness of democracy and the rule of law, basic honesty and politeness, etc. Under the guidance of the core concept of literacy, teachers need to attention to the cultivation of students' various aspects quality.

In students' all-round development, cultivate core quality occupies the important position, especially in the primary school English teaching, the permeability core literacy skills can not only guide the students to learn knowledge, also can effectively widen students' scope of knowledge, be helpful for students to achieve all-round development, to the improvement of their comprehensive quality, to develop good moral character. Traditional education with "graduation rates" as the main teaching goal, insufficient recognition of core literacy of students, primary school education also is such. Most primary school English teachers will be teaching in our country at present stage focus on improve the students' English learning ability, professor of English knowledge, pay more attention to the content of teaching material, and not into the core accomplishment. This not only affects the students' outlook on life, world outlook, the values of setting and not conducive to improve the up. comprehensive quality of students.

Nowadays information technology rapid development, large amount of information. students' cognitive ability largely depends on its ability to information acquisition and processing. To cultivate elementary student's core literacy, first, to improve the ability of students to obtain information; Secondly to develop pupils' thinking ability, and type of heuristic teaching can help students form a scientific thinking system, including image thinking, creative thinking and intuition thinking; Finally to cultivate elementary student's humanities cultivated manners and humanities cultivated manners improvement can help students to set up the correct outlook on life, world outlook, the values (Chen Meihui 2014). TRAINING 2 USE

2.USE VOICE MATERIAL TRA INFORMATION ACQUISITION ABILITY

2.1 Creating scientific language environment

Auditory and visual is the main way people access to information, for primary school students, their language knowledge is not enough, and mostly based on information from image lifelike picture, therefore, the primary school English teachers should create the language environment, lets the

student in the learning process of the initiative to accept the edification of knowledge. This not only can help students enhance the learning consciousness, also can improve the students' learning enthusiasm. Interesting the listening learning environment can arouse students' curiosity, to make it more actively in classroom learning.

Teachers need to plan before the class classroom teaching content, increases the chances of students in the classroom to listen to.

Teachers create language environment can let more students to participate in the study, to obtain equal learning opportunities (Joan Morley, 1988).Professor, for example, the "friendship", the teacher can play the tape, and offered to question: "Who isyour best friend? He/she is a what kind of person?" Let the students read the text with questions to, to get the corresponding knowledge content; Let the students listen to the way was used to optimize its own method of learning, develop good study habits.

2.2. Use of audio-visual resources open student's field of vision

Teachers need according to the teaching content, before the class to collect related to learning materials. Teachers should start from students interested in the material, attracted the attention of students.

Diversified teaching resources at the same time of improving students' learning enthusiasm, also can help students accumulate language knowledge, deepen their understanding of the text and get more emotional experience (Geoff Thompson, 1996).

Teachers in the process of selecting material according to the actual cognitive level and learning needs of students, actively join the language and culture teaching.

Teachers can make full use of morning reading and night reading time learning information, to give students sufficient eachother, lets the student can in the learning process to improve the learning efficiency, to capture speech perception in the read method, improve the cognitive level.

3.CREATE A GOOD LEARNING ENVIRONMENT

Language learning depends on the environment. However, in traditional teaching, the teacher in response to various stages of the exam, often adopts the "force-feeding" teaching method.

Under the heavy task of learning, students can only passively accept the teacher knowledge transfer. This way of teaching severely affected the student's study enthusiasm, hindered the development of students' thinking ability, is not conducive to the cultivation of the core accomplishment. Therefore, the teacher in the primary school English teaching to change the teaching idea, attach importance to inspire students' thinking and improve the students' interest in learning. Pupil is active, is full of curiosity to all the novelty, teachers should according to this characteristic, change traditional teaching methods, build the environment for students learning, the harmonious happy keep communication with students, the teaching environment of linguistic interaction, to improve students' learning autonomy. Relaxed and lively learning environment for students to freely express ideas, active thinking, thereby improve English

chun-yan dong (2015). 4. INSPIRE STUDENTS' THINKING WITH THE STORY

understanding ability, cultivate core literacy

Compared with boring dialogue and the text, elementary student's ability to ability to accept and understand the story better. Story in stimulate students interest in learning at the same time also can cause the student positive thinking activity. Therefore, reasonable use of story teaching is enlightening students' thinking, one of the best means to cultivate students thinking ability.

If you want to inspire students' thinking, achieve the goal of cultivating students' core literacy, requires teachers adopt certain methods, flexible organization of classroom teaching. The usual approach is to speak in Chinese the first half of the story, lets the student added during the second half.

On a little story in English, for example, The Hippo and I, The author first to express stories in Chinese: "The Hippo lives in The zoo, I like it very much, so often go to see it, it is also often want to me. Today is Sunday, The weather is very good, I go and see it again. But when I leave The zoo, The students guess The hippos do?"Story immediately attracted the attention of students, students' interests be fully mobilize, more urgently want to know what happened. I did not go on with the story, but requires students to "guess the hippos do anything", let the students imagination, has set itself the development of the story. Students guess "hippos wept bitterly" bold "grow wings flew the" hippo "hippo learn to sing", etc.

Then, the author used English to express this article:: "A hippo lives in the zoo. I like him very much. I often go to see him. He often thinks of me. too. Today is Sunday. It is a fine day. I go to see him again. After I leave the zoo, he follows meto my house. I give him lettuce, cabbages, bananas, apples and other food. He eats them up. When I sing songs, he stays in the pool. He is as quite as a rabbit. In the evening, he jumps onto my bed with me. My mum tells him to go home. He has to pack his bag and go back to the zoo. My mum lets me see him every week." Students will know after learning this article, the original hippo follow with "I" to home, eat and sleep with "I", the mother hippo back to the zoo. When after learning this small story, the author makes students will act out the story, to imitate the situation at that time. Story

teaching not only inspire the students' thought, but also improve the students' interest, active classroom atmosphere; Story can exercise the students' ability of self-expression, make classroom atmosphere more warmly, students' understanding of the article is more profound.

#### 5.THROUGH EXTRACURRICULAR READING TO IMPROVE STUDENTS' HUMANITIES CULTIVATED MANNERS

Although in the primary school classroom teaching, the teaching material can meet the basic requirements of teaching, but also has certain limitation. Conversation with some of the students' real life has a certain distance, causes students to understand the existence obstacle. Therefore, the teacher must supplement some extracurricular information appropriately, by increasing the extracurricular reading deepen students' understanding of the article, expanding students' scope of knowledge, cultivate the students' cultural quality.

Teachers can organize students to go to the library to read in their spare time, can also through the watch English movies to deepen students' understanding of the article.

For example, teachers can play in the classroom "the lion king". Through complete work show, students can be more familiar with English writing style and language; In addition, also can help students to understand the story in the movie the love of parents, friends, help and love of nature.Teachers can through films or other extra-curricular reading, subtly to cultivate the students' humanistic quality. Extracurricular reading or movies is one of the effective means to cultivate

#### International Journal of Education and Management

#### students core literacy.

#### 6.CONCLUSION

In elementary school, students of plasticity is very strong, at this stage to cultivate students core literacy is the most effective. Teachers in the teaching by stimulating the students' interest in subtly guides the student to improve the core quality, at the same time, through the creation of science teaching environment to enhance the students' study enthusiasm liang-liang liu (2015).In this process, the teacher must keep communication with the student, close to the distance between each other, through proper extracurricular reading to promote the improvement of students' core accomplishment.

#### REFERENCES

[1]Chen Meihui .2014.Introduction to humanism in primary school English thinking and practice [J]. Journal of basic teaching and research,(9): 30-31.

[2]Dong Chunyan .2015. Improve the ability of the elementary school higher grades students oral English teaching strategy research [J]. Journal of the new curriculum, early,(7).

[3]Liu Liangliang. 2015. In the primary school English reading teaching, speaking, reading and writing combination mode exploration [J]. Journal of naked,(2).

[4]Joan Morley. 1988.Today's English (foreign language) teaching trends [J]. J YanTong, eds. Foreign language teaching,(4).

[5]Geoff Thompson.1996. Several misunderstandings on the communicative approach [J]. Liu jingzhong, eds. Foreign language teaching, (4).

### Literature Review of EGP and ESP Teaching abroad and in China

#### Liu Tingting

The Basic Department, Jiangsu Maritime Institute, Nanjing Jiangsu, 211170, China

Abstract: The paper is aimed at reviewing the literatures of EGP and ESP abroad and in China. At first, the definitions of EGP and ESP in various ways to define them from different respects. And then the relationship between them can be followed. The paper put main stress on the studies of literature review finally. Research literature on EGP and ESP has experienced tremendous growth. Interest in ESP is in large part due to increased attention to English widely used in various fields. Keywords: Literature Review; EGP and ESP Teaching; abroad and in China; Definitions; Relationship

#### **1 DEFINITIONS**

1.1 Definitions of EGP and ESP

ESP is an approach to language teaching and learning based on the analysis of students' needs, which is different from EGP. ESP could be regarded as recognizable activity within the broader professional framework of English language teaching (ELT), with implications for the design of syllabus and materials, its presentation and then evaluation as well.

EGP refers to contexts, such as school, where needs cannot readily be specified. It is more usefully considered as providing *a broad foundation* rather than a detailed and selective specification of goals like ESP.

The definition of EGP is not an instructive polarization, particularly due to the fact that the meaning of "general purposes" still remains vague. A more helpful view is proposed by Strevens (1977: 76), who favors the term "English for Educational Purposes" (EEP) to account for a school-based learning of a language as a subject element within the overall school curriculum.

Halliday (1964) was the first person raising the concept "ESP". In his book *The Linguistic and Language Teaching* with McIntosh and Strevens, he illustrated that "English is for servants; for policeman; for officials of the law; for dispensers and nurses; for specialists in agriculture; for engineers and fitters."

With the development of ESP, many linguists tried to set their own definitions of ESP, one of which was given by Strevens. According to Strevens (1988: 35), ESP was a language "in which the aims and the content are determined, principally or wholly not by criteria of general education but by functional and practical English requirements of the learner."

Thus it is impossible to produce a universally

applicable definition of ESP. Strevens (1988: 37) also held the view that "a definition of ESP that is both simple and watertight is not easy to produce". In 1978, another definition of ESP came into being,

and it was set by Munby in his book *Communicative Syllabus Design*:"ESP courses are those where the syllabus and materials are determined in all essentials by the prior analysis of the communication needs of the learner."

Tomlinson (1998), in his book entitled *Material Development in Language Teaching*, illustrated that "ESP courses are designed for people who are learning English so that they will be able to use it in particular situations such as on a holiday, in their job, in their training or on academic courses."

Strevens (1988) explained that it was a particular case of the general category of special-purposes language teaching. And Robinson (1991) held that ESP was defined as goal-oriented language learning and was a type of ELT.

According to Hutchinson and Waters (1987), ESP, which should be considered as an approach rather than a product, "is not a particular kind of language or methodology, nor does it consist of a particular type of teaching material. Understood properly, it is an approach to language teaching which aims to meet the needs of particular learners". Concluded from the definitions above, first, ESP can be regarded as a common core which is also the very essence of ESP--the specific needs or aims of learners to learn English. Second, ESP is for special with special purposes in learners either occupational requirements or academic situations. Third, ESP courses are those specially designed according to the special needs of the learners. And lastly, according to Hutchinson & Waters (1987), ESP should be properly seen not as any particular language produce but as an approach to language teaching which is directed by specific and apparent reasons for learning.

1.2 Relationship between EGP and ESP

According to the above definition and classification of ESP and EGP, ESP cannot be said to have a separate identity from EGP, that is, ESP was not fundamentally distinctive from EGP in that they had the common core. What was the difference between EGP/GE (General English) and ESP? The answer to this question was "in theory nothing, in practice a great deal" (Hutchinson & Waters, 1987). For instance, there was nothing special concerning ESP methodology. EGP teaching skills and techniques could also be used widely in ESP class teaching, the distinction of which was about learner's need. What distinguishes ESP from GE is not the existence of a need rather an awareness of the need.

Specifically, EST (English for Science and Technology) will be preferable as an example to generalize some distinctions between EST and EGP or GE.

1. EST is a sub-branch of the broader concept of ESP in which it shares some basic characteristics with the larger field of ESP. The corresponding methodology and activities of the course are distinguished from those of the EGP course. Compared with EGP, EST is different from EGP from the perspective of grammar, lexis, register, discourse, genre and study skills.

2.Both EGP and ESP are affected by the communicative approach to language teaching on sociolinguistic issues. However, the detailed influence on them is greatly different. The communicative approach contributes a lot to the interaction in the EGP class, focusing on the communicative purposes in daily dialogues. In contrast, the influence of the communicative movement on EST can perhaps be seen in the notion of linguistic communities. English language within the particular science users and technological fields in EST may form their own linguistic community. The methodology used in EST has therefore consolidated the notion of a linguistic community within scientific disciplines and emphasized vocabulary as well as the kinds of tasks normally required in these fields. Specific techniques for teaching EST have also evolved, such as the use of models, journals, and so on.

3. The language in EST is also more specialized. This is not surprising given the fact that scientific inquiry is a very specific process, which relates to control, manipulation and observation of situations and involves research assumptions, hypothesis formation and theory construction. The language in EST, therefore, is expected to help the user better describe, interpret and explain the various steps in the scientific process. While vocabulary in the form of technical and scientific terms may be an important element for this purpose, language critical and structures are also essential. Dudley-Evans and St. John (1998), for example, suggested that linguistic structures such as modals that indicated degree of certainty, such as may, might, could, and would, zero articles, as well as nominalization of verbal nouns through suffixes such as -ation, -ity, and -ment may be relatively more important in EST than in EGP. Certainly, linguistic structures that can help describe and express cause, defect, result, conditionals and deixis would be very relevant to the learners.

#### 2 STUDIES ON EGP/ESP TEACHING

2.1 Studies on EGP/ESP Teaching Abroad

2.1.1 Studies on EGP Teaching Abroad

EGP teaching or teaching English as a foreign language (TEFL) referred to teaching English to students whose first language is not English.

#### International Journal of Education and Management

English as a second language (ESL) referred to English used in very important fields such as business, education and law. The precise usage, including the different use of the terms ESL and ESOL in different countries, is described below. These terms were most commonly used in relation to teaching and learning English.

Language teaching practice often assumes that most of the difficulties that learners face in the study of English are a consequence of the degree to which their native language differs from English (a contrastive analysis approach). A native speaker of Chinese, for example, may face much more difficulties than a native speaker of German, because German is closely related to English, whereas Chinese is not.

Language learners often produce errors of syntax and pronunciation thought to result from the influence of their L1, known as L1 transfer or "language interference". Some students may have very different cultural perceptions in the classroom as far as learning a second language is concerned. Also, cultural differences in communication styles and preferences are significant. For example, a study looked at Chinese ESL students and British teachers and found that the Chinese learners did not see classroom discussion and interaction as important but placed a heavy emphasis on teacher-directed lectures.

2.1.2 Studies on ESP Teaching Abroad

In the 1960s, the study of ESP gained achievements with a growing number of related studies and publications. Additionally, ESP has been drawing more attention in the educational field. Nowadays, ESP research has played the same important role in the world of the ELT--English Language Teaching.

So many views have formed the foundation of teaching ESP. In the early and mid-1960s, syllabus and teaching materials were based on the analysis of scientific and technological language. The year of 1969 can be regarded as a milestone for modern ESP. In the following decades, the field of ESP in theory and practice developed gradually to become a new force in English language teaching and research.

In the beginning, ESP work was dominated by EST. Since the late 1980's, as Dudley-Evans and St. John (1998) note, it has changed in two significant respects. Firstly, English for Business Purposes has become an increasingly important, even dominant area of ESP. Definitely, ESP teaching has benefited a lot from common English teaching methods and approaches and is also connected with special requirement of the context. ESP has in its brief history adopted various approaches to text analysis, from the early register analysis associated with the identification of key grammatical elements of communication (Barber.1962. scientific Swales, 1985) to rhetorical analysis associated with Trimble (1985)) through the functional/notional approach associated with the textbooks The Focus Series (Allen and Widdowson, 1974) and to The
*Dominant Genre Analysis of Today* (Swales, 1985). The value of all these approaches to text analysis lies in that they bear special ideas in the special text environment, whether it can be used in academic writing, business or other professional activities or wherever the ESP needs lie, and they have particular characteristics that distinguish them from other texts.

2.1.3 Studies on cohesion between EGP and ESP Teaching Abroad

According to the books, journals, and the Internet, not so many resources can be found. The majority of researchers have paid less attention to cohesion between EGP and ESP Teaching. The common problems that EGP teachers complain of during the procedure of ESP teaching are low priority in timetabling, lack of professional contact with subject teachers, lower status than subject teachers and so on. Besides, Hutchinson and Waters (1987) noted that attention should be shifted to what the students need and want.

2.2 Studies on EGP/ESP Teaching in China

Since this research aims at cohesion between EGP and ESP teaching at the vocational college, College English teaching has become the major concern here. In the College English study, EGP and ESP are two successive stages, which compose the whole process of College English and both of them are indispensable, jointly undertaking the tasks of training students to master the skills specified in the National College English Syllabus. In China, the first two years (or the first one and a half years at the vocational college) are usually spent on EGP study. The principal aim of EGP is to help students acquire the basic skills, such as listening, speaking, reading and writing, which will lay a solid foundation for the learning of ESP. ESP as the follow-up phase, focuses on the application of the acquired language skills to the specific disciplines and it guarantees the continuum of English studies at college. Compared with EGP, ESP has its own characteristics, such as the subject-related vocabulary items and content.

Apart from the advanced ESP teaching practice abroad, Chinese ESP researchers have conducted more specific research into ESP teaching problems and solutions.

As to the ESP course design, Han Ruihua (2004) presented the test of students' ability in ESP, including testing category, task content, testing methods, and testing evaluation. Ji Kangli (2002) made some research and obtained the first-hand materials about the ESP course design.

Generally speaking, Chinese ESP and EGP teaching lacked macro-study and developed relatively slowly, and in particular it was in great need of cohesion between ESP teaching and EGP teaching at the vocational college. As Maritime English teaching was rare, the research in this field comparatively fell behind. With the growing concern about the seafarer's qualification examination, a large number of ESP and EGP teachers have begun to devote more energy and effort to the improvement of teaching efficiency and effectiveness.

3. RESEARCH GAPS

Although quite a few researches have been carried out to explore the relationship between College English and subject English, there are several gaps that those researches have failed to cover. First, the scope of research subjects is limited. Most of the studies have been done on some students other than some certain majors. The second deficiency concerns the issue of how to design the bridging course content, which is not specifically and scientifically mentioned. Many suggest that the connection between College English and subject English is quite necessary but they can not specify what should be done.

4 CONCLUSION OF LITERATURE REVIEW

Research literature on EGP and ESP has experienced tremendous growth. Interest in ESP is in large part due to increased attention to English widely used in various fields. These trends can be traced to the recognition of ESP after World War II. Through a review of the previous relevant studies it is found that EGP and ESP teaching are essential for college students as they can make students effective and efficient learners; efficient teachers are successful in connecting EGP teaching with ESP teaching. Some of the early studies on EGP and ESP in second language acquisition have established a framework as well as an empirical background for conducting the research which will be presented in the later studies.

#### REFERENCES

[1]Allen, J. P. B.& Widdowson, H.G (eds). English in Focus. Oxford: Oxford University Press. 1974.

[2]Barber, C. Some Measurable Characteristics of Modern Scientific Prose. Episodes in New York: Prentice Hall. 1962.

[3]Dudley-Evans T, St John M. Developments in English for Specific Purpose. Cambridge: Cambridge University Press. 1988:22.

[4]Hutchinson, T. and Waters, A. English for Specific Purposes. Cambridge University Press, 1987:19.

[5]Robinson, P. ESP Today: A practitioner's guide. London: Prentice Hall. 1991.

[6]Strevens, P. New Orienta tions in the Teaching of English. Oxford: Oxford University Press, 1977:92.

[7]Strevens, P. ESP After Twenty Years: A Re-appraisal. In M. L. Tickoo (Ed.) ESP: State of the Art. Singapore: SEAMED Regional Centre. 1988:28.

[8]Tomlinson, B. Materials Development in Language Teaching. Cambridge: Cambridge Press. 1999.

[9]Trimble, L. English .for Science and Technology: A Discourse Approach. Cambridge: Cambridge University Press. 1985.

### Reflection of Crossing the Thucydides Trap

Pengfei Liu<sup>1</sup>, Haiyue Zhao<sup>2</sup>

<sup>1</sup> School of Marxism studies. Dalian university of technology, Dalian, 116000, China <sup>2</sup> School of Marxism studies. Jilin University, Changchun, 130000, China

Abstract: Thucydides Trap refers to the idea of a rising power causes fear in an established power which eventually escalates toward war. With the rapid development both economically and socially, is China facing the Thucydides Trap which would finally lead to the war with the developed countries? Such a question continually troubles us, while we can always get a better understanding towards this question with the view of Chinese Dream and the Sino-American Relationship.

Keywords: Thucydides Trap, Chinese Dream, World Dream.

### 1. THE SIMILARITY BETWEEN THE CHINESE DREAM AND WORLD DREAM

The Chinese Dream is the dream of realizing the great rejuvenation of the nation, which is not only for China's development but also for making a greater contribution to the world. The Chinese dream is a dream of peace, development, cooperation and mutual benefit. It not only benefits the Chinese people but also benefits the people of all countries, including the American people. From the perspective of the world, the Chinese dream is identical to the path of peaceful development in China.

Every developmental dimension of the Chinese dream is based on the great and shared beneficent views of all the human beings, all of which are based on the realization of the world dream and the human dream. China's rising on power in the world is peaceful and will not threaten or hinder anyone in any country. China hopes that the international development space for peace will help its own development, and will maintain a healthy and stable international order in the process of development. We will continue to pursue self-improvement and equality and mutual benefit, and integrate the internal development with the open science of the outside world, with all respect and understanding of China's development and economic relations. In diplomatic practice, China has put forward and upheld the five principles of peaceful coexistence, fulfilling its solemn commitment not to seek hegemony or expansion. China, along with other peace-loving countries in the world, is actively contributing its own strength to international security and regional development. Especially in recent years, the global economic crisis, China more effort to practice their own power mission, to become the world's economic stabilizer and booster, interpretation of the dream of world development in

China. At the same time, in response to non-traditional security threats, regional economic integration, global problems such as south-south cooperation, China has actively respond to and cooperate with relevant countries and international organizations, initiative and action made a lot of positive contribution.

Today, China's Open-up Policy has already put this ancient civilizations proudly in the oriental world, we have set up to let the trust region and the world of "Chinese confidence", we will increasingly abandon "made in China" to "created in China", we will do our best to deliver to the world and wonderful "Chinese wisdom". The "Chinese dream" of the Chinese nation will also be set on harmony, stability, development and common prosperity. It will also reflect the world dream of lasting peace and common prosperity

### 2.BUILD A NEW MODEL OF SINO-AMERICAN RELATIONSHIP

The Sino-American relationship is one of the most closely watched and sensitive relationships in the global political system. China is a developing country with high speed. The United States is the most comprehensive developed country. They stand on both sides of the Pacific and play an important role in the changing landscape of the world. Sino-American relations and win-win cooperation have been a huge advantage in terms of both countries development. Therefore, breaking the old historical logic of the inevitable confrontation between the emerging and the great powers is of great significance, both politically and financially.

In June 2013, the two presidents of China and the United States successfully conducted a private meeting in the Anna's Manor of California. The two leaders both agreed to build the "no conflict no confrontation. mutual respect, win-win cooperation" of the new type of power relations. Look from the prospect of future, promoting the stable development of Sino-American new power relations and avoiding falling into a "Thucydides Trap", three supportive factors should be mainly considered. Firstly, from a geopolitical standpoint, the planet of Earth is big enough to hold two or many countries with the potential or dream of becoming superpowers, coexistence and common development are not impossible. Secondly, there are many common interests between the China and the America. such as issues of economy/trade/anti-terrorism/nuclear non-proliferation/climate change/ energy

development and international exchange, etc. China and America have increasingly broad common interests and cooperation space. Thirdly, it is the rapid growth of China's comprehensive strength that makes China actively capable of shaping the relations between the two countries and the ability of rising to power, as well as the framework that helps to maintain the relations between the two countries. Fourth, the two countries have completed the signing of the "two mutual trust mechanisms". which will be another important step for the two countries to strengthen political mutual trust and reduce the management crisis. In addition, since 2009 the annual Sino-American strategic and economic dialogue, as well as the depth of communication, bridging differences, eliminating misjudgment, dissolve suspicion, have expanded cooperation and achieved a win-win situation which will provided an important platform for the future development[7-8].

However, due to the different social system, development level and the histories and cultures, the contradiction and conflict between China and the United States is inevitable, the future development of Sino-American relations will never be plain sailing. In some areas the conflict is fierce; even not rule out the possibility of localized against friction. But as long as there is a growing community of interests between China and the United States, the shared fate of community responsibility and community factors. the development of bilateral relations will presents the general trend of spiral, swinging forward, so that the win-win cooperation as the core of the new power relations gradually will become mature and stable.

#### 3. THE UNIQUE OF CHINESE DIPLOMACY

The reason for China of choosing the road of Peace Development is on grounds of the international strategy that is in order to realize the rise of great powers and makes every effort to cross the "Thucydides Trap". More importantly, facing the international environmental pressure and the urgency of the construction both domestically and internationally, China has to consider the future of harmony, which is decided by the unique qualities of Chinese diplomacy. Anyway, in the diplomatic practice, there are three distinct models in the world[9-10]:

The first is the "Zero Pattern" cultural model. The connotation of this political culture is either this or that. From the outbreak of the First World War in 1914 to the end of the cold war in 1991, the political landscape of the world was devastated by this political culture. Its main manifestations are selfishness and beggar-thy-neighbors. In simple terms, "it's not a matter of beggar-thy-neighbors". China firmly opposes any foreign practice to follow this kind of culture; it does not conform to the

Chinese people and Chinese government in terms of the valuable pursuit of the development of the global political situation. The second is the "Single Pattern" cultural model. Mainly for countries that are in favor of international cooperation. In this mode, all the international political actions are to strive for the narrow national interests, rarely consider the welfare of human beings. This is the political and cultural model of the current world. This culture is characterized by "every person who sweeps the snow from the front of the door and ignores the frost on the other." In plain English, it is "Taking advantage of him or her whether he or she is an enemy or a friend". This is also not in line with China's idealistic pursuit of the world's political and economic landscape. The third is the "harmony" cultural model. This diplomatic model is less popular. It advocates the diplomacy of "flourish the diversity and make the harmony of the world". In plain English, it means "to seek the common goals while accept the individual difference. Successive leaders of China has always advocated in the international political practice adhere to the principle of seeking common goals while putting aside differences, assimilation of foreign and thinking patterns of different ethnic civilization. Anyway the political beliefs should be taken in a legitimate competition, under the principle of reasonable progress. Until today, however, although the "Zero Pattern" culture has been increasingly abandoned by political leaders, but the "harmony" culture has existed only in a few with nations with their politicians having called for the world dream. Most countries still remain addicted to the "Single Pattern" culture.

The three kinds of foreign culture, as it were, a spiral transition from low to high, is a difficult and long historical process. With the great Chinese dream and the dream of the world. "The tolerance of the difference" is the driving force behind the journey of history. China's insistence on and advocating the different" international view, not only for the international principles of Marxism, but also from Chinese civilization in pursuit of "one world" as the highest value and the highest goal of cultural traditions. The Chinese diplomatic culture is the negation and transcendence of the Thucydides Trap, which has the contemporary value of transcending the time and space. Therefore, the international community should adopt the culture of "harmony", for the sake of building a better future and better world for all the peoples of the world.

#### REFERENCES

[1]Marx, K., Capital—A Critique of Political Economy, 3 Vol., Penguin Classics,1992.

[2]Gündoğan, E., "Conceptions of Hegemony in Antonio Gramsci's Southern Question and the Prison Notebooks",New Proposals: Journal of Marxism and Interdisciplinary Inquiry, Vol.2, No. 1 (November) Pp. 45—60,2008.

[3]Peet, R., J., and Lyons, J., V., "Marxism: Dialectical Materialism, Social Formation and the geographic Relations, in Harvey, M, E., and Hooly, B., P., Themes in Geographic Thought, Croom Helm, London, 1983.

[4]Topalov, C., 'Capital, history and the limits of economics', Book review essay, International Journal of Urban and Regional Research, 7, December,1983.

[5]Low, L. P., 'Class, Politics, and Planning: from reductionism to pluralism in Marxist class analyses, Environment and Planning A, V01. 22, pp: 1091—1114, 1990.

[6]Sayer, A., Radical Geography and Marxist political economy: towards a re-evaluation',

Progress in Human Geography, 16, 3, pp: 343—360,1992.

[7]B. Wu and H. Shen, Analyzing and Predicting News Popularity on Twitter, *International Journal of Information Management Corresponding*, Vol. 35 (6), pp. 702-711, 2015

[8]B. Wu and H. Shen, Mining Connected Global and Local Dense SubGraphs for BigData, *International Journal of Modern Physics C*, Issue: 27, article ID:1650072, 2016

[9]Wu, B., & Shen, H. (2017). Exploiting Efficient Densest Subgraph Discovering Methods for BigData. IEEE Transactions on Big Data.

[10]Wu, B., & Shen, H. (2017). Exploiting Active Sub-areas for Multi-copy Routing in VDTNs. IEEE Transactions on Vehicular Technology.

# Reform and Effect Evaluation of General Education Course Assessment — An Case Study of Military Theory Course

Shuqing Xiang<sup>1</sup>, Dong Liang<sup>2, \*</sup>

<sup>1</sup> Military Office, Southwest Petroleum University, Chengdu 610500, China

<sup>2</sup> School of Humanities and Information Management, Chengdu Medical College, Chengdu, 610500, China

Abstract: This thesis discusses the practice situations and effect of "military theory" course assessment reform, constructs the new assessment plan of this course, selects two classes of undergraduates taught by as the same professor with the same numbers as the research object, and adopts the traditional final assessment and the reformed comprehensive assessment of a combination of process assessment and final assessment respectively. And then it compares the results of the two groups to evaluate the effect of the assessment reform. This study finds that the class performance which adopted the reformed assessment is obviously better than that of adopting the traditional final assessment. In particular, the reformed method can significantly reduce the performance differences between students assessment d reduce the failure rate. At the same time, through the questionnaire survey we find that the reformed assessment is generally recognized and welcomed by the students.

Key words: reform of course assessment; assessment plan; assessment result; the effect of reform

#### 1. RESEARCH BACKGROUND AND PURPOSE

In recent years, general education has become an important part of the mode reform for cultivating the talent in university. Colleges and universities repeatedly stressed the importance of general education for students' life. And many students learn with utilitarian, focusing on professional courses but ignoring general courses. And many colleges and universities generally adopt traditional teaching mode and assessment method in general education course. Especially, they emphasize the closed-book examination at the end of the semester to assess, which not only easily leads to students learn by rote to affect the degree of mastering knowledge, but also misleads students to form the bad habit of " only learning by rote at the end of the semester", affecting students' learning motivation and mastery of knowledge[5-8].

In recent years, our school has been committed to exploring teaching reform in order to improve teaching quality. And the reform of corresponding course assessment mode is also an important part.

The reformed general education course assessment mode focuses on the process assessment. If a student

is not involved actively or seriously in the learning process, it is difficult for him to get high scores, and may even fail the exam, forcing students to change their traditional learning attitudes, completely subvert the slack learning attitude that they can easily pass the examination by only learning before the examination.

The purpose of this research is to understand the effect of the assessment reform, and to understand whether education receivers have achieved the intended educational goal in the teaching process. It is helpful for teachers to evaluate the teaching quality and compare the effect of various teaching methods. In addition, it also can reflect the problems and weaknesses in teaching methods, to provide feedbacks for further teaching reform and other works [1].

#### 2. RESEARCH CONTENT AND OBJECTIVE

(1) It is to explore the assessment model suitable for the "military theory" course. In view of the problems existing in the classroom teaching and assessment methods, and the wrong guidance of the traditional assessment methods to the students' learning view, combined with the characteristics of the course, this thesis explores the suitable assessment mode.

(2) It is to evaluate the effect of the assessment reform. It compares the degree of mastering knowledge in the experimental class, which adopted the new assessment plan, with the class of implementing the traditional teaching and assessment mode, and then evaluats the reform effect [2].

# 3. RESEARCH ON THE APPLICATION OF THE ASSESSMENT REFORM OF THE "MILITARY THEORY" COURSE

In the traditional teaching mode, the assessment form of the military theory course is mainly the closed-book examination at the end of the semester, accounting for 70% of the total score. Although the amount of questions is large, objective questions are in the majority, and it is mainly to assess the memorizing knowledge. So it is difficult to assess students' comprehensive application of knowledge, analysis and problem-solving ability and other comprehensive ability.

In the assessment reform and practice of the military theory course, the research group has designed a assessment plan containing a variety of assessment

forms, such as: attendance, classroom discussion, speech, extracurricular self-study, extracurricular learning activity, online learning and final essay. Through a variety of assessment forms, it is expected to achieve the following objectives: first, promote learning by examination, to guide students to change learning attitude, learning method, and change the passive learning into the active and inquiry learning, to cultivate the abilities of research learning, active learning and cooperative learning, to improve the combination of knowledge and ability, learning ability, analysis and problem- solving ability, so as to improve the comprehensive quality. The second is to promote teaching by examination, to promote a variety of teaching methods, to explore the heuristic, problematic, inquiry, discussing, debating and case teaching methods, to change the traditional teaching speech", mode of "one improve teaching effectiveness, as well as teaching quality. The third is to conduct a comprehensive assessment of students' learning situation, to build a more

### reasonable assessment system. (1) Assessment plan

The reformed assessment plan is shown in figure 1. The form, content, standards and subject of the course assessment show a diverse characteristic. In the phrase of process assessment, "classroom performance" is a comprehensive evaluation made by the teacher, combined with the scores of the company commander and platoon leader. In the process assessment, the assessment of "extracurricular learning activities organized by the teacher" is made by the company commander and platoon leader. In the process assessment, the "network learning" assessment is made by the scores, which are the network system automatically generated. And the final assessment is made by the teacher independently.

(2) The implementation of assessment plan

The teaching subject of the military theory course is all freshmen at school. Due to the large number of students, the teaching time is often arranged in the first half of the first semester and the second semester, carried out by stages and in batches.

In order to remove the interference of heterogeneity, making the comparison more objective, the sample is selected from the classes with the same teacher, the same profession and the same number of students. Taking a class (76 students) of oil-gas storage and transportation major, year of 2014 in the first semester of 2014-2015 as the traditional group, and a class (76 students) of oil-gas storage and transportation major, year of 2015 in the first semester of 2015-2016 as the experimental group, the assessment results of the course results in the two groups of students were compared.

#### 4. EFFECT EVALUATION

The assessment results of the traditional group consist of two parts. The first is usual performance,

#### International Journal of Education and Management

accounting for 30% of the total score, including attendance and questions answering. The second is final exam, accounting for 70% of the total score, including judgment, one-choice questions, multiple-choice questions and essay questions. The students in the experimental group adopt the reformed assessment mode, and the assessment plan is as described above.



Figure 1 The reformed assessment plan

(1) Descriptive statistics

The assessment results of the students in the traditional group were compared with those of the experimental group, and the descriptive statistics were carried out. The basic information of the statistical data is shown in Table 1. The sample capacity of traditional group was 76, and the experimental group is the same. The minimum and maximum scores of the students in the traditional group were 35 and 92 respectively, while the minimum and maximum scores of the students in the experimental group were 60 and 95 respectively. It showed that the reformed assessment plan reduced the differences in the results of students, and it meant that the new teaching method guided by the reformed assessment method narrowed the gap of mastering knowledge. The mean and median of the assessment results in the experimental group were obviously higher than that of the traditional group (P

<0.01), which indicated that the reformed assessment method significantly improved the understanding and mastering knowledge of students, and also helped to improve the analysis and problem-solving ability of students. 9 students in the traditional group were failed in the assessment, while all students in the experimental group passed the assessment. The failure rate of the experimental group was far lower than that of the traditional group (0% vs11.84%), indicating that the reformed assessment method significantly reduced failure rate.

Table 1 Descriptive statistics of assessment results in the traditional group and experimental group

Γ	Group	N	Minimum	Maximum	Mean	Median	Standard
							Deviation
	Traditional Group	76	35	92	71.64	73	11.64
	Experimental Group	76	60	95	82.30	83	7.28

(2) Distribution test of assessment results

In order to conduct the qualitative observation of the assessment results, the distribution test of the two groups' assessment results were carried out by the use of SPSS statistical tool, and the results were shown in Figure 2 and Figure 3. From the discrete tendency of the sample in the normal distribution figure Q-Q, the scattered values of the sample in the two figures were distributed near the same straight line, and the slope of the straight line was the standard deviation and its intercept was the mean. From the histogram, the two group assessment results were close to the normal distribution, so the two assessment results approximately obeyed the normal distribution.









(3) Comparison of the assessment results in the traditional group and experimental group

According to the results of the above distribution test of the assessment results, the two groups of assessment results approximately obeyed the normal distribution, while the two groups of assessment results met the requirements of mutual independence. So we can use two groups of independent sample mean T to test and compare the two groups of assessment results, in order to test the differences in the data of the assessment results. Homogeneity test for variance for the two groups of assessment results were carried out, and the results showed that there was significant difference between the two groups (P = 0.00384 < 0.01). At the same time, from the means and medians of two groups of assessment results, the results of the experimental group were 10 scores or more than 10 scores higher than those of the traditional group. So the difference in assessment results between the two groups is statistically significant.

In addition, I also conducted a questionnaire survey to students on the new assessment method and the related teaching method. And the survey covered the satisfaction of students with the reformed assessment method and the improvement of the new assessment method for students' ability, the impact of the new assessment method on the change of learning method, the science and equity of the assessment, and current problems. 92.08% of the students expressed satisfaction with the reformed assessment method, and most of the students thought that it promoted the change of their learning methods, which played a positive role in improving self-learning, teamwork, language and literature search ability.

#### 5. CONCLUSION AND DISCUSSION

Based on the characteristics of the course and the outline of the textbook, the military theory course assessment reform designed a variety of assessment plans, and constructed a comprehensive assessment mode with a combination of process assessment and final assessment. And an experiment was conducted in some classes. The results showed that the reformed mode can play a certain role in the mastery of knowledge to some extent, which has a significant effect on narrowing the difference in the students' performance and the failure rate.

A word of clarification here is that in order to test the role of the reformed assessment mode in the teaching effect is not a special case. I have investigated the classes of other teachers. The results showed that there was no obvious specificity in the promoting role of the reformed assessment mode in the teaching effect, that is, the new assessment mode itself plays a key role in promoting the teaching effect.

Compared with the assessment mode of the previous military theory course, this course assessment reform and practice contain the following innovations:

(1) Assess the students' ability of using the network learning platform and network information resources. The new assessment mode requires students should make full use of network learning platform and resources when they complete certain assignments and write essay. And the latest development of national defense and military issues should be reflected in their essay. In addition, the ability of searching, organizing, summarizing and analyzing network information should be involved in the assessment system, in order to consciously practice the awareness of students to use network information and acquire knowledge by themselves [3].

(2) A variety of assessment forms. The phrases of assessment are made up of the assessment process and the final assessment. The subjects of assessment include both teachers' assessment and the self-assessment of student. The assessment requirements contain the classroom performance. homework, extracurricular activities, network learning and final essay of students. The whole course constantly conducts a comprehensive supervision and assessment from a number of aspects, links and time periods, to create a tense teaching process, so as to improve learning efficiency and effect.

(3) Focus on process assessment. For the situation that students study hard only at the end of the semester, the reformed military theory course assessment method focuses on "process assessment". The process assessment emphasizes the evaluation and importance of the learning process, the personal involvement of students, which effectively promotes the self-evaluation and self-improvement of students in the learning process, and plays a key role in improving the quality of education and teaching [4].

(4) Investigate the participation of students in course teaching. Teachers can early alert the student's learning outcomes in the teaching process. For the students of regular absenteeism or not handing in assignments, teachers can directly cancel their usual performance, or even cancel the qualification of their participation in the final examination, so that the idea of some students that they need to study hard only before the final examination is disillusioned.

#### REFERENCES

[1]Wei Lei, Dong Chuanren, Li Jin, Wang Baohua, Yang Hailu, Tu Shuzhen, Ouyang Jingping. Analysis

#### International Journal of Education and Management

and Evaluation of Final Examination of Pathophysiology [J]. Chinese Journal of Pathophysiology, 2000, 16 (7): 670-671

[2]Zhang Hai, Zhang Yuelei, Wang Xin. Research on the Problems and Countermeasures of Classroom Teaching Quality Evaluation in Colleges and Universities [J].Contemporary Education Theory and Practice, 2013 (9): 58-59.

[3]Liu Xiaoxia, Chen Li, Zhao Yi, Li Jinjuan, Mu Tingting, Pei Lingyun. Application of Process Assessment in Preventive Medicine Teaching [J] .Chinese Journal of Traditional Chinese Medicine, 2016,35 (1): 36-37.

[4] Sun Zhongmei, Chen Ye, Lin Keng. Innovation and Practice of Undergraduate Teaching Reform Based on "Process Assessment" - Taking Shenzhen University as an Example [J]. Journal of Heilongjiang College of Education, 2012,31 (11): 53-55.

[5]Wu, B., & Shen, H. (2017). Exploiting Efficient Densest Subgraph Discovering Methods for BigData. IEEE Transactions on Big Data.

[6]Wu, Bo, Kang Chen, and Haiying Shen. "SPread: Exploiting fractal social community For efficient multi-coPy routing in VDTNs." Computing, Networking and Communications (ICNC), 2017 International Conference on. IEEE, 2017.

[7]Wu, Bo, Shiyue Wu, and Xiaofeng Liu. "Optimization on GA-BP neural network of coal and gas outburst hazard prediction." Bio-Inspired Computing: Theories and Applications (BIC-TA), 2010 IEEE Fifth International Conference on. IEEE, 2010.

[8]Bo Wu, Wandong Cai, Yongjun Li," Association analysis and case study framework based on the name distinction", IEEE International Conference on Computer Application and System Modeling.

# Research on the Application of Campus New Media in Improving the Satisfaction of Students in Higher Vocational Colleges

Lei Qin

Zhejiang Business College, Hangzhou, Zhejiang, 310053, China

Abstract: To understand the effect of campus new media in improving the satisfaction of students in Vocational College, combined with follow-up survey data of graduates in Zhejiang Province, this paper, adopt the method of questionnaire survey, used spss19.0, utilized methods like frequency statistics, reliability analysis, difference analysis method to analyze the application status of new media in Higher Vocational Colleges to propose the methods which can enhance the satisfaction of students.

Key words: new media; students of higher vocational schools; satisfaction

#### 1. INTRODUCTION

With the normalization of University satisfaction survey, satisfaction data of students can directly reflect the quality and level of education services.

Surveys showed that there would be room for improvement of students satisfaction in Higher Vocational Colleges in class teaching, professional characteristics, internships and rear service of the apartment construction. To enhance satisfaction of students is to enhance students' recognition of the university from all those aspects.

In addition to the reform of traditional class, in the digital campus, the new media, as a network communication carrier of teaching, has the characteristics of rich information resources, convenient communication and Real-Time

interaction, which is hot loved and dependent by students. Its construction has also become a breakthrough point in promoting the level of education and teaching. At present, many universities and their secondary college are committed to constructing of new media platform to enhance the intimacy with students and to provide and delivery more comprehensive information to enhance their quality of service and impact.

#### 2. RESEARCH STATUS

(1)Satisfaction model of college student and research status

At present, Chinese scholars have introduced foreign advanced researches, and revised them to accord with the satisfaction model and evaluation methods for college students in China. The graduates are the main objects of satisfaction survey of higher vocational colleges in China.Investigating the satisfaction of students after they leaving school and in the course of their employment, which can directly reflect satisfaction of training students at campus in learning, living, consideration, practicing and other aspects.Through the CCSI satisfaction model[1], we can figure out that the students' satisfaction is related to the expected value and the actual perceived quality. If we aim to improve the students' satisfaction, we should enhance the actual perceived quality of students and make them fit the expected value.

(2)Status of new media construction in Campus<sup>[2]</sup>

With the acceleration of campus informatization, the new media has become a kind of individual existence and a new cultural model that university campus culture should not be ignored. And The idea of equality, interaction and innovation is quietly growing on campus. There are many examples of making use of new media technology to improve the quality of teaching services. At present, many colleges and universities are building new media brands with their own characteristics. Taking We-chat subscription as an example, schools, secondary colleges, teachers and student organizations can set up We-chat Subscription. In this platform, the subject can Increase interactions with students through various ways, such as Collecting and releasing relevant information, pushing real-time campus news, capturing the knowledge in the classroom, sending the certificate and materials about tests, announcing the management system of universities and colleges, and publishing the scientific and educational achievements of the campus.

### 3. RESEARCH OBJECTS AND METHODS (1)Research objects

This paper adopted stratified sampling method, selecting 500 students from Zhejiang Business College to conduct online questionnaire survey. The subjects of questionnaire covered all grades and majors in whole campus, and carried out the sampling according to the proportion. The number of questionnaire was 494, and the valid was 489. The data obtained was representative and authentic. Among them, the majority of respondents were female, accounting for 63.6%, and freshman, sophomore and junior accounted for 36.5%, 34.3% and 29.2% respectively.

#### (2)Questionnaire setting

Based on the evaluation results of follow-up survey of the graduates in Zhejiang Business College, the questionnaire of campus new media was made to improve the satisfaction of students of Higher Vocational College. The main content of this paper is to investigate the students' satisfaction of the construction of existing campus new media platform and to understand the content and function of students' expectations to promote the strategy and direction of the students' satisfaction from the application of new media in the classroom teaching, campus culture, professional characteristics, internship and employment and other aspects.

(3)Analysis method

Utilizing spss19.0, this statistic adopts frequency statistics, multiple response, reliability test, difference analysis to implement data mining to questionnaire surveys<sup>[3]</sup>.

The reliability of the questionnaire is the dependability of the questionnaire. It refers to the consistency of the results obtained by repeated measurements to the same object. Generally speaking, reliability is divided into three types: retest reliability, alternate-form reliability and internal consistency reliability. The re-test reliability is to use the same questionnaire repeatedly test for the respondents in the same group at intervals and calculate the correlation coefficient of the two test results. Alternate-form reliability is that the respondents in the same group answer two copies of the questionnaire at one time and calculate the correlation coefficients of the two copies. In this paper, the Cronbach alpha coefficient is used to measure the consistency of the scores of each item in the scale. The coefficient of Cronbach alpha would be better to more than 0.8. The reliability coefficient of subscales would be better to more than 0.7. If the coefficient alpha of Cronbach is less than 0.6, the scale should be reconsidered.

The difference analysis is to test the independent sample t: the t test is used when two options become independent variables. dependent variable s are continuous variables, such as satisfaction scores, there is a t value. The larger the value of t becomes, the greater difference is. Among them, the independent variables are three or more than three options. when dependent variables are continuous variables, such as satisfaction scores, there is a F value. The larger the F value becomes, the greater the difference is.

The two methods all use p value to test the significance of difference. P(Sig) value>0.05, indicates that the difference is not significant. P value < 0.05 indicates that the difference is significant. This paper makes the positive scores to the question of the satisfaction, namely the higher satisfaction degree is, the higher the scores are.

4.RESULTS AND ANALYSIS

(1)Analysis on the use of new media in campus

After analyzing on multiple choice and multiple sound of frequently-used new media platform, we

#### International Journal of Education and Management

know that the most popular new media platforms for students are We-chat and QQ. And the campus We-chat public platform get the highest concern, accounting for 93.5% of the case. The highest attention to the new media level, makes up 89.2%, it was followed by new media platform of the college accounting for 74.3% and the new media platform founded by the student organizations accounting for 56.7%. The new media content respondents interested in is mainly counseling related to student activities and entertainment article recommended by We-chat Subscription, respectively, the sample accounting for 74.1% and 50.2%.

(2)Analysis on the satisfaction of new campus media i.Reliability analysis

In this paper, Cronbach alpha coefficient method is used to measure scale reliability, and the measurement results are in table 1.

Cronbach's Alpha	Number of terms
0.92	8

From the result of the test, the reliability coefficient of the questionnaire is more than 0.9, which shows that the scale has high internal consistency and meets the data requirements of this study.

ii.Difference analysis

Table 2 Analysis on satisfaction variables of different genders

Terms	Gender	Mean value	standard deviatio n	Т	Р
The content satisfaction of the new media	Male	4.43	0.61	1.08	0.28
platform in schools	Female	4.30	0.76		
The functional satisfaction	Male	4.40	0.78		
of the new media platform	Female	4.24	0.77	1.20	0.23

	Table 3	Variance	Satisfaction	of Different	grades
--	---------	----------	--------------	--------------	--------

Term		Mean value	standard deviatio n	F	Р
The	Freshman	4.41	0.59		
content	content Sophomore		0.95		
satisfactio	Junior	4.43	0.53		
n of the new media platform on campus	Total	4.343	0.72	2.02	0.13
The	Freshman	4.36	0.66	1.85	0.16
functional	Sophomore	4.11	1.01	1.65	0.10

Junior	4.40	0.55	
Total	4.29	0.77	

Through table 2 and table 3, we can conclude that mean value of men are higher than women in terms of 'satisfaction of the content pushed by the new media platform on campus' and 'functional satisfaction of the new media platform on campus'; it also shows that men are more satisfied with the content and function of the new media platform than women. We can conclude that with the grade increasing, satisfaction, however, shows a downward trend from scoring mean and standard deviation of different grades students in article pushed by campus new media and functional satisfaction.

iii.Frequency analysis

Through the analysis of multiple-choice and multiple response, we can know that

the new media cannot get satisfaction from students for it hasn't created a the brand program with campus characteristics, its content and their professional is not relevant closely and cannot help students in academic and professional field accounting for 38.9%, 38.5% and 36.8% of the cases respectively.

The most satisfying place for the new media is to know the latest information about the school and to make students understand the school through the new media platform better and faster, accounting for 70% and 38.5% of the cases respectively.

As we can be seen from table 4, respondents think the new media can get the satisfaction in 'new media provide information on education, employment, find the direction of life for me', 'strengthening the communication between teachers and schools', 'improving the quality of education and teaching and students' dormitories, canteens and other logistics service quality'.

Table 4 Aspects of campus new media can enhance the satisfaction of campus

Options	Percentage	Percentage of
1	of responses	cases
Enhanced communication with teachers and students, and improved the quality of education and teaching	17.7%	37.7%
Through the feedback of teachers and students, improved the service of teaching facilities	16.5%	35.2%
Improved the quality of the dormitory, canteen and other logistics services	19.0%	40.5%

Through the new media publicity, enhanced the influence of the campus	16.3%	34.8%
Through the new media, made students know more about the campus and make campus become orderly and colorful	20.7%	44.1%
The information provided in the new media can help me to further my studies and job hunting	7.6%	16.2%
Other options	2.1%	4.5%
Total	100.0%	213.0%

#### 5. CONCLUSION

To sum up, the popularity of new media on campus has affected the satisfaction of students to a certain extent. Trough the further construction of the campus new media platform, the campus can understand the needs of the students to improve the new media content and functions to construct unique brand new media platform, which can enhance the interaction between students and campus, teachers and students, students and students interaction and recognition, so as to enhance satisfaction of students to campus.

#### ACKNOWLEDGMENT

This work is funded by Zhejiang Province Education Department Scientific Research Project [Y201635121].

#### REFERENCES

[1] Liu Jinlan, Song Yanjun. Research on the index system of students' satisfaction in Vocational Education [J]. China Vocational and technical education, 2009. (06):35.

[2]Deng Hongbin. Using new media technology to enhance the effectiveness of Ideological and political education for college students. [J]. school party building and ideological education, 2011, 36 (5):49-50.

[3]Lu Qing, Zhang Tiancheng, Tang Yanming, Ding Ling, Yun. Application of Excel and SPSS to multi topic data entry and statistical analysis [J]. modern preventive medicine, 2017 (1)

[4]B. Wu and H. Shen, Analyzing and Predicting News Popularity on Twitter, International Journal of Information Management Corresponding, Vol. 35 (6), pp. 702-711, 2015

[5]B. Wu and H. Shen, Mining Connected Global and Local Dense SubGraphs for BigData, International Journal of Modern Physics C, Issue: 27, article ID:1650072, 2016

79

80

# Research on the "Challenge Between Xu and Lei" on the Aspect of Social Conflict Theory

#### *Hao Guofang<sup>1</sup>*, *Zhang Fei*<sup>2</sup>

<sup>1</sup> Department of Physical Education, Northwest Agriculture & Forestry University, Yangling 712100, Shaanxi, China;

<sup>2</sup> Wushu Management Center of Shaanxi Province, Xi'an 710061, Shaanxi, China

Abstract: Social conflict is a basic interaction of the main object of the society. It is a universal phenomenon. By analyzing "challenge between Xu and Lei" based on the theory of social conflict source and function, the author thinks that it is the external appearance of the event that the opposite interest object s make the social conflict actual profit activity. The conflict between different social object s caused by the conflict between different values is the intrinsic motivation of the event. The "challenge between Xu and Lei" shows another meaning: social conflict is not necessarily a bad thing, because sometimes it promotes the internal integration of martial arts groups, facilitates the development of the martial arts society, and promotes the development of martial arts.

Keywords: Social conflict; Challenge between Xu and Lei; martial arts

### 1.INTRODUCTION OF "CHALLENGE BETWEEN XU AND LEI"

Social conflict is a social phenomenon that exists in the human society. It has a great influence on social operation and development as a basic interaction among social object s. Different causes of social conflict can be classified and unified as "interest". That is to say, social conflict is the result of interest difference and conflict[1]. Interests of social object s can be divided into material interests and immaterial interests, in which, material interests refer to the distribution imbalance of scarce status, power, and resources; and immaterial interests refer to the nonconformity of values and beliefs. The "challenge between Xu and Lei" is caused by both reasons.

A martial arts competition which is called to be "the most real martial arts competition since the foundation of PRC" was held in Chengdu City, Sichuan Province on April 27, 2017. The competitors were Xu Xiaodong, the free combat and MMA coach from Beijing Shichahai Sports School, and Wei Lei, the founder of Leigong Tai Chi. To the surprise of the audience, Wei Lei was stroke down by Xu Xiaodong only after ten seconds or so. After that, Xu Xiaodong, who was known as "fighting madman" called Wang Zhanhai and Wang Zhanjun (the second generation of Xi'an Chen-style Tai Chi) the "living doll", with saying "90% of Tai Chi fight are fake". This speech made the conflict between Xu and Lei develop to the conflict between Xu and Tai Chi. As a result, teachers from Chenjiagou, including Li Guangjin, Wang Zhanjun brothers, and Han Feilong, the students of Chen Xiangwu, and students of Chen Zigiang, all sent letters of challenge to Xu Xiaodong. At the same time, Xu's taunt to Tai Chi soon caused the strong dissatisfaction of Internet users who supported the traditional martial arts. They accused Xu of his inappropriate speech via messages, post bar, and micro-blogs, with regarding Xu's speech as obvious speculation. On the other hand, Internet users who supported the idea of "fake fight" held the view that Xu showed the truth to the wide martial arts enthusiasts. As a nonprofessional martial arts enthusiast, the author thinks Xu revealed the fakeness of the traditional martial arts by proposing the reflection that scrapes the poison off the bone. If he can save thousands of martial arts enthusiasts, what's wrong with the speculation?

### 2.FOUR INFLUENTIAL CHALLENGES OF MARTIAL ARTS IN THE HISTORY

Challenges between individuals on martial arts events exist since ancient times. There are four influential challenges of martial arts in the history, with two kinds of conflict sources: one is material interest. For example, the competition between Wu Gongyi, from Wu-style Tai Chi and Chen Kefu, from Baihemen in Macao in 1954 was caused by the conflict of students as they both operated a martial club in Hong Kong. The final score was tied<sup>[3]</sup>. In 1960, there was a challenge between Bruce Lee, the founder of Jeet Kune Do, and local coach Mr. Huang. The conflict rose because Bruce Lee threatened Huang's business when he decided to open a martial club there. As a result, Bruce Lee beat Huang in 3 minutes<sup>[3]</sup>. This kind of conflict is caused by the fight for the distribution of position, rights, and resources. Competitors aimed to neutralize, damage, or eliminate each other to be recognized by the mass, build prestige, and get resources; another is immaterial interest. In June, 1943, when western boxer tried to challenge Chinese martial arts, Cai Yunlong stood out and beat him in five minutes. Three years later, Cai beat American famous boxer Roussel, which created quite a stir in Shanghai<sup>[3]</sup>. In November, 2006, Yanagiliyuken, a Japan Qigong master, challenged Yan Canghao, an MMA professional to prove his actual combat capability. As

a result, he was beat down in one minute and disappeared in the circle<sup>[3]</sup>. The above conflicts are caused by the differences of value and belief. The result is not closed related to individual profit. Cai Yunlong fought for Chinese martial arts and the whole Chinese to prove the strength of China at the time when China was fallen behind. Yanagiliyuken fought to prove his own actual combat capability and belief.

### 3. SOURCE OF CONFLICT BETWEEN XU AND LEI

Lewis Coser defined conflict as "a struggle over values and claims to scarce status, power, and resources, in which, the aims of the opponents are to neutralize, injure, or eliminate their rivals"<sup>[2]</sup>. In Lewis Coser's view, the source of conflict could be divided into two types: one is the distribution imbalance of material resources, including power, status, and resources; another is the immaterial factors, namely the nonconformity of values and beliefs. Based on the above idea, we can interpret the "challenge between Xu and Lei" in another way.

The conflict between Xu and Lei started when Xu Xiaodong claimed to reveal the fakeness of the traditional martial arts. He seemed to do it for the justice of martial arts circle, but was suspected to draw the attention of the mass. Based on the information of tianyancha.com, Xu Xiaodong is the legal representative, manager, and shareholder of Beijing Tuotianbitu Cultural and Sports Publicity Co., Ltd. Xu invested RMB 750,000, with shareholding ratio of 25%. According to the year report of the said company, the total assets in 2015 reached RMB 3,077,100, with total sales of RMB 198,100 and net profit of RMB 524. At the same time, the company was listed as abnormal operation by IBA department on April 14, 2017 for "unable to contact the registered address"<sup>[4]</sup>. After the video of Xu and Lei became quite popular on the Internet, Xu Xiaodong did the following things: accepting interview, promoting self-created program "Dong's Comment", accepting various letters of challenge from all over the country, answering questions on the MicroBlog, and planning the confrontation that values RMB 1,200,000 with "Glory of Heroes". In this way, the profit from reward and question-answering on various live-broadcasting platforms increased greatly. Even Kunlun Fight, one of the top fight events, invited Xu to its program<sup>[4]</sup>. The conflict was started from the challenge between Xu and Lei, and promoted by news media. It's not hard to say who is the final beneficiary. Despite the authenticity of Xu's intention to reveal the fakeness of the traditional martial arts, it is true that Xu obtained "profits" through the Internet after the event.

There's no conflict between the traditional martial arts and modern fighting arts. The traditional martial arts generated to meet the demands of war in ancient times. It is a skill to study killing with the core of confrontation between offense and defense and winning by eliminating enemies. With the development of the times, the function of confrontation of the traditional martial arts gradually disappeared, with its new social functions developing to bodybuilding and health keeping. Modern fighting arts aim to win the opponent, with inherent features of utilitarian, irritation, and risk. It features more systematic and scientific in terms of offense and defense skills. To fight modern fighting arts with traditional martial arts is just like to fight the opponent's advantage with your own disadvantage. You can tell the result. The value of the traditional martial arts has been the spirit of martial arts. It is the most shining part in the culture of Chinese martial arts. In this case, martial artists of generations and generations fight on the arena that they are not good at, only to prove the fighting value of the traditional martial arts. Based on the two sources of conflict: material source and immaterial source defined by Coser, the conflict between Xu and Lei features both sources. Besides the material purpose of status and profit, the martial arts beliefs of opponents belong to the immaterial source. The conflict between Xu and Lei, and the conflict between them and the Internet users are resulted by the mutual effect of status, profit, and difference of values and beliefs.

#### 4. FUNCTIONS OF SOCIAL CONFLICT

Based on the theory of social conflict, conflict is not necessarily bad. Sometimes, conflict can be good<sup>[5]</sup>. On one hand, conflict may generate more obvious profit difference between both opponents, which will lead to violence confrontation; on the other hand, the focus of conflict can filter the difference of both opponents and bring the integration of both objects. Coser believed that, intra-group conflict facilitates inter-group integration<sup>[5]</sup>. In the "challenge of Xu and Lei", it is understandable that Wei Lei lost as an individual. However, the list claimed by Xu Xiaodong damaged the status of Tai Chi, which led to the result that the whole Tai Chi circle and even the whole traditional martial arts circle jointly challenged Xu Xiaodong. Through this conflict, the group consciousness of the traditional martial arts circle was enhanced, which was good for better development of the traditional martial arts. At the same time, Coser thought that intra-group conflicts by providing a bond between the members, help to reduce social isolation or to unite individuals and groups otherwise unrelated or antagonistic to each other, and take them to a public living area<sup>[5]</sup>. The "challenge between Xu and Lei" involves two groups: traditional martial arts and modern fighting arts, which are not bonded directly. The event is introduced to the audience by the news media. However, after Wei Lei lose and Xu Xiaodong sneered Tai Chi, audience who love traditional martial arts supported Tai Chi even if there's no direct interest in it. When one's belief is controversial, one

would stand out and support his own belief. From this aspect, therefore, the "challenge between Xu and Lei" brings various groups of traditional martial arts together, with better cohesion.

Social conflict has active promotion to social change<sup>[2]</sup> in the way that social conflict forces the mass and decision makers to think about the problems of the society during the operation<sup>[5]</sup>. After the "challenge between Xu and Lei", Chinese martial arts Association announced that their behavior was against the martial virtue and suspected as noncompliance to the law, which was firmly objected<sup>[6]</sup>. At the same time, the announcement also claimed that: there were a lot of types of traditional martial arts in China, in which, 129 were recognized. There were some disorder during study and heritage, which required further regulation and management. For some fake behavior against regulations or law, the mass should report to related department for further steps based on the regulations, rather than challenge others in the name of revealing fakeness, not to say vicious speculation. In the future, the association will further enhance the industry management, and take effective measures to manage the disorders; increase propaganda and guidance; regulate martial arts events; and promote the health development of martial arts cause. In the meantime, National Sports General Administration of Sports Management Center announced that. "as confrontation belongs to high-risk event, scientific events should be fair and square, with united regulations. The level of the opponents should be regulated. There's no way a 80kg player fight a 50kg player. The game should be under control. If Xu Xiaodong continues to challenge various martial arts groups, he should be stopped".

German socialist Georg Simmel also studied the function of social conflict. He thought that social conflict had the active function of promoting social integration and stability. Yang Jianhua concluded his idea as follows: (1) Social conflict is good for social integration<sup>[7]</sup>. Behind Xu Xiaodong and Wei Lei stands two groups: Chinese traditional martial arts and modern fighting arts, which share the common cultural background, and have obvious boundaries. Therefore, when they become competitors, the members of different groups would naturally stand together and fight against each other. At the same time, when a group is united due to some factors outside the group, the inter-group contradiction will be ignored or solved, which is good for the balance of various factors in the system of martial arts circle; (2) Social conflict is good for social stability<sup>[7]</sup>. Georg Simmel belived that social conflict may sharpen contradictions, but be able to relieve contradictions. During the physical and language conflict between Xu and Lei, the hostility between Xu and Lei, and two groups behind them will be led off. Their psychological dissatisfaction are relieved in a way.

#### International Journal of Education and Management

That is to say, social conflict is good for reliving negative emotions, thus good for social stability; and (3) social conflict is good for social development<sup>[7]</sup>. Despite the great influence of the "challenge between Xu and Lei", it didn't threaten the stability of the Chinese martial arts structure, nor lead to abominable influence to the society. It only serves as a reminder to martial arts associations and organizations to improve the challenges of individuals. It reminds the media to be more rational and prudent when it comes to reports. After the event, different parties showed their ideas. National Sports General Administration of Sports Management Center and Chinese martial arts Association claimed that they will take measures on management and guidance. From this aspect, social conflict is good for decision makers to find and improve the deficiencies, and to promote social development.

5.ENLIGHTENMENT OF "CHALLENGE BETWEEN XU AND LEI"

5.1 Negative Attitude to Traditional martial arts Will Provide Modern Fighting Arts Without Source

Traditional martial arts includes fighting martial arts. The negative attitude to traditional martial arts in the name of revealing the fakeness will provide modern fighting arts without source<sup>[8]</sup>. Traditional martial arts is the foundation and the base, while modern fighting arts is developed from the traditional martial arts by absorbing the practical fighting skills. To totally repudiate the traditional martial arts in the name of revealing the fakeness will put traditional martial arts against modern fighting arts, and try to repudiate the fighting skills in the traditional martial arts. If the fighting skills in the traditional martial arts are repudiated, where does the modern fighting arts come from? How does it develop in the future? As a result, the modern fighting arts can only imitate western fighting items including kickboxing, taekwondo, and boxing. In that case, it will be completely isolated from Chinese traditional martial arts, which makes it no longer Chinese martial arts. It is more like the imitation of western fighting events than the representative of Chinese traditional martial arts<sup>[8]</sup>.

5.2 Internet News Media Should Strengthen Self-Discipline

In his "weapons of the weak" and "social conflict" theories, Scott explained the generation and function of public opinions. "Weapons of the weak" explained the social protest function of public opinions. If there's no information security valve nor "outlet", the anxiety and unstable attitude of the mass would threaten the social stability<sup>[9]</sup>. As for the "challenge between Xu and Lei", it goes from "launching by grassroots, commenting by elites, and jeering by the mass". The judgment and self-discipline of the Internet users decided the development speed and direction of the conflict. In this case, news media and social public opinion function as the security valve of Chinese martial arts. Therefore, news media and

internet public opinion should guide the direction. No matter the opponents are for economic interests or vicious attack, we should see its damage on the Chinese martial arts image. To solve the social conflict in transmitting, some non-governmental Internet regulation associations should be founded for information screening, rather than depending on the monitoring of the country. What's more important, the mass should enhance self-discipline and control their behavior. In general, in the continuous conflicts in the transmitting of martial arts culture, we should utilize the Internet media correctly and stimulate the positive influence of martial arts culture. This is the demands of martial arts and social developments.

#### ACKNOWLEDGMENT

The work presented in this paper is supported by the Foundation Item : humanities and social sciences program for youth in Anhu Province (AHSKQ2016D75).

#### REFERENCES

[1]Wang Wenjing. On the Source and Function of Social Conflict [J]. Changchun University of Science and Technology (Social Sciences):2006(19)12-15

[2]Lewis Coser. Functions of Social Conflict [M]. Beijing: Huaxia Publishing House, 1989.

[3]Sports.sohu.com: Fight vs Traditional martial arts,

Cracking or speculation? How Many in the History? [EB/OL].[2017-5-6]http://sports.sohu.com/20170506/ n492022775.shtml

[4]NetEase News:Why Martial Arts Experts Are Not Lack of Money? The Secret of Xu Xiaodong Opening Martial Arts Clubs [EB/OL]. [2017-5-3] http://news.163.com/17/0503/21/CJHT47DF0001875 N.html

[5]Hou Junsheng.Course on Western Sociology(Version 3)[M]. Tianjin: Nankai University Publishing House. 2010

[6]Xinhua News Agency: Chinese martial arts Association: "Challege Between Xu and Lei" is against the martial virtue and the law [EB/OL].[2017-5-3]http://news.ifeng.com/a/2017050 3/51041561 0.shtml

[7]Yang Jianhua. Conflict and Bridging: Empirical Studies on Conflicts of Social Groups and the Regulatory Mechanism [M].Beijing: Social Sciences Academic Press, 2013.

[8]Wen Shantian.Traditional martial arts and Competitive martial arts: a Dichotomy Contradictive to Logic[J]. Journal of Physical Education: 2009(16):87-89

[9]Jin Yuzhu.The Sociological Research of the Spreading of martial arts Rumors under the New Media Era [J].Journal of Capital University of Physical Education and Sports:2014(6):489

# Study on the Health Status of Students in Police Colleges under the Background of Public Security Combat

#### Lvzi-qiao

#### *Liaoning police academy, police training department Dalian, liaoning province,116036 China*

Abstract: The police academy has strict demands on the students' physical qualities.Because the physical quality of students not only affect the quality of students' learning, but also affect their future work efficiency. Therefore, police college has set up a police physical training course according to the students' physical quality,then the physical quality of the students has been raised on all sides.The police physical training course has attracted the attention of leaders at all levels of the police academy.

Keyword: Actual combat of public security; Police academy; students health

#### 1. PREFACE

At present, the overall level of China's social security decline, many police officers in the execution of business process, the emergence of a large number of casualties and the number of casualties, this phenomenon also shows that grow with each passing day, there are loopholes in public security education and training mode. This problem has aroused great attention of the CPC Central Committee and State Council for the CPC Central Committee and the State Council issued instructions, request the public security system of the police physical training must be increased, the casualty rate to a minimum, at the same time, in the arrangement of practical links, increase physical examination project.In the public security system, increasing the reasonable training courses, to lay a good foundation to create a new era of the police. On the current development trend, the public security system has introduced a series of teaching tasks, to study the physical training, set up different physical training for different students. Because of the Police College graduate student primarily engaged in special occupation, only to ensure the personal safety of police officers, in order to ensure the sound development of the public security system, at the same time, the social security level[5-7].

#### 2. RESEARCHING TECHNIQUE

#### (1)Researching target

In this paper, a total of two students from the Liaoning Police College and Dalian University in 2016 were enrolled in the national student physical fitness test, and the total sample size was 1000.The subjects of the study were mainly police boys from

Liaoning Police College, which accounted for 400 people, accounting for 40% of the total sample size; The number of girls majoring in public security is 100, accounting for 10% of the total sample; The number of boys at Dalian University's undergraduate school is 400, accounting for 40% of the total sample; Undergraduate school girls, this part of the number of 100 people, accounting for 10%. of the total sample.

(2)Researching technique

2.1Documentary analyzing

Documents were consulted at the Liaoning police academy and the Liaoning Normal University Library, combined with CNKI, Wanfang, VIP database to collect a lot of information. A series of experiments were made through the whole data, and the corresponding data were obtained, which laid a good foundation for the later questionnaire survey. 2.2Survey method

Before the formal test, the object of study to understand the test standard, our testing process, in the process of testing, to specify the professional testing personnel of physical health test for students, students in the test to ensure personal safety, at the same time, to ensure the authenticity of all data. In the test project, to covers the student's height, weight, vital capacity, standing long jump, sit ups, pull ups, running, sprint.

2.3Interviewing method

In the research data, the characteristic questions can be separately put forward, and the physical fitness research experts and the physical education curriculum evaluation experts in higher vocational colleges are deeply discussed. At the same time, part of the test data is communicated. In the interview, understand the real situation of health quality of college students, according to the actual situation of students, combining the opinions of experts, lists the feasibility of the program, so as to meet the "national student physical health standard" work needs. 2.4Statistic law

Analyze the data in the survey form, with the aid of SPSS18.0 statistical software, ensuring the rationality and scientific of the valid questionnaire data.

3. INTERPRETATION OF RESULT

(1) Body shape index comparison

For height and weight, it is a critical indicator of the

physical shape of each student. It can really reflect whether a student's body is symmetrical, good balanced physical development and body nutrition.Policecollege is aspecial undergraduate college, and the requirements and standards for students are different from those of ordinary undergraduate schools. Thestudy included 1000 students, for them a series of analysis, especially to the change of students' body form body mass index and standard weight and height of the two aspects of understanding, according to students' gender and professional distinction, in-depth study of the body shape index, body mass index, body shape changes in terms of BMI, the data of weight and height difference of the square. According to some data standards, we can see that the value of BMI is less than 20, which is called "lean". The value of BMI is between 20 and 25, which is called normal value. The value of BMI is more than 25, which is called obesity.In police colleges, the BMI value of public security majors is higher than that of ordinary undergraduate students. According to the data, we can find that the police academy has paid great attention to the students' body shape indicators in the process of enrollment. The reason that attention is due to weight exceed the standard means that the body at once, overweight or obese, can easily lead to cardiovascular and cerebrovascular diseases; if underweight, mean the body nutritional imbalance or body disease. Therefore, the normal weight of the police college students is very important.

#### (2)Comparison of body function indexes

Vital capacity refers to the amount of gas exhaled by a person who uses his maximum strength in the absence of time. It can explain the potential ability of breathing skills and is an important criterion for measuring the development of the body function of a student.For healthy adult men, the lung capacity is more than three thousand and five hundred ml, below four thousand ml;For healthy adult women, the lung capacity is more than two thousand and five hundred ml, less than three thousand ml.Through the different professional and gender data for lung capacity test, can understand, judicial, public security students' vital capacity value is higher than normal, and other professional students' lung capacity value and normal people are basically the same.Under normal circumstances, the freshman year, the highest value of lung capacity, after a year of systematic training, by the sophomore year, the lung capacity of students is the largest;By the third year, physical training classes were gradually reduced, and students' vital capacity began to decline, and the higher the grade, the lower the lung capacity.

#### (3)Physical fitness index comparison

For students, 50 meters sprint is one of the compulsory subjects. The 50 meter sprint is in short distance, high intensity training, the training function can adjust the direct reaction of the human central

nervous system function and nerve and muscle, indirect response to the body of the explosive force, agility and so on. For male students majoring in public security, their grades are generally between 6.9 and 7.8, and the average undergraduate male students usually score between 6.6 and 7.8. Through the independent sample T examination, we can find the public security, judicial undergraduate male students, the P value is 0.014, the male students in ordinary schools, the P value is more than 0.05, the basic is not much difference, the results can be counted as a pass.For female students, the results are different, but they are all able to pass the exam.Because of the sensitivity of police colleges to students, the demand for explosive force is very high, and students will not be able to meet these requirements if they fail to meet the required requirements.To this end, students should attach great importance to the quality training of students speed.Standing long jump project can directly reflect the explosive force and coordination ability of the lower limb muscles of the human body, and can fully reflect the explosive force of the students.Through data, we can understand that all male students, standing long jump results are relatively low, need to strengthen training. In the 1000 meters and 800 meters in the training, testing students aerobic and anaerobic endurance, is the evaluation of a student's physique and skill data. Its data is the aerobic and anaerobic endurance numerical basic no difference, can meet the requirements of national standard, but there are still rising space.

Sitting and forward flexion can reflect the flexibility of the body.Flexibility is the degree of tension in the anatomy of the body, joints, joints, soft tissues, ligaments, muscles, skin, etc.For the public security, judicial undergraduate students and ordinary undergraduate students, their flexibility is very good, and can meet the national standards for student physical health.

Pull up the project is to show the main index of male upper limb strength, it can reflect the strength between the shoulder and the arm.

Police in most people's minds, justice, and other professional students in the project test, its performance is much higher than ordinary college students, but the test results show that the administration of justice, public security and other professional students did not occupy certain advantages, basic and other professional students were similar.

#### 4. CONCLUSION AND SUGGESTION

Students at the police academy are in line with the health requirements of the national system in terms of body shape indicators, in particular, the height of boys is higher than the average in the country, and the height of girls is slightly lower than that of the whole country. Whether boys or girls, their growth and development and nutritional access, the body index is within the normal range, the body weight index is

#### above physiological indicators.

The police college students, the physical function, especially the vital value is much higher than the normal people, the public security professional capacity boylung is far more than the ordinary college student's vital capacity, but different majors, students of different ages, the vital capacity values are different, the public security majors in University of the first grade. The vital capacity of higher value, after one year of training, the vital capacity reached the maximum value, but to the university physical training courses in the third grade, gradually reduced, the vital capacity is very low, while the fourth grade of the University, the vital capacity is lower.

For public security undergraduate students in physical quality test project, its performance is much higher than the ordinary undergraduate. The quality of the speed test project, the result is not ideal. In toughness, endurance, strength, aerobic exercise and other projects, the public security undergraduate students, the achievement and general undergraduate students are similar.

In the task of teaching the basic training, increased physical training. Only strictly abide by public security system service standards, improve the police team in all aspects of the physical quality, keep pace with the times, innovation training on physical teaching. Students in the process of physical training, to give guidance and certain theory, proper physical training on the improvement of the security measures, formulate scientific and reasonable evaluation mechanism, lay a good foundation for the future teaching.

A series of physical training of Police College, its main purpose is to enhance the police team's fighting strength. Because of the special police to police their own occupation, have the good physical quality, so as to punish crimes. Although the police force in China

#### International Journal of Education and Management

is gradually improving, the physical training has a system, but there are still in certain skills and methods, combined with the actual needs of the current needs of the development of the times, carry out a series of practice, enrich the teaching content, the police college students' physical health has been fully promoted.

#### REFERENCES

[1]ZhangMeijuan,Wang Junli,Xu Jinfeng."The researching of college students physical fitness test and 《 National Physical Fitness Standard for students》, "SME management and technology,2015

[2]Li yuehai."Rational thinking on the grouping of physical fitness teaching in Police Colleges, "China Education Innovation Herald,2009.

[3]Wang shengwu."Investigation and analysis of physical education curriculum development in domesticpolice officers' Vocational Colleges,"ZheJiang Sports Science,2009.

[4]Liu wenbin."Analysis of influencing factors of Shanxi Police College Students Physical Fitness' Vocational Colleges, "Education and Vocation,2008.

[5]B. Wu, H. Shen and K. Chen, DIAL: A Distributed Adaptive-Learning Routing Method in VDTNs, Proc. of the IEEE International Conference on Internet-of-Things Design and Implementation (IoTDI), April 4-8, 2016, Berlin, Germany

[6]B. Wu and H. Shen, A Time-Efficient Connected Densest Subgraph Discovery Algorithm for Big Data, Proc. of the 10th IEEE International Conference on Networking, Architecture, and Storage (NAS), August 6-August 7, 2015, Boston, Massachusetts

[7]B. Wu and H. Shen and K. Chen, Exploiting Active Sub-areas for Multi-copy Routing in VDTNs, Proc. of the 24th International Conference on Computer Communications and Networks (ICCCN), August 3-August 6, 2015, Las Vegas, Nevada

# The Prevailing Teaching Approach in English Intensive Reading Class in a Chinese University

#### Wang Fei

Hunan University of Finance and Economics, Changsha, Hunan, 410000, China

Abstract: On the base of the review of the development of teaching approaches, this paper discusses the teaching problems existing in intensive reading class in a Chinese university and provides corresponding suggestions.

Keywords: English teaching, teaching approach, communicative language teaching

#### 1. INRODTUCTION

This essay aims to find out the prevailing English teaching approach in English department in a Chinese university, and discusses how the prevailing approach are likely to affect the development of English communicative skills of learners.

#### 2. DESPIPTION OF APPOACH

#### What is approach?

An approach is a set of beliefs about language and the language learning process thatguides the teaching of language in a particular context, which means approach focus on both theories of nature of language and process of language learning, and it is the theoretic framework guide, affect and related tightly to the teaching design and procedure.

The main features of the approaches

Nature	Theory of language	Language is made up of linguistic items and rules of the construction of the items. (Larsen-Freeman D 1986)			
	Theory of language learning	A process of learning grammar rules and vocabularies.			
Design	Objectives	General : To improve the English reading competence, especially the ability to understand literature, help learner's native language skills, and improve intellectual ability. Specific: To master rules of grammar and expand vocabulary. (Larsen-Freeman D 1986)			
	Roles of learners	Passive and inactive receivers who should follow the order given by teachers.			
	Roles of teachers	Authority and dominator who are centered and stand for the source of knowledge.			
	Types of activities and exercises	1.Translation     2. Reading comprehensions questions     3. Memorizing     4. Composition     5. Culture introduction activities			
Procedure	Teaching techniques	Instructional language: Learners' native language Class size: No strict restriction. Instructional methodology of linguistic items: Deduction Responses of teacher on learners' performance: Right or wrong Errors are corrected by teachers.			

**3**.OBESERVATION

(1) Introduction to the observation

①General introduction

I went back my teaching place, and spend 7 days to

listen to 10 intensive reading lectures given by 6 different teachers to 6 different classes ranging from grade 1 to 3 in English major. Furthermore, I talked with some observed students and teachers for getting a full picture of what is actually going on in ELT in my teaching context.

Audio-ling	ual			
Nature	Theory of language	Language was viewed as a system of structurally relate elements for encoding of meanings, the elements bein phonemes, morphemes, words, structures, and senten types.(Richards J.C& Rodgers.T 1986/2003)		
	Theory of language learning	Language learning is a habit formation through three stages – stimulus, response and reinforcement.(Skinner 1957;Brown 1980)		
Design	Objectives	General: To have native-like English Specific: To perfect spoken English first through enough listening input, understand linguistic items later, expand vocabulary next, finally read and write what they are able to say with low error rate(Richards J.C& Rodgers.T 1986/2003)		
	Roles of learner	Passive imitator with no initiative		
	Roles of teachers	Dominator, commander, model, and so on.		
	Types of activities and exercises	Dialogues and Drills Culture introduction activities.		
Procedure	Teaching techniques	1.Instructional language: Target language subordinated with native language of learners		
	~	Class size: Under 10 is perfect.     Instructional methodology of linguistic items: Induction     Responses of teacher on learners' performance     Right or wrong     Errors are corrected by teachers.		

Table 3

Communicat	ive approach	2
Nature	Theory of language	Both a body of knowledge and a set of abilities or skills that are used to apply that knowledge. (Martin, 2009)
	Theory of language learning	An interactive process in which learners aim to understand the knowledge of the new language and develop the necessary skills to it in preparation for applying it in authentic situation for different purposes. (Martin, 2009)
Design	Objectives	General : To develop English communicative competence Specific : To improve grammatical competence sociolinguistic competence, discourse competence strategic competence. (Canale M. 1983)
	Roles of learner	Active participant, communicator, knowledge learner skill practicer
	Roles of teachers	Designer, guilder, participant, facilitator, or anyone to help develop learners' communicative competence made up of different sub-competences related to both knowledge and skill. (Kumaravadivelu. B2003))
	Types of activities and exercises	Communicative activities with competent English users or English native speakers.
		Culture involved activities Any activities contributing to the development o English communicative competence
rocedure	Teaching techniques	Instructional language: Mainly target language but no strict forbiddingness on learners native language Class size: Small size. A. Instructional methodology of linguistic items: No strict restriction.
		<ol> <li>Responses of teacher on learners' performance and errors</li> <li>Errors are acceptable if they do not interfere with the function of communication especially in the early stage.</li> </ol>

<sup>(2)</sup>The reasons for selecting of target course, teachers and learners.

I chose intensive reading as the target course is because intensive reading was acknowledged as the

most important course accounting for 6 periods a week which is twice as long as other English courses, and the teachers who are assigned to give the lectures are either well-experienced or have relatively high education background. In addition, the 6 teachers I select to observe differ in age, education background, teaching experience and English practical competence, which may make the result more justifiable. The observed students come from English major in grade 1 to 3. Same major is to provide a fixed foundation for better comparison. Grade span is based on the considering English learning as a dynamic and continuous process, which would increase the reliability of collected data.

#### 3 What I actually do

I telephoned the teachers to ask the permission to listen to their classes first. All of them accepted my request after I made clear that no evaluation would be made on their teaching performance, what I mean to do is to get the basic data which might contribute to the ELT in their teaching context, and they will be informed the result of the research. What they should do is to give lectures as usual with no extra preparation. Every time I entered into the classroom silently from the back door to avoid attracting student's attention for the real happening in the classroom and sat at the last row which is a good observing place to have a panoramic view of the whole classroom. I observed, perceive and take down notes concentrating on the variables I selected. After listening to the class, I tended to meet the teachers to talk about teaching items briefly. When time permitting, after class I talked to some students to have a general knowledge of their English learning.

(2). Data collection and analysis

Edward Anthony had analyzed language teaching practices from three levels in terms of approach, method and technique (Anthony, 1963). The three terminologies are gradually interpreted to or modified to approach, design and procedure which build up an organism called method which language teachings are based on to different extents (Richards and Rodger 1986) Specific approaches guide and also are characterized by different designs and procedures which meanwhile can demonstrate the applied approaches as well. Therefore, I chose the variables which are interacted elements in the both levels of design and procedure. However, not all of the components of the two levels are chosen to be variables, because it is not necessary to observe all of them to identify an approach or approaches, and the space is limited as well. Therefore, I selected some essential elements in the two levels to observe as variables, which I think are sufficient enough to identify the approach applied in the context.

The variables are 1.Objectives 2. Roles of learners (3).Roles of teachers 4.Activities and exercises 5.Teaching techniques including (1)Instructional Language (2)Class size(3) Instructional methodology of linguistic items (4)Comments responses of teacher on learners 'performance.

#### International Journal of Education and Management

The following are the observations in the classrooms (Italic part) and the analysis of the observations (with the mark "•"), but I only select the evidences which are mostly relevant to the variables since the original observed data is too huge to explicate.

Case 1

(1).The teacher stands in the platform reading the contents in the PPT during most time of the periods. He keeps presenting rhetoric (e.g. metaphor, hyperbole, simile...) and vocabularies which include words (e.g. keen, calculating, perspicacious, and acute) and expressions. (e.g. slang, idiom...) The students remains silent and keep taking notes, but occasionally some of them are pointed to translate or paraphrase sentences in the text individually.

•Learners play passive role, since they have to take the orders compulsorily from the teacher.

•Learner's learning interest is not concerned, which lead to the loss of learners' passions.

•The teacher is the dominator, since he transfers knowledge from PPT to learners without mutual interactions.

•The main objective is to improve literature understanding which is specified in terms of grasping grammar and vocabulary

(2).Before starting text exploration, the teacher provided a question: "If to give an individual definition to love, what will your definition be?" and some students are pointed to share their views.

•The oral English is not ignored and communicative function of language is not completely overlooked, although it is a short and ineffective.

(3). The teacher introduced background information of the author.

•Culture contributes to literature understanding.

(4).Students are assigned to answer reading comprehension questions attached to the text

•Reading comprehension is emphasized.

(5).The homework is to translate the paragraphs 1,4,6 and paragraphs from page 145 to the end of the text.

•Translation and paraphrases are two main exercises. •Reading is primary.

(6).English is the instructional language.

•Oral English is not ignored

(7). There are 48 students in classroom.

•Big size

(8).The teacher shows the rules of rhetorical device first and the examples latter (e.g. Hyperbole -A figure of speech with the deliberate use of overstatement or exaggeration to achieve emphasis. Hamlet: I love Ophelia: forty thousand brothers could not, with all their quantity of love, make up my sum.). The teacher presents the meanings of synonyms first and examples next[9].

•It is a deductive teaching device, and rules-first is for the accuracy of language form.

•The new language may not be believed to be used in real situation by learners, since the examples are not realistic[10].

(9).After a student paraphrase a sentence the teacher said "yes, sit down please" and presented a prepared "standard" paraphrase in the big screen.

•The teacher is the authority with the only right answers.

Case 2

(1). At the very first beginning, the teacher types a question in the screen "What programs can we watch in TV?" The students provide lots of answers voluntarily while the teacher responses to most of them, by saying "yes", or expanding the answers (e.g. student :" movie" teacher: "yes, what kind of movie?" student: "romantic.." teacher[11]:

" Oh, you like romantic movie ? There is also scientific movie, horror movies...").

•The teacher is the guider and participant to facilitate a simple communication going on.

•Oral English is emphasized as practical skills which will be used in the real life

•Students have the initiative to show their opinions and opportunities to interact with teachers, but they are not ideal since the each communication between the teacher andstudent is short and cannot be distinguished as native English talk but more like the translation of Chinese without much features of western logic[12].

(2). The teacher presents the meaning, synonyms and examples of the new words, phrases and patterns in both English and Chinese and some students are asked to translate by using the newly -learned words or expressions, while rest of students are busy in taking notes.

•The teacher is a source of knowledge and halfdominator to control the pace and content of teaching.

•Students are passive knowledge receivers without initiative.

•Vocabulary and grammar are significant as the elements to text understanding and communicative competence which also includes grammatical competence.

(3).The teacher pronounces the vocabulary first and then students read out followed

•The teacher is the model

•Pronunciation accuracy is emphasized.

(4).The teacher gives students 5 minutes to read through the text and ask them to answer reading comprehension questions.

•Developing reading skills is an objective

(5). The teacher asks students to divide the text into several parts and give the main ideas of each part.

•Cognition ability of the western logic contributes to English writing ability, reading comprehension and sociolinguistic competence underling the communicative competence.

(6). The teacher gives the lecture mainly in English but also a bit of Chinese for interpretation.

•New language is the combination of practical skills and knowledge. Some native language facilitates to understand the knowledge and skills of target language.

(7). The teacher shows the meaning and use of lexical items first , and the examples latter.

•Deductive way.

•Accuracy of written English is highlighted.

(8.)There are 36 students in classroom.

•Big size

(9).No grammar errors are pointed out when students state orally

•Accuracy is not required in oral English, and language function is prior to language form. *Case 3* 

(1). The teacher keeps analyzing the text without PPT, writes down some words in the blackboard occasionally and seldom asks questions, while the students keep taking notes, and only several students answer questions.

•The students are passive knowledge receiver.

•The teacher is acknowledged as the source of knowledge whose duty is to transmitknowledge.

•Language is considered as knowledge to learn rather than a skill to practice.

(2).The teacher explain the new linguistic points with both English and Chinese meaning, give examples which are utterances produced in the class spontaneously, and then he translates the sentences.

•Finding equivalence of English words and expressions in Chinese can help students grasp the new language better.

•Words and grammars are the two important elements which construct language and affect the comprehension of literature.

•Reading comprehension is the main objective.

•English utterances related to the students' life are considered as ideal examples, which mean oral English is important, but this course teaching is only focus on knowledge transmission not skill practice.

(3).Instructional language includes both English and Chinese.

•The course aims to acquire the knowledge of the language.

(4). There are 35 students in classroom.

•Big size

(5).The teacher presents the meaning of lexical items first and the examples next.

•Deductive way

(6).When a student provides a translation, the teacher corrects some linguistic errors and states his own translation vocally later.

•Language accuracy is emphasized, and he is the model.

Case 4

(1). In the first step of the class teaching the teacher shows a short film video with background music of an English song—sailing, and then ask the students to answer questions.

•Oral English is important and new language should be learned through the order of listening, speaking, reading and writing.

(2).Two pair of students play role of the story of the text in the platform embarrassedly. One pair read the respective script in their hands, and the other pair shares one script prepared.During the performing process, the teacher keeps silent, observes carefully and provide some suggestions without mentioning linguistic errors, but as for the students who are not participating in the activity, some read the text book,

several observe the pairs, and most sit silently.

•Some students are participator and artificial communicator in a fake situation and the rest students are ignored.

•The teacher is the organizer, observer and half-adviser, but the suggestions are not sufficient and she ignores role of herself.

(3).The teacher shows several pictures related to the story of the text, gives some clues (e.g. key words) to help students know the relevant plot which each picture stands for, and ask students to discuss with classmates about the plots. During the discussion, the teacher walks around and talked with several students randomly. After five minutes discussion, some volunteers present the stories of the plots which have been talked about in the text.

•Students are half-communicator and half-language producer. They don't have the opportunity to talk to the high competent English speaker and discuss in the frame of the text rather than in a uncontrollable real communicative situation. The teacher is a participant when she joins the discussion with some students, adviser when she gives some key words and facilitates the student to go on describing by giving some hints, when the student suddenly stop talking.

(4).Students keep taking notes quietly when teacher presents the meaning and usage of vocabularies and grammars.

•The students are the passive knowledge receiver.

•The teacher is the source of knowledge.

Vocabulary and grammar are significant for text understanding and developing communicative competence.

(5). After show a video of a debate of peer college students in an English speaking contest, the teacher asks students to think and prepare an oral presentation in the next class

•Oral English is emphasized

•Learning motivation and interest are focused.

(6).Cultural backgrounds are introduced

•Language should be learned in both linguistic and cultural context.

(7).Reading comprehension questions and structural analysis are introduced.

•Developing Reading skills is an objective and writing skills is also important.

(8). The teacher uses English as instructional language.

•Oral English is emphasized and is believed as a tool to use in real situation.

•English environment is important for the language learning.

(9). There are 41 students in the classroom.

•Big size

(10).The teacher shows the meaning and use of lexical items and grammar points first , and the examples latter.

•Deductive way.

(11).No "right or wrong" comments except for the reading compression questions. Comments of suggestions are given after the students' performances. (e.g. "you should act more naturally like being in the real situation not act like fulfilling a task in classroom.")

•Communicative function is viewed prior to the language form when the meaning can be expressed successfully. The teacher tries to encourage students to communicate, but it does not work well since the students act just for taking the orders from the teacher.

Through the comparison between the above features and the features of 3 different approaches I have introduced in part II, we can find the underlying are very similar to those features of Grammar-Translation approach (Table 1 in part II). The similarities are specified as follows: 1. The main objective is to improve reading ability specified in literature understanding. 2. The leaner's role is passive receivers, who should take the order given by teachers compulsorily. 3. Teacher plays the main role of dominator and authority that stands for the source of knowledge. 4. The main activities and exercise are translation and readingcomprehension questions, which contribute to the reading ability most. 5. The class is big 6. Instructional methodology of linguistic item is deduction 7. The teacher is the representative of rightness, who always has the "standard" answers which cannot be challenged, since standard language form is emphasized. So that, it has full supportive reasons to draw the conclusion that the prevailing approach to English teaching in my teaching context is Grammar-Translation approach.

Why is the prevailing approach?

(1).Most of teachers just graduated from general English major without any formal and systematic knowledge about EFL. After they become teachers very few of them gained retraining experience of ELT, they don't know what they are doing and why they are doing so. A great part of them just follow the regulations set by institution and teach English according to their previous learning and teaching experience, which is most likely the grammar-translation method.

(2). The college is not possible to attract the scholars and experts with high faculty for the geographic location and low incomes, and the communication with other colleges is not much. The teachers' salary can only meet the needs of daily expenditure, so that, very few teachers devote great energy and time to the teaching, let alone the professional dailv self-improvement. Although the leaders encourage teachers to reflect and improve, the motivation of changing in teachers is still weak, partly because above 70 percent of teachers are local people who feel ease and safe in home town with no ambitions and what is easily prepared and simply manipulate is GTA.

(3).A great part of the students come from rural areas or the local city, their former learning experiences are focusing on the reading and writing ability, and there is no threshold of oral English or communicative ability to enter into the college. Since they come from undeveloped areas, they probably received the out-dated ELT in previous learning experiences. So that, they do not tend to expect a newly-changed English teaching which turns into a kind of relax and leisure to teachers.

(4). There are few opportunities to use English as a communicative tool, since foreigner is seldom to see, import and export companies are few, no international affairsare held here and so on, which will lead teachers and students to ignore the communicative function of a new language but treat it as a compulsory subject only for exam.

#### 4. DISCUSSION

Q:What extent to which learners are able to become competent communicators?

Thestudents' four basic English abilities can be ranged from the strong to weak in this way: reading, writing, listening and speaking. A great part of graduates who have passed cet-4 but can not communicate with me or foreigners, make a speech fluently, present a good trial lesson to get teaching jobs or pass English interviews of foreign companies smoothly. Although for those who have won the prizes in speaking English contest in the college only can make a beautiful prepared speech with good pronunciation, but are not able to act well in the prompt speech or Q&A part, which means they pay much more attention upon language form rather than the development of communicative competence.

Although writing ability is listed second, it is not pleasant too. It is hard for me to find several convincing or original pieces out of dozens of writings which can be feelings after reading an article, watching a movie or observing a public lectures. Sometimes even an English note asking for Leave cannot be expressed clearly.

From the above evidence, we can see that the ignorance of communicative competence and the emphasis on the reading ability prevent the students from applying English in authentic communicative situations for social, vocational and other purposes, and eventually hinder them from becoming competent communicator to a great extent.

#### 5. CONCLUSION

The prevailing English teaching approach has been identified as Grammar-Translation approach. The whole research process includes research instrument design, data collection, data analysis, comparison and identification. Furthermore it is found that the GT approach has hindered the students from becoming real communicators to a great extent, since the communities competence is not developed but restricted in the most English teaching. However, I have to point out, to my excitement, there are some young teachers has a greatawareness of the significance of communicative competence. (as case 2 and 4) They try to design activities to provide students opportunities to think, talk and act in

91

communicative way. The teaching atmospheres are quite active and the interest of students is obviously stronger than the students in other observed classes, although there are a lot of problems preventing the teaching from developing communicative competence, like the fakeness of task, the lack of competent native speaker, the ignorance of English logic or culture, the incompetent communicative competence of teacher themselves, and so on. But it is a good sign of starting point to accept change, expect change, and change.

#### REFERENCES

1980. Principles of [1]Brown H. D. LanguageLearning and Teaching Prentice Hall, Englewood Cliffs, New Jersey.

[2]Calnale M. 1983. Communicative Competence to Communicative Language Pedagogy. London.Longman

[3]Hu G.W. 2005. CLT is Best for China-An Untenable Absolutist Claim.ELTJ. 65-68

[4]Kumaravadievelu.B 2003. Beyond Method: Macrostrategies for Language Learning Yale University Press. New Haven

[5]Larsen-Freeman.1986.Techniques and Principles in Language Teaching.OxfordOxfordUniversity Press.

Roders.T.2003.Approaches [6]Richards.J.C, and Methods in Language Teaching' Cambridge. CUP

[7]Martin Wedell. 2009. Planning of Educational Change- Putting People and Their Context First. Continuum International Publishing Group

[8]Skinner 1957. Teaching languages: A Way and Ways. Rowley Mass. Newbury House.

[9]B. Wu, H. Shen and K. Chen, DIAL: A Distributed Adaptive-Learning Routing Method in VDTNs, Proc. of the IEEE International Conference on Internet-of-Things Design and Implementation (IoTDI), April 4-8, 2016, Berlin, Germany

[10]B. Wu and H. Shen, A Time-Efficient Connected Densest Subgraph Discovery Algorithm for Big Data, Proc. of the 10th IEEE International Conference on Networking, Architecture, and Storage (NAS), August 6-August 7, 2015, Boston, Massachusetts

[11]B. Wu and H. Shen and K. Chen, Exploiting Active Sub-areas for Multi-copy Routing in VDTNs. Proc. of the 24th International Conference on Computer Communications and Networks (ICCCN), August 3-August 6, 2015, Las Vegas, Nevada

[12]B. Wu and H. Shen, Discovering the Densest Subgraph in MapReduce for Assortative Big Natural Graphs, Proc. of the 24th International Conference on Computer Communications and Networks (ICCCN) Workshop on Big Data and e-Health (BDeHS), August 3-August 6, 2015, Las Vegas, Nevada

# The Impact of Female Leaders on Corporate Social Responsibility Performance On the Basis of Feminine Ethics of Care

#### Zhang Mengqi<sup>1</sup>, Zhu Wenzhong<sup>2</sup>

<sup>1</sup>School of English for International Business, Guangdong University of Foreign Studies, Guangzhou, China <sup>2</sup>School of Business, Guangdong University of Foreign Studies, Guangzhou, China

Abstract: With the development of society, social contract is changing. Performing corporate social responsibility (CSR) is the duty of every company. This paper explores the relationship between the proportion of female leaders in management and CSR performance and reveals that the two variables have positive correlation. It further analyzes this phenomenon on the basis of feminine ethics of care and summarizes that women's empathy care and their maternal thinking impel them to perform more social responsibility. With ecological thinking, female pay more attention to sustainable development to promote a harmonious relationship between human beings and society. The findings of this paper not only make contributions to improve companies' CSR ratings, but also conductive to eliminate gender discrimination and optimize management structure.

Keywords: female leaders; CSR; feminine ethics of care

#### 1. INTRODUCTION

In recent years, the events of environmental pollution, food safety and production safety events occur frequently, which arises the public attention on Corporate Social Responsibility (CSR). In 2006, CSR was introduced into *Corporate Law* to make requirements that enterprises must fulfill CSR. As CSR becomes a focus issue, more and more domestic scholars set about studying it. Whether enterprises fulfill its CSR directly concerns the development of enterprises, which makes CSR become an important event in the board of directors' decision-making (Kakabadse, 2007).

In recent years, board gender diversity has been paid more and more attention. It has been a long time that males play a dominant role in management in which the number of females take a small proportion. With the progress of the society, more and more female leaders come to the force. Some countries enact relevant laws and regulations to stipulate the proportion of females in the board of directors. Norway government issued laws that female must take up 40% in board until 2008.

In April 2, 2014, Jennifer Li, the CFO of Baidu, appointed as the independent director of Philip Morris International became the first Chinese female who enters S&P 500. According to the data shown in *Times*, in the top 300 enterprises, the percentage of female members of the board of directors is less than 10%, the number of which is obviously lower than it in the USA, 15%. According to the data in European Commission, about 18% members of the board of directors are female in the top 610 European enterprises. In *Standard and Poor's* (S&P 500) Index, women account for 19.2% in the board of directors. In 2015, *Fortune* selected the top 10 CSR leaders in China, among whom there are 6 female leaders. However, both Chinese enterprises and government pay less attention on board gender diversity. McKinsey reports that 27% Chinese directors think that gender diversity should be attached importance in management, compared with 53% European directors.

In the previous study, both domestic and international research concern more about the relation between CSR and corporate profits or corporate financial performance. Only does a small amount of literature focus on the impact of board gender diversity to CSR. Webb (2004) pointed out that female leaders make contributions to the fulfillment of CSR. Due to the increasing significance of CSR in evaluating enterprises (Kakabadse, 2007) and the evidence that board gender diversity improves CSR (Post et al.,2011), this paper examines the influence of board diversity and the proportion of female leaders in the board on CSR to evaluate the link between them. The number of female leaders in top 100 CSR performance of Chinese private corporates is taken as the object of the study. Feminism care ethics (Gilligan, 1982) is applied as the theoretical basis.

Therefore, this paper, as an interdisciplinary study integrating ethics and management, enriches the study on gender diversity in Chinese companies, which provides some insights to companies' leaders on how to optimize management structure. The findings may also contribute to avoid the discrimination against women in employment, which has a positive impact on improving female competitiveness.

One hypothesis is raised in this paper that the proportion of female leaders positively correlate to CSR development index. And three questions are answered in the article:

1) Whether the proportion of female leaders has positive impact on CSR ratings.

2). If the hypothesis is valid, why female leaders play positive roles in CSR?

3). If the hypothesis is valid, what is the implication of the positive correlation between female leaders and CSR index to the society?

2. LITERATURE REVIEW

Board diversity & CSR

About gender diversity, many foreign scholars have done some research in management and accounting fields. Their research mainly focus on the impact of female leaders to corporates operating performance. Adler (2001) found that more female members in administrative department, the enterprise can gain much more profits. Carter, Simpkins and Simpson (2003) carried on an empirical study on the influence of board gender diversity on corporate value. Krishnan and Parson (2008) found that the percentage of female leaders had positive correlation with enterprise earnings quality. Thus, most of the previous studies pay more attention to tracing the relationship between the number of female members on board and corporate profits.

At present, after searching in the existing databases, although there is not much research about the impact of the percentage of female leaders to CSR, many scholars especially foreigners have set about this topic as the status of women advances. Rising board gender diversity is able to improve decision-making because of its wider perspective (Dalton and Daily, 2003). Research has addressed that companies with a higher percentage of women board members do have a higher level of charitable donation (Williams, 2003). Board diversity makes contributions to firm reputation (Stephen Bear et al, 2010). Boulouta (2013) selected the sample of firms in S&P group of companies whose social performance has been rated by Kinder Lydenberg Domini, Inc.(KLD) to analyze the relationship between board gender diversity and corporate social performance. And the results show that they two has positive correlation. In China, Huang Heshu and Zhou Zejiang (2015) discussed the relationship between female executives and CSR information discourse on the basis of evidence from A-share listed companies in their paper. However, there is relatively little academic literature concerning CSR of Chinese private enterprises that account for 60% GDP and board gender diversity. This paper focuses on the impact of the number of female leaders to the CSR of Chinese private enterprises.

Feminine Ethics of Care

Feminine ethics of care rose in 1970s along with western feminist movement. The publication of In a Different Voice: Psychological Theory and Women's Development written by Carol Gilligan in 1982 marked the formation of the theory. According to the theory, there exists significant difference between male and female on moral orientation. Ethics of care stresses responsibility, emotion, relationship and care between people and people. Gilligan (1999) pointed out that men regard morality as the pursuit of individual rights, attaching importance on rights and regulations; women are inclined to treat morality as their responsibility others, emphasizing to relationship and responsibility. The influence of women on CSR is realized through their own empathy. Extensive studies support an idea that women tend to analyze situation on the basis of ethics and make conclusions with a feature of morality. Sturmer (2005) pointed out that empathy, as the core

of feminine ethics of care, is a kind of emotional response including sympathy and care about the people who are in trouble. 'Care', promoted in feminine ethics of care, is based on relationship. Mutual responsibility between people is established in dependency. 'Care' can be interpreted as a sense of responsibility in human's deep emotion. CSR asks companies to shoulder the responsibility of staff, customers, community and environment. Feminine ethics of care emphasizes humanistic care, social care and ecological care, which provides theoretical basis with analysis of the impact of women leaders on CSR.

In the previous study, CSR is universally analyzed from the perspective of economics. In a sense, CSR is the product of the change of social values. Women, as a special group, have their own special values. Thus, we should not only analyze CSR from the angle of economics, but also from economic philosophy to discuss CSR.

#### 3. METHODOLOGY

The top 100 CSR ratings Chinese private enterprises are selected as the explained variables; the proportion of female leaders in companies the explanatory variables. CSR ratings in the study are obtained from Blue Book of CSR --- Research Report on CSR of China (Huang Qunhui et al, 2015). The percentage of female leaders in companies are obtained from the corporate official websites, corporate annual reports and some other channels. The sample for this study consists of companies selected from the CSR development index of top 100 private firms in China, which covers 21 industries including 24 mixed industry, 11 metal industry, 8 transportation industry, 6 food industry, etc. Both female on board and female executives are counted in the study. Altogether 57 data are collected because companies' some companies don't release the data to the public.

Excel and SPSS 19 are used as analytical tools to measure the correlation between the percentage of female leaders in the companies and CSR. Feminine ethics of care is adopted as the theoretical foundation to analyze the relationship. Data analysis and theoretical analysis are applied in writing this paper. 4. RESULTS & ANALYSIS

#### 4.1 Data Analysis

Chart I and chart II are drawn through Excel. According to the charts, they two have the same trends which clearly indicates that the proportion of female leaders positively correlate to CSR development index. That is, except some particular samples, the charts show that the higher proportion of the female leaders in companies, the better performance of CSR.



Figure 1 proportion of female leaders positively correlate to CSR development index

From table 1, we can see that the average proportion

of female leaders in companies is 8%. Compared with American and European countries, the proportion of the sample companies is much lower. The average number of CSR ratings is 34.11, minimum 7.1, maximum 86.9. There exists a big gap between the minimum and maximum, which reflects that different companies have different CSR performance so that companies in the back of the list still have a large room for progress.

Table II are the pearson correlation coefficients of all samples. From the table, we can see that the correlation coefficient is 0.649 which is greater than 0.5, indicating that the proportion of female leaders positively correlate to CSR development index.

Table1 average proportion of female leaders in companies

Minimum	Maxin	num	Mean	STD	
0.00 0.33			0.08	0.07	
7.1	86.9		34 11	25.51	
elations					
		Fem	aRati	CSR	
FemaRati Pearson correlation Significance (bilateral)		1		.649**	
				.000	
Ν		57		57	
CSR Pearson		.649**		1	
correlation					
Significat	Significance .00				
(bilateral)					
N		57		57	
	0.00 7.1 elations Pearson correlatio Significar (bilateral) N Pearson correlatio Significar (bilateral) N	0.00 0.33 7.1 86.9 elations Pearson correlation Significance (bilateral) N Pearson correlation Significance (bilateral) N	0.000.337.186.9elationsFemPearson1correlation1Significance(bilateral)N57Pearson649correlation59Significance.000(bilateral)NSignificance.000(bilateral).000N.57	0.00         0.33         0.08           7.1         86.9         34 11           elations           FemaRati           Pearson         1           correlation           N         57           Pearson         .649**           correlation         Significance           Significance         .000           (bilateral)         .000           N         57	

\*\*.In .01 level (bilateral) significant correlation4.2 The Analysis on the Basis of Feminine Ethics of

Care

#### 4.2.1 Female Empathy

Women are inclined to regard morality as their responsibility to the society, in the pursuit of caring ethics of relationship. The influence of female on CSR is reflected through their special empathy. Sturmer (2005) pointed out that empathy is women's emotional response to help people who are in need. Slote (2007) extended the mechanism of empathy, that is, empathy is care, benevolence and sympathy, called as 'empathy ethics'. Willer (2012) investigated the gender difference in charitable donation and found that 'empathy' played an important role in interpreting the difference. Compared with male, more female took part in charity activities and volunteer service due to their empathy motivation. Given that female have the higher moral level because of their empathy motivation, women have stronger perception to the people in bad situation than men. That is to say, the more female in management. the higher possibility of the administrative staff to give hands to the people in trouble.

As mentioned above, feminine ethics of care emphasizes social care. That is to say, female care is comprehensive covering all aspects. Along with empathy, women can share other things' feelings. Taken *Alibaba*, ranked the second in the CSR development index of top 100 private firms in China, as an example, female leaders account for 25.3% in the management, better than the average. According to Alibaba's CSR report, the CSR performance of Alibaba involves almost all aspects of society, public

#### International Journal of Education and Management

welfare, creating employment opportunities, promoting economic development, employee care, working condition, staff training, protecting environment, entrepreneurial support, emergency training, boosting rural economy and technical support, all of which is connected to the strong empathy of women and their strong perception to the external situation.

#### 4.2.2 Maternal Thinking

Sara Ruddick (2008), a representative in ethics of care, put forward mothering is a conscious activity that calls for choices, daily decisions and a continuing, alert reflectiveness. Sara argued that women have different thinking model emerging from the care of children. For example, mother love, a kind of material thinking, has always been singing because of its selflessness and greatness. Feminine ethics of care stresses humanistic care. Thus, compared with men, women pay more attention on consumersorientation. In the view of female empathy mentioned above, women will also spread their love to the society.

On the basis of the data in Blue Book of CSR ---Research Report on CSR of China (Huang Qunhui et al, 2015), food industry CSR average rating is 27.2, at the preliminary stage. However, the average score of dairy industry is 34.8, higher than food industry CSR average ratings. Mengniu, as one of the biggest diary manufacturing industry, leads CSR ratings both in private firms and food industry. And dairy products, as the necessity of babies, its quality is concerned by mothers. The pre-chairman of the board of Mengniu Dairy Company is a female leader. She fully carried mothering love. As a mother, she is familiar with mothers' thoughts that they wish their babies grow up Mengniu healthily. Thus, insists on customers-orientation. On the basis of the company's CSR report, we can see that Mengniu has been devoting to products research and innovation and producing healthy food, which is the company's corporate vision. Similarity, Sanyuan, another diary manufacturing company, ranks the first in diary industry CSR ratings with 20% female in management.

Female have their own thinking mode with emphasis on care and emotion opposite to the patriarchal society stressing principle, sensitivity, contract and rights. Thus, female leaders in management play a complementary role with male leaders in the process of decision-making. And female care can be spread from family to society.

#### 4.2.3 Feminist Bioethics

Gender discrimination exists in the current society. As the progress of the society and the increasing level of women, women's awareness of the pursuit of equality has awaken. Feminists strongly support gender equality. Female are inclined to devout to oppose injustice and eliminate discrimination. According to the collected data, the higher proportion of female leaders in management, the more female staff in the company and more information about the equality of male and female in the CSR report.

Nowadays, women take a small percentage in management. Thus, increasing the number of female leaders in management is conductive to eliminate gender discrimination in employment.

5. DISCUSSION AND CONCLUSION

This paper puts forward and validates a hypothesis that the proportion of female leaders is positively associated to CSR development index. That is to say, female leaders have a positive impact on CSR performance. And the hypothesis is analyzed on the basis of feminine ethics of care and concludes that women's empathy care and their maternal thinking impel them to perform more social responsibility.

For companies, the effectiveness of female on boards increases with the addition of female directors. What's more, because of the different thinking modes between female and male, diversifying management by increasing the proportion of female directors will make contributions to wider horizons and more perspectives in decision-making, leading the board to make better decisions. The findings of this paper have essential implications for the optimization of management structure. The positive impact of women leaders on improving CSR index will in turn improve corporate reputation and positively influence companies' financial profits, institutional investment and share price. For the society, the rising number of female leaders in companies will be accompanied by the improvement of women's status. The phenomenon of gender discrimination in employment with be eased. And the traditional idea that men managing external affairs women internal will be broken.

Since it has a positive impact, companies should optimize management structure reasonably, hire female leaders and trust them. Once on the condition of reasonable proportion, the companies should take full advantage of it, such as letting female leaders write CSR reports and publish statement level of CSR. Female will provide different oversight of management with board diversity. And the companies can make rules to stipulate the number of female leaders in management. The government should also play a role in promoting female leadership, such as, implementing laws to eliminate gender employment. discrimination in Cooperative relationship can be established between schools and enterprises to develop some courses about female leadership.

Limitations of the study should be acknowledged, which provides opportunities for future study. There are only two variables in this study. Thus, for future research, more variables can be collected, such as female marriage situation, their ages or whether they have children. Another provocative area for future study is that the influence of the rising number of female leaders on the same company. Future research can also focus on the characteristics of CSR reports of the companies with gender diversity management structure.

#### ACKNOWLEDGMENTS

This research is funded by 2016 Guangdong

Provincial Quality Project "International certification-driven International Business Management Talent Training Model Research" (item number: 127-XCQ16264)

#### REFERENCES

[1]Adler, R. D. (2001), Women in the Executive Suite Correlate to High Profits. *Glass Ceiling Research Center. European Projecton Equal Pay.* 

[2]Boulouta I. (2013), Hidden Connections: The Link Between Board Gender Diversity and Corporate Social Performance. *Journal of Business Ethics*, 113(2): 185-197.

[3]Brammer, S., A. Millington and S. Pavelin: 2009, 'Corporate Reputation and Women on the Board', *British Journal of Management* 20(1), 17–29.

[4]Carter D. A., Simpkins B. J., and W. G. Simpson. (2003), Corporate Governance, Board Diversity and Firm Value. *Financial Review*, 23-28.

[5]Daily, C. M. and D. R. Dalton. (2003), Women in the Boardroom: A Business

Imperative, Journal of Business Strategy 24(5), 8-9.

[6]Fombrun, C. J.: 2006, 'Corporate Governance', *Corporate Reputation Review* 8, 267–271.

[7]Fraser, N. (2013). Fortunes of feminism: From state-managed capitalism to neoliberal crisis. London: Verso.

[8]Huang Q. H. and Zhong H. W. (2015), *Research Report on Corporate Social Responsibility of China*, Social Science Academic Press.

[9]Kakabadse, A. (2007), Being Responsible: Boards are Reexamining the Bottom Line, *Leadership in Action* 27 (1), 3-6.

[10]Karam, C., & Jamali, D. (2013). Gendering CSR in the Arab Middle East: An institutional perspective. *Business Ethics Quarterly*, 23(1), 31–68.

[11]Krishnan, G.V.,L. M. Parsons. (2008), Getting to the Bottom Line: An Exploration of Gender and Earnings Quality. *Journal of Business Ethics*, 15-19.

[12]Larkin M. B. and R. A. Bernardi (2012), Board Gender Diversity, Corporate Reputation and Market Performance, International Journal of Banking and Finance, 1-21.

[13]Pearson, R. (2007). Beyond women workers: Gendering CSR. *Third World Quarterly*, 28, 731–749.

[14]Post, C., N. Rahman and E. Rubow. (2011), Diversity in the Composition of Board of Directors and Environmental Corporate Social Responsibility (ECSR), *Business & Society* 49 (forthcoming).

[15]Scherer, A., & Palazzo, G. (2011). The new political role of business in a globalized world: A review of a new perspective on CSR and its implications for the firm, governance, and democracy. *Journal of Management Studies*, 48(4), 899–931.

[16]Squires, J. (2005). Is mainstreaming transformative? Theorizing mainstreaming in the context of diversity and deliberation. *Social Politics*, 12, 366–388.

[17]Yancey-Martin, P. (2006). Practicing gender at work: Further thoughts on reflexivity. *Gender, Work and Organization*, 13(3), 254–276.

# Study on the Operating Efficiency of Chinese Banks' Credit Business of SMEs

#### *Mu-Chun Wan*<sup>1\*</sup>, *Wen-Zhong Zhu*<sup>2</sup>

<sup>1</sup>School of English for International Business Guangdong University of Foreign Studies, Guangzhou, China <sup>2</sup>School of Business, Guangdong University of Foreign Studies, Guangzhou, China

Abstract: Recently, the development of small and micro enterprise (SME) has made a great contribution to the encouragement of technological innovation, social employment, the acceleration industrial transformation and the improvement of total factor efficiency in China. Through the use of data envelopment analysis (DEA), this paper analyzed and compared the operating technical efficiency (TE) of 12 major commercial banks' credit business of SMEs in China and found that regulatory division and ownership structure have an effect on banks' operating efficiency of credit business for SMEs. Nationwide joint-stock bank's operating efficiency is higher than the large state-owned commercial banks'; the high concentrated shareholding of commercial banks leads to the low operating efficiency. Thus, major commercial banks are urged to carry forward their own ownership structure actively and improve the efficiency of fund supply in order to develop the credit business of SMEs well and give better service to the implement of supply-side reform in current China.

Keywords: Credit Business of SMEs, DEA, Operating Efficiency

#### 1. INTRODUCTION

In China, small micro-enterprises (SMEs) are one of the main forces to promote economic development. By the end of 2013, the total number of enterprises across the country was 1527.84 million. SMEs have become the main undertaker of social employment in China. Under the background of "New Normal Economy", China advocates the full play of labor in the allocation of resources in order to improve the quality of economic development and the efficiency of market. Therefore, supporting the growth of SMEs is an irreplaceable part of "Supply-side Reform" which benefits the expansion of employment and promotes public entrepreneurship and innovation.

However, financing difficulty is the most prominent problem that the SMEs confronted with during their operations. As the core of Chinese financial system, commercial banks have the obligation to support the healthy development of SMEs. In March 2015, China Banking Regulatory Commission (CBRC) adjusted SMEs' credit policy indicator from "Two Not Less Than" to "Three No Less Than". Thus the improvement of the credit business of SMEs is not only a passive task of banks under the supervision but also an initiative demand of banks in order to find a new growth point under the trend of interest rate liberalization. In order to foster the development of banks' credit business of SMEs, it is necessary for us to evaluate its current status quo and find out the countermeasures of improvement in order to serve the Supply-side Reform better.

Existing literature have intensively studied the factors influencing commercial banks' loans to SMEs. Many empirical studies studied the relationship between bank size and loans to SMEs basing on "small bank advantage" hypothesis. (Chen and Lin, 2015) Some studies are about the relationship between credit business of SMEs and banks' share of the local loan market. (Berger, Rosen, and Udell, 2001) They found that the share of small business lending is roughly in proportion to small banks' loan market share. Some literature focuses on the problems of SME loan managements from the perspectives of the bank, such as bank is not yet able to design appropriate financial products for SME segment due to lack of feedback from SME owners (Akterujjaman, 2012); banks with a public mandate are 25% less cyclical than other local banks in SME lending cycle. (Behr, Foos and Norden, 2017) However, few literature is about the evaluation of performance of banks credit business of SMEs.

The data envelopment analysis (DEA) is a nonparametric method to empirically measure relative efficiencies of multiple decision-making units (DMUs), which has been recognized as a valuable analytical instrument and a practical decision support tool for dealing with the task of business performance assessment. DEA has been applied extensively to evaluate the performance for a variety of sectors including banks. Sherman and Gold (1985) firstly applied DEA model to the evaluation of the relative efficiency among various sectors in commercial banks. From then on, DEA has become a common tool for bank's performance efficiency evaluation. Some studies focus on the comparison of the different efficiency of Chinese state-owned banks, joint-stock banks and local commercial banks (Wei and Wang, 2002; Zhang, 2003; Zhu, Zhuo and Dong, 2004) and the branch performance evaluation of a specific bank (Paradi

and Schaffnit, 2004). However, to author's knowledge, the majority of literature focuses on the total efficiency of banks and few studies have employed DEA to investigate the efficiency of a specific business of banks, such as banks' credit business for SMEs.

#### 2. RESEARCH METHODOLOGY

This paper adopts DEA to calculate the operating efficiency of credit business of SMEs in each bank. Then the operating efficiency of each is evaluated and analyzed from several dimensions.

The basic principle of DEA is to evaluate the relative effectiveness of multiple input, output -multiple decision-making units (DMUs) through the use of linear programming. CCR models is used in this paper to examine the technical efficiency (TE) of various DMUs.

The DEA CCR model (Charnes et al., 1978) assumed that there are n DMUs, with m inputs and s outputs, while the efficiency evaluation model of DMU can be defined as following:  $\chi_{ij}$  represents the ith input value for jth DMU and the  $y_{rj}$  represents the rth output value for jth DMU. Thus, the vector of the total input factor and the output element of the jth decision unit  $DMU_j$  can

output element of the jth decision unit *Direct* can be recorded as:

$$X_{j} = \begin{bmatrix} x_{1j} & x_{2j} & \dots & x_{mj} \end{bmatrix}^{T}, \ j = 1, 2, \dots, n$$
  

$$Y_{j} = \begin{bmatrix} y_{1j} & y_{2j} & \dots & y_{sj} \end{bmatrix}^{T}, \ j = 1, 2, \dots, n$$
  
and

The whole CCR model can be defined as following:

min  $\theta$ 

$$\sum_{j=1}^{n} X_{j}\lambda_{j} + s^{-} = \theta X_{0}$$
s.t. 
$$\sum_{j=1}^{n} Y_{j}\lambda_{j} - s^{+} = Y_{0}$$

$$\lambda_{j} \ge 0$$

$$s^{+} \ge 0, s^{-} \ge 0$$

$$j = 1, 2, \dots, n$$
(1)

Where  $s^{-}$  is the input slack variable and  $s^{+}$  is the output slack variable.  $\lambda_{j}$  is the weight of the jth DMU and  $\theta$  means the the jth banks' technical efficiency value (TE). If  $\theta = 1$ , and  $s^{-} = 0$ ,  $s^{+} = 0$ ,  $DMU_{j_{0}}$  is DEA efficient, If  $\theta = 1$ , and  $s^{+} \neq 0$  or  $s^{-} \neq 0$ ,  $DMU_{j_{0}}$  is DEA efficient,  $If \theta = 1$ , and  $s^{+} \neq 0$  or  $s^{-} \neq 0$ ,  $DMU_{j_{0}}$  is DEA efficient, weak efficient which means that there is some possibilities of improvement on the basis of existing inputs or existing outputs; If  $\theta < 1$ , then  $DMU_{j_{0}}$  is DEA inefficient.

#### 3. EMPIRICAL ANALYSIS

By the end of December 2015, the total loan balance of Chinese banking financial institutions for SMEs amounted to 2,345,980,000 million RMB, among which loan balance for SME of 5 large state-owned commercial banks and 7 national joint-stock commercial banks account for 31.96%. They are Industrial and Commercial Bank(ICBC); Agricultural Bank of China(ABC); Bank of China(BOC); China Construction Bank(CCB); Bank of Communications(BOCOM) and China CITIC Bank (CITIC Bank); Huaxia Bank (HB); China Merchants Bank(CMB); Shanghai Pudong Development Bank (SPDB); China Industrial Bank (CIB); China Minsheng Bank(CMBC); China Zheshang Bank(CZB). As the most important supplier of micro-credit market in China, these 12 commercial banks are directly supervised by the CBRC. The corporate governance structure is relatively sound and the information disclosure is sufficient and convenient for us to obtain. Therefore, these 12 commercial banks are selected as the research sample-the DMU in DEA model in this paper.

In this paper, there are 3 indicators of DEA input, the total number of employees X1, the number of branches X2 and loanable funds X3, respectively. DEA output indicators are also 3, loan balance for SME Y1, the reciprocal of SME lending's non-performing loan ratio Y2 and the cumulative number of SME loans issued throughout the year Y3, respectively. (Because DEA model requires a direct proportion between the input and output indicators which means the greater the output index is, the greater the efficiency evaluation value is. Thus this paper adopts the reciprocal of SME lending's non-performing loan ratio as the output indicators.) There are six inputs and output indicators, the number of DMUs is 12, and the number of DMUs is between two or three times more than the number of input and output indicators, which conforms to the requirements of DEA model. Input-output indicator data are shown in Table 1.

Table 2 indicates that there are only 4 commercial banks that achieve DEA efficient in terms of TE, whereas the 5 large state-owned commercial banks together with 3 commercial banks ranks later. For mean value, the national joint-stock commercial banks rank higher than the large state-owned commercial banks in TE. This paper will conduct further analysis concerning this phenomenon from the perspective of property right structure of banks in China.

Table 1 Dea'S Input-Output Indicator Data Of 12Chinese Banks In 2005

DMU	X1	X2	X3	Y1	Y2	Y3
ICBC	446842	17002	181251.37	18832.08	38.18	93318

ABC	494299	23615	154930.12	10882.28	31.23	50813
BOC	277657	10687	130512.03	11457.14	38.97	47090
CCB	369183	14917	155375.65	12778.79	29.90	87171
BOCOM	89269	3372	61469.61	6244.58	23.76	27038
CITIC Bank	56489	1353	44075.17	4419.89	48.76	22152
HB	34023	789	17540.47	2361.87	61.84	11582
CMB	75828	1710	45353.78	5898.01	43.20	22290
SPDB	47159	1660	44709.27	5104.69	36.39	18290
CIB	50367	1786	47503.35	5605.39	41.84	20600
CMBC	57228	2806	39403.59	5722.27	39.92	10021
CZB	8360	133	9606.20	1074.15	65.15	6010

(Note: The unit of the data on the table above are 100 million. The total number of employees and the number of branches are domestic statistics which does not include overseas workers and branches.)

Put the data of Table 1 into DEAP 2.1 software and select the VRS model for analysis. Then we obtain the sorted output results shown in Table 2.

Table 2 The Operating Efficiency Of Banks' Credit Business Of Smes Through Vrs Model

Technical Efficiency(TE)
1.000(HB)
1.000(CMB)
1.000(CMBC)
1.000(CZB)
0.962 (CIB)
0.933(SPDB)
0.850(CCB)
0.822(CITIC Bank)
0.788(BC)
0.780(ICBC)
0.640 (BOCOM)
0.519(ABC)

Table 3 Property Right Structure Of Banks In China

Name of	Major Shareholders and	Property
Bank	Shareholding Ratio	classification
ICBC	Central Huijin Investment 34.71%, Ministry of Finance 34.60%	state-controlled
ABC	Central Huijin Investment 40.03%, Ministry of Finance 39.21%	state-controlled
BOCOM	Central Huijin Investment 64.02%	state-controlled
CCB	Central Huijin Investment 57.31%	state-controlled
BC	Ministry of Finance 26.53%, HSBC 18.70%	state-controlled
CITIC		State -owned
Bank	CITIC Group 67.13%	legal person holding
HB	Shougang Group 20.28% Yingda Group of State Grid1of China 8.24% Deutsche Bank Luxembourg Branch 9.28% Deutsche Bank 8.21%	State -owned legal person holding
СМВ	China Merchants Group 29.97% Anbang Insurance 10.72% China Ocean Shipping Group 6.24%	State -owned legal person holding
SPDB	Shanghai International Group 24.32% China Mobile Company Guangdong Branch	State -owned legal person holding

International Journal of Education and Management

	20%, Funde Sino Life 19.43%	
CIB	Finance Department in Fujian Province 17.86% 、 People's Insurance Company of China 14.06%	State -owned legal person holding
CMBC	Anbang Insurance Group 17.77% New Hope Group 5.00%	Domestic non-state-owned legal person holding
CZB	Zhejiang Financial Holding Company 19.96% Traveler Motor Group 9.28% Hengdian Group 8.57%	Domestic non-state-owned legal person holding
(0	0015 1	1 . 1

(Source: 2015 Annual report of each commercial bank)

With reference to Table 3, this paper divides 12 commercial banks into state-controlled, state-owned legal person holding and domestic non-state-owned legal person shares. The results are shown in Figure 1: The state-controlled commercial bank show significant low efficiency than the other two types of banks. As we can see from table 3, the shareholding percentage of state-owned legal person holding banks' state-owned legal person shares is relatively large but often scattered, which is different from the "single-large shareholder" of state-controlled commercial banks. Therefore. the over-concentration of state-owned property right reduces commercial banks' operating efficiency of credit business of SMEs. The reason is that highly state-owned property concentrated commercial banks have much more management levels, thus the cost of information transmission and decision-making is relative high. Whereas, the corporate governance structure of decentralized commercial bank is more scientific and market-oriented, thus the credit business of SME is more efficient.

#### 4. CONCLUSIONS AND SUGGESTIONS

Through the empirical study using DEA, this paper evaluated the Chinese banks' performance on credit business of SME and found that: the operating efficiency of joint-stock commercial banks is significantly higher than that of state-owned commercial banks. And the property right structure will affect the operational efficiency, to be specific, the concentration of state capital will lead to the decline in operating efficiency.

Several suggestions are provided aimed at improving Chinese banks' performance in credit business of SME and alleviating financing difficulty of SMEs: Chinese financial regulators should further encourage commercial banks to develop credit business of SMEs by strengthening state's policy support; the reform of the diversification of banks' property right structure, marketization and the reduce in the concentration of state-owned shares should be promoted immediately; besides the traditional deposits, Chinese banks should broaden their financing

channels to enhance the ability to take the initiative, comprehensive utilization of co-financing, bond financing, equity financing, asset securitization and other means of financing and to ensure that the loan funds are able to meet the financing needs of SMEs.

#### ACKNOWLEDGMENT

This research is funded by 2016 Guangdong Provincial Quality Project "International certification-driven International Business Management Talent Training Model Research" (item number: 127-XCQ16264).

#### REFERENCES

[1]Akterujjaman, S. M., 2012. Problems and prospects of SMEs loan management a study on mercantile bank limited, khulna branch. Social Science Electronic Publishing 5(2).

[2]Berger, A. N., Klapper, L. F., Udell, G. F., 2001. The ability of banks to lend to informationally opaque small business. Journal of Banking & Finance 25, 2127-2167.

[3]Behr, P., Foos, D., Norden, L., 2017. Cyclicality of SME lending and government involvement in banks. Journal of Banking & Finance 77, 64–77.

[4]C. Chen., L.Q. Lin., 2015. Bank Scale, Loan Technology and Small Micro Enterprise Financing-Reexamination of the Theory of "Small Bank Advantage". Economic Science 4, 54-66.

[5]Charnes, A., Cooper, W.W., Rhodes, E., 1978. Measuring Efficiency of Decision Making Units. European Journal of Operational Research 1,429-444.

[6]J. H., Zhang., 2003. DEA Method of Efficiency Study of Commercial Banks in China- Empirical Analysis from 1997 to 2001 3, 11-25.

[7]N. Zhu., X. Zhuo., Q. Dong., 2004. An Empirical Analysis and Reform Strategy on the Efficiency of State-owned Commercial Banks in China. Management World 2, 18-26.

[8]Paradi, J. C., Schaffnit, C, 2004. Commercial branch performance evaluation and results communication in a Canadian bank—a DEA application. European Journal of Operational Research 156(3):719-735.

[9]Sherman H D, Gold F., 1985. Branch Operating Efficiency: Evaluation with Data Envelopment Analysis. Journal of Banking & Finance 2, 297-315.

[10]Y. Shen, M. Shen, X. Zhong, et al., 2009. Can more small and medium sized banks provide more loans to small and medium sized enterprises? Evidence from China.

[11]Y. Wei., L. Wang., 2000. Study on the Efficiency of Chinese Commercial Banks: A Nonparametric Analysis. Financial research 3, 88-96.

### Humanistic Spirit and Core Value in the Spreading Path of New Media

#### Zhen Zhang

#### Zhengzhou University of Aeronautics, Zhengzhou, China

Abstract: Thinking and exploring a variety of social changes by the development of new media at the humanistic spirit dimensions, is not only the necessary process of correcting the defects of new media's development, but also the only way to statute of the new media development in health. Based on this point, the article analyses net media issues from an ecological presentation, philosophical examination, cultural criticism, and many other dimensions and thinks of the problems that the new media development facing.

Keywords: new media, humanism spirit, sociology

#### 1. INTRODUCTION

New media is in silence to change the original human social environment and cultural ecology, affecting people's way of thinking and cognitive logic. New media is an evolving and controversial concept [1]. In the view of some researchers, new media refer to a group of digital information, a stream of information that "all spreads to all", a blend of interpersonal dissemination and mass communication characteristics of the presentation. This part of the people think that as a concept to define the new media and traditional radio, television, film and other media conceptual architecture model is different, it is no longer possible in any special sense of the media form. Representatives of this view and the main institutions are Levi Manovic, Van Kraussberg and "connection" magazine [2].

Corresponding to this view, some people think that the concept of new media should still only the traditional media concept of the supplement and extension, and should not be the original concept of the mechanism of subversion. On the basis of absorbing the above-mentioned ideological elements, they extend the traditional media entity conceptual architecture, and form their own new media definition from the two degrees of extension and connotation. Such as Xiong Chengyu, Wei Wu, Fang Xingdong, Gong Chengbo, Jiang Hong, Xu Jian, etc., they are based on the above ideas, come to their own definition of the concept of new media [3,4].

Although the new media in the theoretical definition, there are still a variety of disputes and differences can not be unified, but it is in the field of information dissemination caused by the great changes, but it is an indisputable social reality.

2.THE TECHNICAL CHARACTERISTICS OF NEW MEDIA

#### Hypermedia and Macross Technology

The first technical feature of the new media is reflected in the new media in the process of information dissemination with the hypermedia and the spread of space and space. The new media breaks the single linear transmission mode of the traditional media, and constructs the new system of "mesh-chain" transmission with the random triggering of the content information by means of fragmentation and sporadic non-linear arrangement. In the wireless network and digital compression technology driven by the rapid development of new media broke through the geographical limitations of information dissemination, to achieve "zero distance", "zero time" and cross-media over time and space synchronization transmission effect.

Virtuality and Interactivity

New media broke through the physical constraints of the original information model, to achieve a combination of high virtuality and high interaction characteristics of communication. New media content is sorted, assembled and stored by "bit" as the basic unit, so that the participants of the communication process can easily and quickly change or even put together the audio and video that does not exist in the order of the bit arrangement combination And text or pictures and other content, such as the British Newspaper Federation new media company in 2001 launched the news broadcast virtual host Anana Nova and so on. In the creation of a realistic but fantasy world at the same time, the audience through the text of the link in the information guide, in the real-time interactive exchange is extremely convenient to achieve the choice of text information browsing, organization and management and storage standby and other randomized operation and control.

#### Sharing and Personalization

The characteristics of the performance of the new media on the basis of P2P technology, the smooth realization of the high content of information content personalized and high communication. The communicator can send accurate information to one or more audiences based on the IP address, cell phone number, email address or instant messaging account on the information transmission network, and the audience can also send a personalized message to the information disseminator Customization and retrieval requirements. All users, in the information dissemination of the network nodes, can achieve their own information with the instant exchange and

dissemination can also be based on their own preferences such as blog, Boke (personal audio and video network radio, Weike (based on Internet technology allowed Multi-person collaboration to complete a text content of the technical tools and information media) and other media content from the personalized changes and logo.

#### Agenda Setting Function

This feature is reflected in the agenda of the information content. New media sporadic and fragmented features combine to form a new media continuous agenda setting function. In addition to the particularly important reports of traditional media, very few of the agenda for a continuous set, the new media is different, it is "network - chain" communication characteristics consciously or unconsciously formed for each event and the message Continuous agenda setting function. The use of each communication node in the cross-platform interaction, the new media will be related to the contents of the aggregation under the same agenda, the content and its influence to form a multi-dimensional condensation, multi-level upgrade and multiple juxtaposition, and thus the media agenda sets an unprecedented penetration effect. In the new media UGC mode of operation, the audience in the new media participation has been the greatest respect and expansion. They surpassed the traditional media information producers and disseminators on the content of the monopoly, in the new media information dissemination process to "original ecological content production" to replace the "professional content production" to less intermediate language processing characteristics of the spread Way to directly reflect their own ideas. If the user does not participate in the operation of the new media, or in the content area does not contribute, do not act, then the network based on the spread of many new media patterns will become the content of the shell.

#### 3. HUMANISTIC SPIRIT AND NEW MEDIA

A. New Media and Human Ecology

With the continuous development of technical means, according to Moore's Law and Gill's Law, new media communication participants and communication bandwidth will show a multiple growth or exponential upward trend, more and more people will be in the transmission network speed (Such as P2P download, video on demand, full 3D virtual game, etc.), will also be a greater successor to the future of the data transmission chain, as the information communicator and receiver, need to participate in the new media form The enrichment and improvement. Social interpersonal "six space theory", in the new media information age, to achieve it will become more simple and convenient. When the whole world is more closely linked together, the new media influence the power of society will also be an unprecedented increase.

According to the principle of the squares of Matt Kraft, if the position of each sound on the new media communication network is regarded as a discourse node (whether it is BBS, QQ, MSN or other forms), then the new media in society The spread and social impact of the field of civilization will be the square of these nodes. So, the impact of new media on the ecological civilization of human beings will undoubtedly have a huge adjustment.

B. New Media and Thinking Mode

In the digital and Internet technology, driven by the writable network of society and huge economic development potential, the new media to the form of information dissemination as a symbol of change, not only triggered a huge change in the field of media and information dissemination, but also to subtle The way to change the restructuring of the original human social environment and cultural ecology, spread and affect people's thinking and cognitive logic [5]. In the media environment, through the digital, new hyperlinks, interactive communication, information nodes such as neurons to the world unlimited extension of the creative process of knowledge has also been "collectively shared to the whole society", and gradually to the "Technology simulation phase "transition. In the new type of communication relationship, the traditional "broadcast" mode is replaced by arbitrary information "pull" mode, e-commerce, online mail, VOD on demand, MSN instant messaging and RSS information aggregation to replace (at least partially replaced) the traditional The practice of bargaining, postal delivery, information retrieval and program services and other daily rules, and then this model will penetrate into people's social interaction and daily activities, unknowingly integrated into the logic of their structure, Become people used to think of the way of thinking and code of conduct.

C. New Media and Cultural System

In the formation of the cultural structure system, people are living in the construction of cultural symbols in the meaning of the system composed of units. The interaction between culture and the environment, the formation of the meaning of the system of historical heritage chain, but also the construction of a stable line of knowledge production methods; but the new media communication system with the power of technology, this interaction with the original environment of knowledge production and history Continuation of the way to rewrite. When a cell phone or computer, coupled with a wired or wireless network connection, instantly can complete a large world of construction, when the whole community members of all these scenes and lifestyle habits, the new media technology power has been ubiquitous to control the world. The history of the traditional cultural statute and the physical scene is extended to the modern civilized system of new media communication, which is subject to the value challenge and the concept rewriting from the scientific and technological instrumental rationality. In the self, self-contained symbol space and the virtual world of communication, the new media rejected the process of self-examination, but also lost the occasion of the historical extension, it allows disseminators and recipients to enjoy beyond the reality of love and hate Happy.

#### D. New Media and Spiritual World

In the technology complex phase, science and technology is no longer just a tool to promote efficiency, but evolved into the contemporary civilization of the cultural implication of the body. Under the support and domination of this frame, the energy of the natural world is developed, changed its form, transforms its energy, radiates and distributes it in human society. After the baptism of science and technology, in a seemingly controlled by the human and holding the way, showing their own energy and usability. However, in this process, technology and nature presented by the face and its own strength and state, but never human beings can freely grasp the manufacturing. Science and technology itself has the structure of the mandatory characteristics of "occupied" people, and people can no longer rely on simple will and knowledge to control the development and direction of science and technology. As a modern science and technology of the two basic ways to show, restrictions and strength has become a modern society, people can not escape the environment, everywhere and deeply involved in people's daily life. New media is in this "frame", by the digital and network technology together to produce. As Paul Vichrio points out, modern science is becoming a technology science, and as the technical nature of the further play, the boundaries of operational tools and exploratory research are further confused. The interaction between the two has made science and technology to form a "self-organization, self-derived, self-reference and self-system" of the huge system. There is no doubt that the new media, supported by technological development, is becoming the representative of this manifestation. Any form of communication always evolves with technological change, and technological change in the field of communication always leads to a series of profound social changes.

#### 4. CONCLUSIONS

The cultivation of humanistic spirit should not be accompanied by a gradual decline in academic qualifications. In other words, a person's high school does not mean that his humanistic quality is high, there is no need to cultivate its humanistic spirit. Whenever

#### International Journal of Education and Management

a highly educated person lacks a humanistic spirit, his or her knowledge and skills will be likely to be used for his criminal offense. In the context of new media, is the need for comprehensive development of college students, and here the comprehensive development, not only contains the operational capacity and scientific knowledge, but also contains moral qualities. social responsibility and so on. In college, the cultivation of students should not only focus on academic education, while personality education should keep up with students to respect others, love and tolerance and other training, so that they understand their own behavior, to prevent the tragedy again The It can not be denied that the university is a critical period for the cultivation of students' professional and technical skills, but it is also the cradle of the country and society to cultivate a comprehensive development of applied talents. In the new era, China wants to make a national dream, not only in science and technology and economic aspects to be fully prepared, played the battle, while in culture and moral education can not be backward, to continue to accumulate in order to make themselves become more powerful. National talent for the accumulation of culture presents the carrier, but also as a national cultural communicator. This means that the university in the process of training students should not only focus on professional skills and knowledge training, in the cultivation of humanistic spirit can not relax, although not everyone can become a gentleman, but it must be a bright and upright of people.

#### ACKNOWLEDGMENT

This work was supported by a grant from Henan Province Department of Education Humanities and Social Sciences Research Project (No.2016-qn-011).

#### REFERENCES

[1] H. Jiang, J. Xu, "Introduction to New Media," *Shanghai Jiaotong University Press*, 2014.

[2] J. Liu, "On the Evolution of Image Media Language," *Radio and Television Education*, 2016, vol. 37, pp. 29–31.

[3] C.B. Guan, "Introduction to New Media," *China Radio and Television Publishing House*, 2015.

[4] H. Jiang, J. Xu, "The localization of social theory construction," *Peking University Press*, 2013.

[5] Graham Burton, "Media and Society: A Critical Perspective", Tsinghua University Press, 2007.

## An Evolutionary Game Study on Coordinated Development of Supply Chain Finance by Logistics Enterprises and Financing Institutions

Sheng Xin

School of Management, Guangzhou Panyu Polytechnic, Guangzhou, China zhong Zuchang School of Business, Guangdong University of Foreign Studies, Guangzhou, China Wang Keming Department of Accounting, School of Business, Sun Yat-sen University, Guangzhou, China

Abstract: The research establishes an evolutionary game model of the coordinated development of supply chain finance by logistics and financing institutions to analyze the impact of different factors on stability of game results. The model result shows that the coordinated development of supply chain finance by the two is characterized by "path dependence". When the correlated earning increases, investment cost decreases, extraneous income decreases and extra risk of cooperation reduces, coordinated development of the two is more possible.

Keywords: Supply chain finance, evolutionary game, logistics enterprise

#### 1. INTRODUCTION

Development of the supply chain finance business provides an effective way to solve the difficulty in financing of small and medium enterprises (Li Yixue, Wang Shouyang et al. 2010) and poses an impact on the performance of the entire supply chain (Chod J, 2006). Development of supply chain finance requires interference in the operation process of supply chain. However, the financing institutions do not have professional talents and resources required, and tend to seek for cooperation with logistics enterprises to control and manage the business and reduce the business risk (Sheng Xin, Chen Gongyu, 2015). Therefore, theoretically, the logistics enterprises and financing institutions realize joint business development through effective division of labor and coordination. However, this is not true. Some financing institutions are not satisfied with services provided by logistics enterprises, and the capacity of the logistics enterprises are not enough, which slows down business development. The way to ensure the dynamic evolution of coordinated development between the two evolves towards the benefit of the two parties within such a competition and cooperation mechanism is of great study value and

significance. The evolutionary game combines the evolution process and game process, and applies widely to the study on formation process and impact factors formed by regulations and systems (Xue Shiyu, 2001). It is of great significance both theoretically and practically (Wang Wenbin, 2009). The behavior choice between different symbiotic of supply chain finance business is constrained by the asymmetry of the bounded rationality and information. The choice of two symbiotic parties from the initial status to the realization of optimization is a dynamic adjustment process. This paper uses the evolutionary game method to build up an evolutionary game model of coordinated development between logistics enterprises and financing institutions, so as to analyze the evolution relation and impact factors between the symbiotic units.

#### 2. BASIC ASSUMPTION ABOUT THE MODEL

#### A. Participant of the model

Logistic enterprise L and financing institution F are the two participating units in the coordinated development process of supply chain finance and the game between the two follows the basic assumptions for evolutionary game theory.

#### B. Strategic selection of participant

The strategy sets of both the logistics enterprises and financing institutions in the supply chain finance business development process are "coordinated development and independent development". When the financing institution chooses "coordinated development" strategy, it actively forms a coordination relation with the logistics enterprise. When the financing institution chooses "independent development", it invests resources in operation independently and competes with the logistics enterprises. Similarly, when the enterprise "coordinated logistics chooses development" strategy, it develops jointly with the financing institution in terms of business development and input of business resource. When the logistics enterprise chooses "independent development" strategy, it tends to develop business using its own resources, or even cuts down the input of investment (such as lowering the monitoring level), and takes opportunistic measures (such as conspiring with the monitored enterprise) to obtain short-term earnings. The final evolution results of coordinated development between the

Table 1 Gains Matrix Of Evolutionary Game

#### International Journal of Education and Management

two eventually reach a stable state through dynamic adjustment of strategic choices in the evolution process of the system made up by the two.

C. Gains matrix of participants

In Table 1,  $\pi_L$ ,  $\pi_F$  respectively represents the initial gains of the logistics enterprises and financing institutions given independent development of supply chain finance business.

Probability p			Financing institution F		
		Probability	Coordinated development	Independent development	
		р	β	1 - eta	
Logistics enterprises L	Coordinated development	α	$\pi_L + \gamma \Delta V - C_{OL}, \pi_F + (1 - \gamma) \Delta V - C_{OF}$	$\pi_L - C_{OL} - C_{L,i}, \ \pi_F + R_F$	
	Independent development	1-lpha	$\pi_L + R_L, \pi_F - \mathcal{C}_{OF} - \mathcal{C}_F$	$\pi_L, \pi_F$	

Its value depends on the comprehensive capacity and market performance of different subjects. The coordinated development of the two can drive the overall performance level up by  $\Delta V$ , and the resource investment to be invested is respectively,  $C_F$ ,  $C_L$ . In this paper, it is assumed  $\Delta V > C_{OL} + C_{OF}$ . which means that the overall gains resulting from cooperation are greater than the total input of the two. If the two party respectively chooses "independent development" and "coordinated development", the extra cost will be  $C_F$  or  $C_L$ . The egoistic behavior may result in extra gains $R_F$  (such as the fraud gains, the cheap capital cost obtained by the logistics enterprises or gains resulting from conspiring with the monitored party) and  $R_L$  (such as the gains obtained by the financing institution from strict monitoring or newly increased customer resources).

The  $\alpha$ ,  $\beta$  in the payment matrix are both probability. In particular,  $\alpha$  is the probability of logistics enterprise group choosing "coordinated development";  $\beta$  is the probability of financing institution group choosing "coordinated development;  $\gamma$  refers to the distribution ratio of the newly increased gains  $\Delta V$  of "coordinated" development". The values of  $\alpha$ ,  $\beta$ indicates different initial status and the value of  $\gamma$ depends on different business modes.

3.ANALYSIS OF EVOLUTIONARY GAME GAINS OF LOGISTICS ENTERPRISES AND FINANCING INSTITUTIONS

A. Analysis of gains of logistics enterprises

According to the gains matrix, the replication dynamics evolutionary game model of the logistics enterprises, i.e., the derivation process, is as follows:

When the logistics enterprise chooses "coordinated development", its expected gains are:

 $u_{L1} = \beta(\pi_L + \gamma \Delta V - C_{OL}) + (1 - \beta)(\pi_L - C_{OL} - C_L)$  (1) When the logistics enterprise chooses "independent development", its expected gains are:

$$u_{L2} = \beta(\pi_L + R_L) + (1 - \beta)\pi_L \qquad (2)$$
  
Therefore, the average expected gains of the logistics enterprises are:

$$\bar{u}_{L} = \alpha u_{L1} + (1 - \alpha) u_{L2} \tag{3}$$

In the logistics enterprise group, the dynamic change speed of the "coordinated development" enterprise can be expressed by the replication dynamics equation:

$$\frac{d\alpha}{dt} = \alpha [u_{L1} - \overline{u}] = \alpha (1 - \alpha)(u_{L1} - u_{L2})$$

 $= \alpha (1 - \alpha) [\beta (\gamma \Delta V + C_L - R_L) - C_{OL} - C_L]$ (4)

*B. Analysis of gains of financing institutions* According to the gains matrix, the replication dynamics evolutionary game model of the financing institution, i.e., the derivation process, is as follows:

When the financing institution chooses "coordinated development", its expected gains are:  $u_{F1} = \alpha [\pi_F + (1 - \gamma)\Delta V - C_{OF}] + (1 - \alpha)(\pi_F - C_{OF} - C_F)$ 

When the financing institution chooses "independent development", its expected gains are:

$$u_{F2} = \alpha(\pi_F + R_F) + (1 - \alpha)\pi_F \qquad (6)$$

Therefore, the average expected gains of financing institution are:

$$\bar{u}_F = \beta u_{F1} + (1 - \beta) u_{F2} \tag{7}$$

In the financing institution group, the dynamic change speed of the "coordinated development" enterprise can be expressed by the replication dynamics equation:

$$\frac{d\beta}{dt} = \beta[u_{F1} - \bar{u}] = \beta(1 - \beta)(u_{F1} - u_{F2}) =$$

$$\beta(1-\beta)\{\alpha[(1-\gamma)\Delta V + C_F - R_F] - C_{OF} - C_F\}$$
(8)  
C. Analysis of stability of model equilibrium point

The replication dynamics equations (4) and (8) of logistics enterprise and financing institution are combined into an equation set. According to the method proposed by Friedman (1991) and Jiang Qiyuan (1998), the stability of equilibrium point of an equation set can be determined based on the
#### International Journal of Education and Management

local stability of the Jacobian matrix of the equation set. The partial derivative is obtained for  $\alpha$ ,  $\beta$  in

$$J = \begin{bmatrix} (1-2\alpha)[\beta(\gamma\Delta V + C_L - R_L) - C_{OL} - C_L] & \alpha(1-\alpha)(\gamma\Delta V + C_L - R_L) \\ \beta(1-\beta)[(1-\gamma)\Delta V + C_F - R_F] & (1-2\beta)\{\alpha[(1-\gamma)\Delta V + C_F - R_F] - C_{OF} - C_F\} \end{bmatrix}$$
(9)

Based on the above analysis, the five equilibrium points of the system are respectively A(0,0), B(0,1),

C(1,0), D(1,1) and E(
$$\frac{C_{OF}+C_F}{(1-\gamma)\Delta V+C_F-R_F}, \frac{C_{OL}+C_L}{\gamma\Delta V+C_L-R_L}$$
).

The ordinate and abscissa of the five points respectively represent the ratio of logistics enterprises and financing institutions choosing

equations (4) and (8), and the Jacobian Matrix J of the system is obtained as follows:

$$\frac{\alpha(1-\alpha)(\gamma\Delta V + C_L - R_L)}{(\gamma\Delta V + C_F - R_F] - C_{OF} - C_F}$$
(9)

coordinated development independent and development". In the five points, Points A (independent development, independent development) and D (coordinated development, coordinated development) are asymptotic stability points; Points B and C are instability points and Point E is the saddle point. Please see Table 2 for details.

Table 2 Analysis Of Equilibrium Point Stability Of Evolutionary Game Between Logistics Enterprise And **Financing Institution** 

Equilibrium point	Determinant of J	Trace of J	Results
A(0,0)	$(C_{OL}+C_L)(C_{OF}+C_F)$	$-\mathcal{C}_{OL}-\mathcal{C}_L-\mathcal{C}_{OF}-\mathcal{C}_F$	Asymptotic stability point
B(0,1)	$(\gamma \Delta V - R_L - C_{OL})(C_{OF} + C_F)$	$(\gamma \Delta V - R_L - C_{OL}) + C_{OF} + C_F$	Instability point
C(1,0)	$(C_{OL}+C_L)[(1-\gamma)\Delta V-R_F-C_{OF}]$	$C_{OL} + C_L + \left[ (1 - \gamma) \Delta V - R_F - C_{OF} \right]$	Instability point
D(1,1)	$(\gamma \Delta V - R_L - C_{OL})[(1 - \gamma)\Delta V - R_F - C_{OF}]$	$R_L + C_{OL} - \gamma \Delta V + R_F + C_{OF} - (1 - \gamma) \Delta V$	Asymptotic stability point
Е	M	0	Saddle point

Note: When Point E is taken, the value of determinant of J is:

$$M = \frac{(c_{OL} + c_L)(c_{OF} + c_F)(\gamma \Delta V - R_L - C_{OL})[(1 - \gamma)\Delta V - R_F - C_{OF}]}{[(1 - \gamma)\Delta V + C_F - R_F](\gamma \Delta V + C_L - R_L)} (10)$$

The evolutionary game dynamic process between logistics enterprises and financing institution is shown in Fig. 1. In the figure, Points A, B, C, D and E respectively represent the equilibrium points. The five points divide the figure into 4 zones, the size of which depends on the value of Saddle Point E. In different zones, the system is converged into different status. For a certain initial status, the investment cost, gains, distribution ratio, potential risk related to unilateral cooperation, and invisible gains resulting from unilateral non-cooperation of the coordinated development are comprehensively considered.



A (00)

Phase Diagram of Evolution of Coordinated Development of Logistics Enterprise and Financing Institution

D. Analysis of factors impacting evolutionary game stability between logistics enterprise and financing institution

1. Analysis of value selection for extra income of independent development, investment cost and linkage gains

When 
$$(\gamma \Delta V - C_{OL}) > R_L$$

 $[(1 - \gamma)\Delta V - C_{OF}] > R_F$  by, which means that the

two game parties choose "coordinated development strategy", the gains of coordinated development exceed the extra gains of "independent development" of one party, the two parties can cooperate. Otherwise, if any of the formula is not established, the two can not cooperate, and the stability results of evolution will be (independent development, independent development). It can be seen that the equilibrium point of the system evolution depends on the value selection of extra income of independent development, investment cost and linkage gains. The extra gains value resulting from cooperation between the two depends on the  $\Delta V$  of total gains, distribution coefficient  $\gamma$ , and the respective investment cost  $C_{OL}$ ,  $C_{OF}$ . Hence, the prerequisite of game evolving towards (coordinated development, coordinated

development) is that the gains of the cooperation can be no less than the sum of investment cost and opportunity cost  $(C_{Oi} + R_i)$ .

(1) Discussion on value selection of  $\Delta V$ 

It can be obtained by analyzing the coordinated formula of saddle point E that: when the value of  $\Delta V$  increases, Point E moves towards bottom left. As indicated in Fig.1, the area of Zone ABEC reduces and the area of Zone CEBD increases. The probability of system evolving towards Equilibrium Point D (1, 1) goes up, which means the increase of total gains of coordination will bring greater cooperation possibility.

(2) Discussion about value selection of  $\gamma$ 

The variation of value of  $\gamma$  poses a direct impact

on distribution of coordination gains between the logistics enterprise and financing institution. With other conditions unchanged, the gains to be obtained by the logistics enterprise through cooperation, i.e.,  $(\gamma \Delta V - C_{OL})$  increases when the value of  $\gamma$  increases, and the cooperation gains of the financing institution will drop. According to the coordinate formula of saddle point E, it can be drawn that with increase of value of  $\gamma$ , Point E moves towards the bottom right. With other conditions unchanged, the relation between the value of  $\gamma$  and other parameters should be considered. As the prerequisite of cooperation between the two is that the gains resulting from cooperation are no less than the sum of the initial investment cost and opportunity cost  $(C_{oi} + R_i)$ . Hence, Formulas 11 and 12 are workable at the same time.

$$(\gamma \Delta V - C_{OL}) > R_L \tag{11}$$

$$[(1 - \gamma)\Delta V - C_{OF}] > R_F \qquad (12)$$

By combining the equations:

$$\frac{C_{OL}+R_L}{\Delta V} < \gamma < \frac{\Delta V - C_{OF}-R_F}{\Delta V}$$
(13)

Also:

$$\Delta V \ge (C_{OL} + R_L + C_{OF} + R_F) \tag{14}$$

It can be drawn that if the value of  $\gamma$  is out of

 $\left[\frac{C_{OL}+R_L}{\Delta V}, \frac{\Delta V-C_{OF}-R_F}{\Delta V}\right]$ , one game party will choose

non-cooperation because the cooperation gains can not compensate for the cost.

(3) Discussion about value selection of  $C_{OL}$ ,  $C_{OF}$ 

As  $C_{OL}$ ,  $C_{OF} > 0$ , there will be invest cost, which means that either party unilaterally choosing "coordinated development" strategy will face potential investment risk. When other factors are not considered, there is no possibility for unilateral "coordinated development" in the game.

By analyzing the coordinate formula of saddle point E, it can be drawn that with increase of the value of  $C_{OL}$ ,  $C_{OF}$ , the coordinate of Point E moves towards the upper right. It can be seen in Fig.1 that the area of Zone ABEC goes up and that of Zone CEBD will go down. The possibility of system evolving towards the stability point D (1, 1) will increase. The change of  $C_{OL}$ ,  $C_{OF}$  is also reflected by the requirements of the system for value selection of  $\Delta V$ . As the value of  $C_{OL}$ ,  $C_{OF}$  increases, the minimum value of  $\Delta V$  value required by the system will increase. At this time, the investment cost required for coordinated development of the supply chain finance by the two parties will be higher and the possibility of coordinated development of the two

International Journal of Education and Management

will be lower.

(4) Discussion about value selection of  $C_L, C_F$  and  $R_L, R_F$ 

The reason to consider value selection of  $C_{L}, C_{F}$ and  $R_L, R_F$  is the change of unilateral gains resulting from the party choosing the "coordinated development" strategy when the two parties have different choices. In particular, the  $C_L, C_F$ represents the extra cost loss and  $R_L, R_F$  represents extra gains. If  $C_L, C_F > 0$ ,  $R_L, R_F > 0$ , which the party choosing "coordinated means development" strategy needs to pay extra cost, the other party will obtain extra gains. If  $C_L$ ,  $C_F < 0$ ,  $R_L, R_F < 0$ , the party choosing "independent development" strategy will have negative extra gains and the other party will have negative extra cost. In essence,  $C_L, C_F$  and  $R_L, R_F$  are potential impact resulting from information asymmetry. Due to existence of such cost or gains, the two game parties will deviate from "cooperation" strategy and choose the more hoggish "non-cooperation" strategy.

1)  $C_L, C_F > 0$ , when the value of  $C_L, C_F$  increases, the coordinate value of Point E increases and moves towards upper right. Based on Fig.1, the area of Zone ABEC goes up and that of Zone CEBD will go down. The possibility of system evolving towards the stability point D(1, 1) will increase, and vice versa. It is clear that the investment cost will be high if the two independently choose "coordinated development" and the possibility of choosing "coordinated development" will be lower. 2) $C_L$ ,  $C_F < 0$ , which means the gains resulting from one party choosing "coordinated development" increase, and the cost does not increase. In such a case, comparison of value selection of  $C_L, C_F$  and  $C_{OL}, C_{OF}$ is required. If  $-C_L > C_{OL}$ and  $-C_F > C_{OF}$ , the two parties will choose "coordinated development" strategy whatever the other party chooses, and there will be win-win results whatever. If only one of  $-C_L > C_{OL}$  or  $-C_F > C_{OF}$  is workable, then the workable party will not care about the strategic choice of the other game party and will choose "coordinated development".

Meanwhile, according to Fig.1, when the absolute value of  $C_L$ ,  $C_F$  increases, the value of Point E decreases and moves towards bottom left. The area of Zone ABEC will decrease and that of Zone CEBD will increase, with the possibility of system evolving towards Stability Point D (1, 1) increasing. As a result, if cooperation will result in potential

gains ( $C_L, C_F$ ), with increase of potential gains ( $C_L, C_F$ ), the possibility of coordinated development of the two will increase.

 $3R_L, R_F > 0$ : It can be drawn from Phase Diagram I that when the value selection of  $R_L, R_F$  increases, the value of Point E will increase and move towards upper right. The area of Zone ABEC will increase and that of Zone CEBD will decrease, with the possibility of system evolving towards Stability Point A (1, 1) increasing. Otherwise, with decrease of the value of  $R_L, R_F$ , the result will be opposite. As a result, with greater extra gains for both parties choosing "independent development" strategy, the possibility of cooperation between the two will be lower.

4)  $R_L, R_F < 0$ , which means the party choosing "non-cooperation" obtains negative gains due to its egoistic behavior. This is punishment. In such a case, cost  $C_L, C_F$  will be paid for "coordinated development", and cost  $R_L, R_F$  will be paid for "independent development". Comparison of  $C_{Oi}$ and  $R_i$  shows that if  $C_{0i} < R_i$ , which means that the loss resulting from "independent development" is higher than the initial investment, the two parties will choose to make initial investment to jointly develop the supply chain finance business. If  $C_{0i} > R_i$ , which means the loss resulting from "independent loss" is lower than the investment, it can be drawn based on the coordinated formula of Saddle Point E that when the absolute value of  $R_L, R_F$  increases, the coordinate value of Point E will decrease and the Point E will move towards bottom left. The possibility of the system moving towards stability point D (1, 1) will increase. As such, if punishment R<sub>L</sub>, R<sub>F</sub> is posed upon the party "independent development", choosing the non-cooperation party will evolve towards cooperation, and the game evolutionary result will evolve towards bilateral cooperation.

2. Impact of initial status of game on system evolution

Whether the logistics enterprise and financing institution move towards coordinated development and the moving speed is closely related to the initial status of the game. As indicated previously, one of the four quadrants in which the initial point is located determines the convergence status and speed. The percentage of members of the two initially choosing "coordinated development", i.e., the deviation degree of value selection of  $\alpha, \beta$  will directly impact the convergence speed of the system. If the value of  $\alpha, \beta$  is great, the system will converge quickly at Point D (1, 1). If one of the

values of  $\alpha, \beta$  is greater, it will take a longer time for the group with smaller value to converge towards Point D (1, 1), and its evolution speed will be low. The study findings of Wang Zhenzhen (2012) demonstrated the impact of the initial evolutionary game status on the progress of system evolution. [9] If the values of both  $\alpha, \beta$  are small, and their values fall within Zone ACEB in Fig. 1, the evolution result of the system will eventually converge at Point A (0, 0), i.e., (Independent development, independent development). To sum up, the initial location of the coordinated development system of the two poses impact on the stability status and evolution speed of the evolutionary game.

### 4.ANALYSIS OF PRACTICAL SIGNIFICANCE OF GAME MODEL

The game model shows that the change of value of different parameters will pose different impact on the final result of evolution. The study findings are of great interpretation significance for the cooperation evolution process of the logistics enterprise and financing institution in the supply chain finance business field.

In the practice of enterprises,  $C_L, C_F$  are indeed in existence. Due to information asymmetry between the logistics enterprise and financing institution, a principal-agent relation is formed between the two, which may result in moral risk. Existence of the principal-agent relation does not only result in loss  $C_L, C_F$  to the information disadvantage party, and will result in extra gains R<sub>L</sub>, R<sub>F</sub> for the other party. Take the mortgage financing business for example. The logistics enterprise is commissioned by the financing institution to occupy and monitor the pledge. The most common risk in the business operation process is repeated pledge or repeated mortgage. One of the major reasons for such business risk is that the logistics enterprise and lender conspire to divest the loans to financing institution. In such a case, the logistics enterprise obtains extra gains  $R_L$ , while the financing institution faces greater business risk, and the cost of  $C_F$  is increased. This is the reason for outburst of problems in the supply chain finance business of logistics enterprises such as CMST and China Railway Materials Co., Ltd. At the same time, with increased business risk of financing institution, the non-performing loan ratio of domestic commercial banks in 2014 increased by 0.08 percentage point compared with that at the end of 2013. The increment of bad loans of the bank mainly resulted from steel and iron trading and small and micro enterprises, and the main financing method of iron and steel trading is the supply chain finance.

Though the information asymmetry can be used in

the short term to bring extra gains, in the long run, it is not good for development of the enterprise itself. Once the financing institution becomes aware of the risk, it will impose punishment on logistics enterprises such as business reduction and cooperation termination. However, the competitor may actively increase business investment and gain competitive advantages by information system and monitoring visualization construction. Such enterprises assume the investment cost Col and possible extra cost  $C_L$ . However, they reduce the monitoring cost and potential risk of financing institution via such investment, and this is beneficial for  $banks(R_F)$ . According to the dynamic evolution process, when the financing institution becomes aware of the investment value, they tend to cooperate with those logistics enterprises. The investment of logistics enterprises, in such a case, will result in long-term gains  $\pi_L + \gamma \Delta V - C_{OL}$ . Apparently, the financing institution having the business initiative may actively cooperate with the logistics enterprises, and support development of the logistics enterprises via technical and capital support. The  $R_L$  obtained by the logistics enterprise is the development fund invested by the financing institution in $C_F$ .

In the initial stage of supply chain finance business development, the financing institution is dominant. The logistics enterprise may only obtain gains slightly higher than that of traditional logistics services. With growth of strength and business value of the logistics enterprise, value of  $\gamma$  will go up. The parameter  $\Delta V$  refers to the joint gains of the two parties. In the early stage of business development, the value of  $\Delta V$ is high. As industrial competition becomes more intense, the value of  $\Delta V$  drops, and the evolution results move toward (0, 0). The possibility of coordinated development of the two decreases. In the practice of enterprises, the financing institutions and logistics enterprises constantly carry out business innovation for higher  $\Delta V$ . As business innovation becomes increasingly difficult, unilateral innovation will have higher opportunity cost. In such a case, joint innovation becomes very important.

#### 5. CONCLUSION

The joint development of supply chain finance business by logistics enterprise and financing institution improves the comprehensive service capacity and profitability of the logistics enterprise. This paper analyzes the impact of change of different factors on the stability of game results through the evolutionary game model of joint

#### International Journal of Education and Management

development of supply chain finance business by logistics enterprise and financing institution. The model results indicate that the coordinated development of the two is characterized by "path dependence". The logistics enterprise should reduce investment cost of cooperation with financing institution, improve business quality and profitability through various ways, so as to increase the possibility of coordinated business development and foster sound development of the supply chain finance business.

#### ACKNOWLEDGEMENT

The research is supported by the National Natural Science Foundation of China (71673064), Social Sciences Planning Project of the Panyu Polytechnic(2016SK007), Humanities and Social Sciences Planning Project of the Ministry of Education (13YJC630240), Soft Science Project of the Science and Technology Program of Guangdong Province (2013B070206058, 2015A070704054), Outstanding Youth Fund Project of Education Department of Guangdong Province (2014WTSCX040), Soft Science Project of the Science and Technology Program of Guangzhou (2014Y430009).

#### REFERENCES

[1]Li Yixue, Wang Shouyang, Feng Gengzhong. A New Discipline Orientation – A Brief Introduction to Practical Development and Theory of Logistics Finance. *System Engineering Theory and Practice*, pp. 1-13, January 2010.

[2]Chod J, Rudi N. Strategic Investments, Trading, and Pricing Under Forecast Updating. *Management Science*, Vol.52, pp. 1913-1929, December, 2006.

[3]Sheng Xin, Chen Gongyu. "Study on Strategic Selection of Supply Chain Finance Business Innovation – From Perspective of Logistics Enterprise Cluster". *Technoeconomics & Management Research*, pp. 14-18, November 2015. [4]Xue Shiyu. Evolutionary Game Theory under Bounded Rationality Condition. *Journal of Shanghai University of Finance and Economics*, Vol.5, pp. 3-9, March, 2001.

[5]Wang Wenbin. Current Situation and Prospect of Study on Evolutionary Game Theory. *Statistics and Decision*, pp. 158-161, March, 2009.

[6]Friedman D. Evolutionary games in economics. *Econometrica: Journal of the Econometric Society*, pp. 637-666, 1991.

[7]Jiang Qiyuan. *Mathematic Model*. Higher Education Press, Beijing, 1998

[8]Wang Zhenzhen, Chen Gongyu. Evolutionary Game Analysis of Linkage Development between Manufacturing Industry and Logistics Industry. *Chinese Economic Issues*, pp. 86-97, February, 2012.

### An Empirical Analysis of Influencing Factors about Abnormal Returns in Stock Market

Yang Yu

#### Capital Normal University, Beijing, China

Abstract: The source of abnormal returns can determine whether the stock market is healthy or not. The paper significantly analyzes the influence about abnormal returns of stock investment in China's A-stock market though three factors of the operating performance, growth and price manipulation of listed companies, thus finding that the main source of abnormal returns is price manipulation. Also, it puts forward policies and recommendations to strengthen the construction of information disclosure system according to the present situation.

Keywords: abnormal returns, influencing factors, price manipulation, information disclosure

#### 1. INTRODUCTION

Abnormal Return refers to the part that actual investment return of the stock deducts the normal return. Because of the limitation of the data source. this paper only analyzes the annual abnormal return. The actual return usually includes two parts: stock spread return and dividend distribution return. The cash dividend of A-stock market is very small and negligible. The stock spreads are calculated only. The normal return is the anticipated stock investment return under a specific market environment. In the existing literature, normal return is generally replaced with three estimated values: the mean value of actual stock return, the calculated values of investment return of stock market index and the estimated model of linear regression. There may exist large errors using actual stock returns to replace normal returns. It is closer to the actual situation to use linear regression model for calculation. But it is difficult to carry on estimation mode on more than 1000 listed companies in a short period. Therefore, this paper adopts the securities market index returns as the estimated value and calculate the abnormal returns of stock investment under the condition. The calculating method is as follows:

In the formula, R is the actual return of the stock investment; IR is Shanghai Stock Exchange (or Shenzhen Stock Exchange) A-stock composite index return; AR is abnormal return; Pc is initial stock price; Pm is end stock price.

$$R = \frac{(P_m - P_c)}{P_c} \times 100 \qquad (1)$$

$$4R = R - IR \tag{2}$$

### 2. INFLUENCING FACTORS OF ABNORMAL RETURN

There are abnormal returns in stock markets at any time in any country, but there are many reasons for the existing abnormal returns. In the healthy development of the stock market, abnormal returns are mainly derived from the company's operating performance and good growth. And in stock market with excessive speculation and manipulation, abnormal returns mainly come from price manipulation. In order to study the main influencing factors of abnormal returns in A-stock market, this paper divides the influencing factors into the following three types.

A. The factor of operating performance

The intrinsic value theory holds that the stock price is the discounted value of company's future cash flow. From the point of view of static analysis, blue chip returns per share should be higher than the average level of investment return, that is, abnormal returns are higher. So operating performance is one of the factors affecting abnormal returns. In order to verify whether the operating performance is a factor influencing the abnormal returns of A stocks, this paper chooses returns per share (X<sub>1</sub>) and return rate of net assets (X<sub>2</sub>) as the indicators of business performance. Although returns per share don't represent the contributions, most investors dividend are accustomed to measure the company's returns per share by operating performance, so as to make the evaluation on the company. So under normal circumstances, returns per share often serve as one of the common investor decision-making basis. Net assets yield not only reflects the profitability of the company's net assets, but also becomes one of the important indicators investors often consider.

B. The factor of company growth

The securities investment theory believes that buying stocks is to buy the future. The PE ratio of companies with good growth will continue to decrease with returns per share increasing year by year. So company with good growth should have a better return on investment and the company will obtain high abnormal returns in annual year. In order to test the influence of the growth of listed companies on abnormal returns in A-stock market, the paper selects dynamic index, profit growth rate

#### International Journal of Education and Management

 $(X_3)$  and return and growth rate of net profit  $(X_4)$  as measuring indexes of company growth.

The returns growth rate is the ratio of the net profit growth of the company in the year to the total profit of the previous year. The growth rate of return on assets refers to the ratio of the growth rate of the return on assets to the previous year's net asset yield.

C. The factor of stock price manipulation

Manipulation can change the supply and demand relation of the manipulated stock, thus affecting the change of the stock price. It can be seen that manipulation can become one of the factors influencing the abnormal return. In the specification of the stock market, the measuring indicator of stock price manipulation factors can be designed according to investors' transaction records.

But the situation of China's A-stock market is very complex with the trading behavior of manipulator not opening. In addition to most of the newly established securities investment fund and individual professional investment institutions, the majority of institutional investors is through the covert stock account.

This phenomenon has been an open secret in the stock market, and China Securities Regulatory Commission found and published the similar facts during the investigation on stock manipulation of Yi An Technology. The concrete practice is that funds holders involved in the transaction open capital accounts in one or more of the securities business department and at the same time they use a large number of individual resident identity cards to open stock trading accounts, thus connecting these (hundreds to thousands) stock accounts with one or several funds accounts.

When buying stocks communicated by natural person account, the capital is automatically drawn by the agency account, and when selling the stock, the money received automatically return to the financial institutions.

This approach is a kind of illegal behavior, the 74th regulation of People's Republic of China securities law is: "In the securities trading, it is prohibited for legal person to open bank accounts for securities trading." But so far, this phenomenon has not been fundamentally changed. In this case, it is very complicated to distinguish the effects of institutional investors' trading behavior on stock prices (including manipulation), because it is difficult to judge whether natural transaction accounts are actually used by institutional investors.

This paper designs and proposes to adopt the rate of change in number of shareholders  $(X_5)$  as the

measuring index of manipulation factors. The rate of change in the number of shareholders refers to the ratio of the number of shareholders decreasing or increasing in the year to the number of shareholders at the beginning of the year, and the formula is as follows.

$$X_5 = \frac{(X_m - X_c)}{X_c} \times 100$$
 (3)

In the formula,  $X_5$  is the rate of change in the number of shareholders;  $X_m$  is the number of shareholders at the end;  $X_c$  is the number of shareholders at the beginning.

This measuring index is based on the analysis of the investor structure in China's A-stock market. At present, the trading body of China's A-stock market consists of two investors: institutional investors and individual investors.

The investor structure of each year and the market value of the stocks held by each household are shown in Table1. It can be seen the average market value of individual investors is less than 30 thousand yuan. This is also confirmed in the survey of the Securities Sales department. At present, according to the scale of funds, the domestic brokerage securities business departments divide individual investors into individual (the amount of funds 100 thousand yuan), the middle (the amount of funds 100 thousand yuan to 500 thousand yuan) and the large (the amount of funds in general more than 500 thousand yuan). Individuals under 100 thousand yuan are a major component of the market as a whole.

Table 1 Average Circulation Market Value

Year	Investors	Individual Investors	Institution Investors	Market Value
1999	2272.23	2264.67	7.56	18087.68
2000	2943.32	2931.20	12.12	27678.90
2001	3326.93	3311.07	15.87	23101.90

The present situation of investor structure and investment behavior determine the number of shareholders, the change of the number of shareholders and the number of stocks held in each stock account.

Although institutional investors use individual accounts to make their funds and stocks less subtle in each account, the size of the funds under each account is still much larger than that of the average individual investor. Therefore, if the stock of a company is mostly owned by institutional investors, the number of shareholders of the company will be less and vice versa. If an investment institution continues to buy and hoard a stock, then the number of shareholders of the company will continue to reduce and the change rate is less than zero. If institutional investors, the number of shareholders of the number of shareholders of the company will gradually

#### 110

increase and the rate of change in number of shareholders is greater than zero. Therefore, the rate of change in the number of shareholders can be used as a measuring index of institutional investor's trading direction.

#### 3. TEST METHOD OF INFLUENCING FACTORS OF ABNORMAL RETURNS

In summary, influencing factors of abnormal returns may include operating performance, company growth and stock price manipulation.

In order to distinguish which factor plays the main role in A-stock market, the paper selects returns per share  $(X_1)$  and the rate of return on net assets  $(X_2)$ as measuring indexes of operating performance; returns growth rate  $(X_3)$  and the rate of growth and return on net assets  $(X_4)$  as measuring indexes of company growth; the rate of change the number of shareholders  $(X_5)$ as measuring index of manipulation factor. The abnormal return model of stock investment is:

$$AR = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon$$
 (4)

Among them,  $\alpha$  is constants, and  $\beta_i$  are the regression coefficients of the above 5 factors,  $\varepsilon$  is

random term, and the above parameters are estimated by the least square method:

$$\begin{pmatrix} \alpha \\ \hat{\beta}_i \end{pmatrix} = (XX)^{-1} XY$$
$$\hat{\sigma}^2 = \frac{e'e}{n-k+1}$$

Among them,  $X = (1, X_1, X_2, X_3, X_4, X_5)$ , Y = (AR), e is the residual term, n is the sample size, and K is the number of measuring index.

After estimating the parameters, the following hypothesis can be proposed to test the significance of each measuring index to the dependent variable AR.

H<sub>0</sub>: 
$$\hat{\beta}_i = 0$$
, H<sub>1</sub>:  $\hat{\beta}_i \neq 0$ 

Given the level of significance, if the test statistics reject the original hypothesis, it is believed that the measuring index has a significant impact on the

abnormal return, otherwise, it is believed that the index does not affect the abnormal return.

This paper selects 404 companies listed by Shanghai Stock Exchange in 1999, accounting for 83.47% of the total number of listed companies (there are 484 companies listed by Shanghai Stock Exchange at the end of 1999); 401 companies listed by Shenzhen Stock Exchange, accounting for 89.11% of the total number of listed companies (there are 450 companies listed by Shenzhen Stock Exchange at the end of 1999); 450 companies listed by Shanghai Stock Exchange in 2000, accounting for 78.67% of the total number of listed companies (there are 484 companies listed by Shanghai Stock Exchange at the end of 2000) and 451 companies listed by Shenzhen Stock Exchange, accounting for 90.38% of the total number of listed companies (there are 484 companies listed by Shanghai Stock Exchange at the end of 2000) as the research samples.

The rest of the companies are not listed because of incomplete data. Data are respectively taken from the last trading day of 1998, 1999 and 2000.

The number of shareholders, the distribution of shareholders, returns per share, the profit after tax and return rate of net assets and other data come from (www.cninfo.com.cn and www.sse.com.cn. The stock price data and the number of shareholders in listed companies of Shanghai Stock Exchange are provided by Shenyin Wanguo Securities Research Ltd.. Various raw data points are one-to-one correspondent.

#### 5. THE RESULTS AND RECOMMENDATIONS

The enterprise itself is the principal part of the annuity system, a way to assume the responsibility of old-age security. There are three types of corporate annuity systems including corporate annuity scheme, industry annuity scheme and national annuity scheme.

The respective tests of  $\beta$  of abnormal return models in Shanghai and Shenzhen in 1999 and 2000 are shown in Table 2.

Model	R <sup>2</sup>	Test value( $\alpha$ =0.05)				
Widder	ĸ	β1	β <sub>2</sub>	β <sub>3</sub>	β4	β <sub>5</sub>
Shanghai1999	0.068	-0.084	1.791	0.174	1.114	-3.477*
Shanghai2000	0.325	-4.059*	2.877*	3.412*	-3.180*	-11.638*
Shenzhen1999	0.191	2.725*	1.214	2.214*	0.432	-6.383*
Shenzhen2000	0.400	-2.782*	1.252	1.788	-0.935	-9.648*

Table 2 The Test Results Of Regression Coefficients Of Market Abnormal Return Model

Note: "\*" means the significance level is below "0.05", rejecting the original hypothesis. The test results show that the influence coefficient  $\beta_1$  of returns per share passed the significant test in Shanghai in 2000 and in Shenzhen in 1999 and 2000, but  $\beta_1$  values in the four models are negative, that is, abnormal returns have negative correlation with returns per share.

The influence coefficient  $\beta_2$  of the net asset returns only passed the significance test in Shanghai in

2000, and the other models did not pass the significance test. Overall, the operating performance of the current A stock is not the main source of abnormal returns.

The influence coefficient  $\beta_3$  of company's returns growth rate in Shanghai in 2000 and Shenzhen in 1999 passed significant test but failed in Shanghai in 1999 and Shenzhen in 2000. The influence coefficient  $\beta_4$  of the rate of return on net assets growth rate passed the significant test only in Shanghai in 2000, and other models failed to pass the test. So it can be seen that a small part of abnormal returns come from growth with limited contribution.

The influence coefficients  $\beta_5$  of rate of change in the number of shareholders  $(G_B)$  in the above four models all passed with big T value, which shows that abnormal returns of China A-stock market in 1999 and 2000 mainly came from price manipulation. The effect of company's operating performance and growth on stock returns is secondary.

According to the above empirical analysis, the recommendations of the paper are: strengthen the construction of transaction information disclosure system and suppress the trade-based manipulation.

At present, the focus of information disclosure of domestic securities markets is the mandatory information disclosure of listed companies, which can better suppress information-based manipulation.

But it cannot be fully played for trade-based manipulation. According to the empirical analysis results in this paper, trade-based manipulation of A-stock market is very common. Therefore, it is one of the imperious tasks to study the system of trading information disclosure so as to effectively curb market manipulation and ensure the development of market norms.

#### REFERENCES

[1]Griffin Mark W. "Why Do Pension and Insurance Portfolios Hold So Few International Assets? " The Journal of Portfolio Management, vol.23, pp. 89-96, July 1999

"A Unified Theory of [2]Hong, J. Stein. Underreaction, Momentum Trading and Overreaction in Asset Markets ."Journal of Finance, vol.54, pp. 2143 - 2184. July 1999

[3]Shefrin, Statman. "The disposition to sell winners too early and ride losers too long: Theory and evidence," Journal of Finance, vol. 40, pp. 777-790, May 1985

[4]Bostock Paul, Wolley Paul, Duffy Martin. "Financial "Duration-Based Asset Allocation, Analysts Journal, vol.2, pp. 53-66, October 1989.

[5]Charel Jones, Sabri Oncu, Aamir, Sheikh Barra, "Developing and Implementing Risk Management Systems," Journal of Investing, vol.4, pp. 122-141, October 2000.

[6]Thaler. "Mental accounting and consumer choice," Marketing Science, vol. 5, pp. 199-214, September 1985.

[7]De Bondt. "A portrait of the individual investor," European Economic Review, vol. 42, pp. 831-844, September 1998.

[8]Barberis, Nicholas, Ming Huang, "Prospect theory and asset prices," Quarterly Journal of Economics, vol. 116, pp. 1-53, September 2001.

Subrahmanyam. [9]Daniel, Hirshleifer. "Overconfidence, Arbitrage, and Equilibrium Asset Pricing," Journal of Finance, vol. 56, pp. 921-965, September 2001.

#### 112

# Research on Problems and Countermeasures of Corporation Recombination in China

#### LU Xiaojun

College of Applied Technology, University of Science and Technology Liaoning, Anshan, Liaoning, China

Abstract: This article in-depth analysis our country corporation recombination problem, in view of China's corporation recombination in the strategic goals, the degree of marketization and standard operation, property transactions and later integration and so on the problem of the comprehensive analysis, and put forward their views and suggestions.

Keywords: Corporation recombination; Problems; Countermeasures

#### 1. INTRODUCTION

As the global economic recession impact on China's economy gradually falling external demand will increase, which for many years has been the strong external demand growth and investment continued to expand conceal overcapacity problem surfaced.

In China, due to the long-term influence of the economic system, political system and other factors, the restructuring of this enterprises development strategies has not been well adopted. But with the further deepening of economic reform, the restructuring of this enterprise innovation more and more attention by the Chinese business community.

China's government has also introduced various of policies and measures to promote and guide the enterprises to restructure. However, for China's enterprise restructuring, there are still the following problems.

#### 2. PROBLEM EXISTING IN CHINA ENTERPRISE RESTRUCTURING

2.1 Corporate restructuring strategy without clear goals

Now lots of corporate restructuring is the scale of expansion in China, just keep the property right transfer of the restructuring process, and no real assets reorganization and management chain, and the effective integration of resources, does not implement the national industrial structure adjustment and optimal allocation of resources, did not achieve the desired goal of effective coordination, resulting in restructuring and found not only for their own benefit, but to increase their own liabilities.

2.2 Excessive administrative intervention

Central Government institutional reform for the relationship between Government and enterprises has played a positive role. However, there is generally some corporate restructuring issues between all levels of Government and corporate relations. In the restructuring of enterprises, exercise, how the government exercises and plays its role is essential. The participation of the government, making up for the lack of market intermediary forces for the early carry out of corporate restructuring , and reorganizing the interests of related parties, playing a guiding role in the reorganization. But on the other hand, the government's excessive participation also produced a certain Negative effect<sup>[1]</sup>.

2.3 Restructuring the legal system is not perfect

In order to promote and standardize corporate restructuring, since the 1980s,, the state has introduced a number of legal norms, forming a corporate restructuring of the legal system of adjustment, to a certain extent to promote the development of enterprise restructuring. However, compared with the developed market economy countries, China's lack of legislation in the restructuring of enterprises, there are many shortcomings, especially in labor and social security, finance and taxation, finance and other supporting laws. These legislation most is to adjustment State-owned economic sector which facing society public policy and the law are rarely; involved enterprise of legal, and regulations scattered to appeared in sector regulations or Ordinance in the both not sound also lack can operation sex, far cannot specification diversification, and variability of enterprise restructuring behavior, Form a barrier to corporate restructuring activities; the effectiveness of the existing adjustment regulations of corporate restructuring is still relatively low, no special adjustment for corporate restructuring law, which made in the restructuring of enterprises is often not or ignoring the law, due to the legal uncertainty and enable enterprises to have unreasonable expectations, affecting the smooth progress of restructuring activities.

2.4 Restructuring of interests are difficult to coordinate

For enterprise departments, the main reason is the impact of the pattern of interests. In the mature economy conditions, market whether the reorganization of enterprises, decision-making power lies in the enterprise itself, that is to say it's by the owner of the enterprise to make a reorganization decision, reorganization is only a business market behavior. In the current enterprise, especially the reorganization of state-owned enterprises, due to the property rights is not clear, the reorganization of both enterprises, local governments, industry authorities, the central government have different degrees of decision-making power and influence, business restructuring need to go through a series of bargaining, It is difficult to reach a consistent result, thus making the interests of the parties difficult to coordinate. From the perspective of interests, the reorganization and reorganization of enterprises will

make some legal representative of the enterprise lose the decision-making power of the senior management personnel such as separation, merger, termination, profit, salary, fund allocation scheme and deputy management, and also affect the enterprise management personnel, especially the senior management. Their profit distribution, work arrangements, benefits also will be effected. If the reorganization of damage to their interests, these people must resist the reorganization.

2.5 Property rights trading market is underdeveloped Market-oriented enterprise restructuring in terms of value is the capital management, and capital management needs to have a well fully developed capital market,however, China's current capital market is still has a series of problems, such as lack of development and the development is not standardized. Comparing with the current there is a considerable gap between<sup>[2]</sup>.

Economic development and institutional changes and the needs for the restructuring of enterprises. This is not only reflected in the national securities trading market is small in Shanghai and Shenzhen, it can not meet the hundreds of thousands of enterprises in the country in the direct financing and asset restructuring needs, but also the performance of China's property rights trades variety of single, lack of level. Although a period of time, countries have to establish a number of property rights trading center or exchange, but many property rights trading market in the "no market" state [1]. At the same time, property rights transactions are not standardized, leading to the loss of state assets, the development of intermediaries is not standardized, the degree of marketization is not high, financial innovation is not enough, institutional investors lack of property rights trading market construction is imperfect.

2.6 Lack of effective integration management after restructuring management

From the practice of corporate restructuring in China, most of the corporate restructuring failed. In addition to institutional, policy, legal and other factors, there are the following five aspects : 1) corporate restructuring is mainly asset restructuring, debt restructuring or reorganization of property rights, the lack of deep-seated 2, the integration of products, technologies, capital, organization and other aspects of organic integration, a variety of resources are not fully effective use, so that the reorganization is difficult to achieve complementary advantages and strengths to strengthen the Purpose; 3) some enterprises even after the reorganization of the management, business processes, human resources, corporate culture proposed integrated management measures, but the actual operation of the lack of persistence and consistency, so that integration does not achieve the desired results; 4) lack of effective 5) After the reorganization of the enterprise, the group did not adjust the functions and functions of the headquarters in a timely manner, lack of organizational integration and human resources integration, resulting in management dislocation<sup>[3]</sup>.

3. POLICY SUGGESTIONS ON REGULATING THE REORGANIZATION OF CHINESE ENTERPRISES

3.1 Clear reorganization of the strategic objectives

Government departments to strengthen policy guidance and coordination to optimize the industrial structure and allocation of resources for the direction of the implementation of integrated strategy to increase the intensity of corporate restructuring, in particular, to increase the policy support to the advantages of enterprises to guide the limited resources to the advantages of enterprises Focus on encouraging advanced technology, management norms, well-funded enterprises reorganization, grasping large and small, do the preparation of enterprise restructuring, change the mode of development of enterprises to improve the overall competitiveness of China's enterprises. Enterprises to carry out mergers and acquisitions before the first to understand their position in the industry and the lack of competition, improve these areas is the need to solve the upstream or downstream business, or enterprises urgently need to further expand the existing scale of production, to achieve large-scale operation; Enterprises to clear whether they really have a restructuring needs, after the reorganization of the target business can really bring their own imagination of the proceeds, the final business to carefully consider the integration of the difficulty after the reorganization. On this basis, enterprises can take the situation of forward integration, backward integration, horizontal integration and other mergers and acquisitions strategy to achieve their own acquisition goals.

3.2 Adhere to the direction of the market

The development direction of China 's enterprise reorganization to the direction of market development. In the process of promoting the reorganization of enterprises, we must change the concept, establish the socialist market economy thought, respect the law of the market economy, prevent and avoid the use of administrative means to intervene in the enterprise reorganization simply, or must adhere to the market is the guidance of resource allocation.

3.3 Improve restructuring laws and regulations

China should follow the tide of international reorganization and mergers and acquisitions, in the integration of the existing legal provisions on the basis of research and development of specialized "corporate restructuring law" to regulate and promote mergers and acquisitions of Chinese enterprises. In this way, on the one hand, it can eliminate the contradictions and conflicts in the existing legal provisions, make up the gaps in the existing legal provisions, and form a harmonious and scientific corporate reorganization legal system with the law as the core. On the other hand, Law "of the high level of effectiveness, you can break through the existing laws to hinder the reorganization of the provisions of the enterprise, specifically for the reorganization of the special provisions of the enterprise, which in the legislative technology can simplify the program and

#### save costs, with greater operability<sup>[4]</sup>.

3.4 Effective means to resolve the conflict of interests in the reorganization

Too much interest to resolve the dispute and "give way" in order to promote the success of restructuring and restructuring of the key enterprises. We should from the economic development point of view, do not pay too much attention to the interests of the sector, regional interests, personal interests. From the perspective of business managers, improve the quality of enterprise managers, not meet the requirements of modern enterprise management, can eliminated, otherwise, only he after the reorganization of enterprises will appear for the phenomenon of change. For enterprises in charge of the department, the head of the enterprise shall be the head of the industry, cancel the department in charge of the enterprise, strengthen the tax, prohibit the collection of management fees in any form, and strengthen the audit of the manager, to ensure that the integrity and fairness, Business to create a good market environment. But also to safeguard the fundamental interests of the majority of workers and long-term interests. In the process of enterprise reorganization, the trade unions should assist and supervise the major decision-making issues such as the enterprise restructuring plan, the merger bankruptcy scheme, the staff diversion resettlement plan and so on, and promptly express the opinions of the masses of the workers and the public. Supervise the enterprises in the implementation of restructuring, the total assets of enterprises, total liabilities, net assets, net profit and other major financial indicators of financial audit, asset evaluation results, open to the masses of workers to accept the democratic supervision of the masses of workers. Enterprises to reorganize, according to the law to implement the workers' participation, right to know, decision-making and supervision, and effectively safeguard the legitimate rights and interests of workers. When the enterprise is reorganized, it is necessary to consider and arrange the resettlement and economic compensation of the employees.

3.5 To develop the property rights trading markets The development of property rights trading market is the key to the reorganization of marketization. The essence of enterprise reorganization is the free trade and movement of property rights. There is no complete property rights trading market, it is difficult for the performance of enterprises and prospects for the market-oriented evaluation.

In order to meet the needs of corporate restructuring, we must vigorously cultivate and develop a variety of levels, a variety of forms of capital markets to meet the different levels and types of corporate restructuring of the financing needs. Among them, the most important thing is the development of property rights trading market. Because, from the practice point of view, China's corporate restructuring in addition to a small number of listed companies can be completely through the securities market to carry out, the vast majority of corporate restructuring are related to non-standard property rights transactions, property rights around the market is also In order to meet this need to set up and developed, but the current property rights trading market in China there is the development of non-standard, chaotic problems, can not meet the needs of state-owned enterprise restructuring, should strengthen the legal system, regulate and promote property rights The development of the trading market<sup>[5]</sup>.

In view of the current problem of China's securities market, we should base ourselves on the market-oriented promote thinking, vigorously financial innovation, increase the variety of transactions, so that enterprises can reorganize more financial instruments can be used at the same time, efforts to cultivate institutional investors, social idle funds Focus on the hands of institutional investors, which can promote the stability and development of the securities market, but also play the institutional investors in the reorganization of corporate governance and improve the role of corporate governance structure. In addition, for China's securities market, there are illegal acts of law enforcement should strictly enforce the law, increase the intensity of the fight for the development of capital markets to lay a good foundation. Therefore, to promote the reorganization of China's state-owned enterprises, we must learn from the Western countries mature capital market experience, vigorously develop China's capital market.

3.6 Strengthening the integration after corporate restructuring Management

3.6.1 Reorganized the importance of management integration

Enterprise restructuring is the natural expansion of market forces, it leads the resources to the highest utilization of the field of transfer, the result is the improvement of resource allocation efficiency and enhance the competitiveness of enterprises. But the expected effect of the reorganization is not naturally occurring, after the reorganization of enterprises is not everything, the success of the reorganization process does not mean the success of the merger, it often requires a lot of work later. Therefore, the management of the reorganization of the enterprise is very important. The reorganization of the company due to the reorganization of the two sides in the background system of cultural concepts and other aspects of the existence of differences must be effective management integration. Reorganization has a very large risk of integration, strengthening management, often to promote the efficiency of the reorganization after an important guarantee<sup>[6]</sup>.

From the theory and practice point of view, enterprise restructuring in the integration of management is essential. From the concept of enterprise restructuring and integration management, integrated management is an indispensable part of enterprise restructuring. Through the analysis of some outstanding problems in China's reorganization practice and the comparison with the practice of corporate reorganization in the United States and Japan, it is concluded that the effective implementation of integrated management is an important factor affecting the success or failure of enterprises. Enterprise restructuring to effectively improve operational efficiency, not only to focus on integrated management, but also to effectively integrate management. Focus on integrated management and effective implementation of integrated management, corporate restructuring can be successful, on the contrary, ignore the integration of management, corporate restructuring will fail.

3.6.2 Strengthen the integration after corporate restructuring

Integrated management and corporate restructuring are indivisible whole, and activities the reorganization of the enterprise management has a great deal of particularity, the reorganized consolidated management phase is the most critical to the success of restructuring stage. Whether the reorganized assets are effective assets or ineffective assets, the reorganization of enterprises and the target be integrated, enterprise culture can the reorganization process accumulated huge cost and debt burden, the size of the enterprise itself and its industrial structure constraints and enterprises The ability of managers to put forward the integration of the reorganization of the management of a huge challenge, the combination of these factors brought about a huge risk after the merger, therefore, the effective implementation of integrated management of the successful reorganization of enterprises is of great significance.

The implementation of integrated management, including business integration, integration of human resources and corporate culture integration. Among them, the corporate culture plays an important role throughout the reorganization process.

First, business integration is the only way to reorganize parties to achieve integration goals and synergies. This includes both the unified management and operation of the core resources of people, finance and materials, as well as the unified deployment and optimization of production, operation and sales. In this integration process, will involve a lot of interest adjustment and process reengineering, involving a large number of institutional integration and personnel changes, will inevitably affect the restructuring of enterprises in many ways, must be through the integration of corporate culture, to achieve a smooth integration and achieve tangible results. Merger and reorganization will generally use the parent company's business system, which will form the corporate culture system in the main culture and sub-culture coexistence. To this end, we must adhere to the corporate culture and the personality of the compatibility, that is, the main culture and subculture coexistence and mutual promotion. The main culture guides the subculture, and the subculture relies on and serves the subject culture<sup>[7]</sup>.

Second, because the core human resources is the

#### International Journal of Education and Management

most valuable, the most dynamic and potential resources, in the core of the core human resources to conduct a detailed investigation on the basis of the basis of the reorganization of enterprises to establish a culture of growth. Through the core talent to provide career planning counseling, scientific design growth channel, improve the performance evaluation system, improve the various substances, the spirit of incentives, prompting them to complete the psychological transition as soon as possible to accept job changes in the new business to identify the positioning, Development direction, enhance the enterprise development and personal growth confidence. Second, to promote the integration of culture, by strengthening the reorganization of the core talent exchange between the parties to break the original small group awareness, so that the core talent to enhance the awareness of large groups and the recognition of new enterprises, enhance the team awareness between talent and Work together to promote the management of experience and technical knowledge of the dissemination of promotion<sup>[8]</sup>.

In short, corporate restructuring has become an important means for enterprises to achieve enterprise structure optimization and upgrading, enhance international competitiveness and an important means to enhance the international influence. But the corporate restructuring is not an easy task which requires both aggressive and seize the opportunities, be careful and secure, and grasp the opportunity, should not blind shots, causing serious losses.

#### REFERENCES

[1]Bai Lin . Second half of State-owned enterprises will usher in a new wave of mergers and trapped [J]. China business daily, 2015(05).

[2]In Eastern Hebei . Discussions on the problems of State-owned enterprise reorganization and integration [j]. Reform and management of enterprises , 2017 (02).

[3]Wu Xiangyun . Study on the issues related to corporate restructuring [j]. Legal system and society, 2016 (12).

[4]Xu Lu . Corporate restructuring under asset management risk analysis [j]. The financial services sector (Academic Edition), 2016 (01).

[5]Qi Jia Hui . Risks of enterprise merger and acquisition and restructuring [j]. Chinese and foreign entrepreneurs, 2016 (11).

[6]Luo Xiaoming . Analysis of merger and reorganization of enterprises and [j]. Management observation, 2016 (08).

[7]net jade . A study of assets reorganization of enterprises in China [j]. Economic and technology cooperation, 2016 (03).

[8]Xiao yaqing . Further speeding up industrial restructuring in cooperation between central enterprises [j]. Country report, 2016 (10).

# An Analysis of Differences in Applying Listening Strategies between Skilled and **Unskilled English Learners**

#### Zhang Ying

Dalian Ocean University, Dalian, 116023, China

Abstract: In this paper, the writer investigates the practical application of listening strategies in the English listening comprehension process between skilled English learners and unskilled English learners in Chinese universities. And an investigation and relative questionnaires have been conducted in school-wide English learners. A conclusion has been drawn on the basis of the statistics collected from related questionnaires and interviews. The findings show that most English learners are still unable to apply the appropriate strategies un English listening and need guidance from instructors.

Keywords: English learners, listening strategies, differences

#### 1. INTRODUCTION

As China's Belt and Road Initiative carries out, China is taking a larger role in global affairs, and therefore in China, there is an increasing need for talents good communication. While English listening at comprehension not only plays an essential role in academic success, but also a key role in language development and cross-cultural communication.

Language learning mainly relies on listening. Listening offers the aural input that functions as the basis for language acquisition and enables learners to interact in spoken communication. Listening strategies are the techniques or activities which contribute to the comprehension and recall of listening input. Listening strategies can be classified by how the listener processes the input. Therefore, there might be a great difference between the strategies that skilled and unskilled English learners apply in their listening comprehension process.

In this study, by using questionnaires, a data analysis has been conducted on a basis of the statistics collected from the survey by using SPSS. The aim of the study is to get a conclusion of what might be the differences between the listening strategies of skilled and unskilled learners while they are listening to English.

The subjects that are chosen for the questionnaires and study are from grade one non-English major students from Dalian Ocean University. 200 students have been investigated. These subjects are in different English levels and have attended a designed English listening test. Their listening English scores in Entrance Examination to College are used as a

reference as well to measure their English capabilities. A series of listening tests have been carried out and questionnaires and interviews are done directly after the tests. The questionnaire consists of 30 questions including the metacognitive strategies, social strategies and affective strategies. The findings show that most English learners are still unable to apply the appropriate strategies in English listening and need guidance from instructors.

The paper aims to analyze the differences between the strategies of skilled English learners (SELs) and unskilled English learners (UELs) apply while they are listening to English. And the conclusion is as follows

Table	1	The	Differences	in	Applying	Listening
Strateg	gies	s of SI	ELs and UELs	5		

	Groups	Mean	SD	t	Р
metacognitive	SELs	3.6542	0.2783	6.355	0
strategies	UELs	2.7321	0.5632		
cognitive	SELs	3.1251	0.2473	5.528	0
strategies	UELs	2.5183	0.4790		
social/affective	SELs	3.9071	0.4180	4.345	0
strategies	UELs	2.5802	0.4622		

First, it could be seen that metacognitive strategies are mostly applied by skilled English learners as well as planning, inference strategies and auditory representation. Strategic listeners also use metacognitive strategies to plan, monitor, and evaluate their listening. They plan by deciding which listening strategies will serve best in a particular situation. They monitor their comprehension and the effectiveness of the selected strategies. They evaluate by determining whether they have achieved their listening comprehension goals and whether the combination of listening strategies selected was an effective one.

Second, unskilled English majors use relative listening strategies at a comparatively low level. In fact, unskilled English learners have great difficulty in catching up with the listening materials as they are often stuck in the new vocabulary or complicated sentence structures. The strategies that unskilled English learners apply are commonly self-encouragement, selective and attention self-monitoring.

Third, skilled English learners subconsciously apply more listening strategies than unskilled English learners, especially in planning, background utilization, self-monitoring, self-evaluation, inference, and summarization.

Fourth, from the interviews, it is discovered that unskilled English learners have a psychological anxiety and nervousness even before the listening, which causes some unnecessary listening obstacles and mistakes in the listening process. Unskilled English learners are used to giving a hint to themselves that they have difficulty in English listening, which consists with the Pygmalion effect, the phenomenon whereby higher expectations lead to an increase in performance and vice versa.

As a result, effective language teachers could show students how they can adjust their listening behavior to deal with a variety of situations, types of input, and listening purposes. Teachers could help students develop a set of listening strategies and match appropriate strategies to each listening situation.

In order to get the most out of lectures and seminars, listeners not only need to sit, listen and think, they also need to prepare for them. Each lecture series is usually accompanied by a list of texts which listeners should read in advance of the lecture, which will familiarize listeners with the ideas and information they will hear. It also gives listeners the opportunity to check important vocabulary which is likely to be used in the lecture. In addition, it will help to remember the content better, as the more ways listeners access information, the more likely they are to learn it.

### 2.PREDICTING THE CONTENT OF THE LISTENING MATERIALS

As listeners listen, they unconsciously compare what they hear with what they already know, which allows listeners to identify what is new information and what is already known. In order to help this process, listeners could spend a few minutes before the listening, thinking about what they may expect to hear. Listeners could be also suggested focusing on the title of the lecture and think about what they already know, or questions that they would like answered.

#### 3. WHILE LISTENING

Listening is an active process. Selecting what is important or useful .Listen for signposts which tell

#### International Journal of Education and Management

you what the lecturer thinks is important, e.g. "There are three key points ...", "On the other hand ...", "What's more, ...". Usually, the lecturer's voice would tell when they are starting a new point or illustrating some important viewpoints. Listening for changes in their intonation is of great importance because loud and high sounds often indicate importance.

With the above listening strategies applied in listening, as well as relative psychological consult, both skilled and unskilled English learners could have a great progress in their English listening capability.

#### ACKNOWLEDGMENT

Foundation Program : the research result of "A BL Theory-Based Study of College English Watching, Listening & Speaking Teaching Mode in Internet+ Era" of 2016 Dalian Ocean University Teaching Reform Program

#### REFERENCES

[1]Hanson-Smith, E. Multimedia Projects for EFL/ESL Students [J].CAELL Journal, 1997 (7).

[2]Adeogun, M. The Challenge of a Modern Tertiary Education System: Paradigm Shifts for Educators and Information Professionals in Sub-Sahara Africa [J].African Journal of Library Archives and Information Science, 2006 (16).

[3]Bacon, S M. The Relationship between Gender, Comprehension, Processing Strategies, Cognitive and Affective Response in Foreign Language Listening [J]. The Modern Language Journal, 1992(76).

[4] Arasaratnam L A. Further Testing of a New Model of Intercultural Communication Competence[J]. Communication Research Reports, 2006, 23(2):93 -99.

[5] Chen G M . Foundations of Intercultural Communication Competence[M]. Hong Kong: China Review Academic Publishers, 2010.

[6] Deardorff D K. The Identification and Assessment of Intercultural Competence as a Student Outcome of Internationalization at Institutions of Higher Education in the United State[D]. Raleigh, NC: North Carolina State University, 2004.

#### 118

# Secondary College Educational Administration Management under the New Situation the Optimal Path

#### Gu Ting-ting, Cheng Shi

School of computer science and technology, Nantong University Jiangsu Nantong 226000 China

Abstract: Effect of secondary school educational administration had important effect on the entire educational administration work in colleges and universities, the nature of the secondary school is the school educational administration general policy implementation unit. Mainly analyzes the status and status quo of secondary college educational administration management, discuss the present situation of the main causes. To explore the of optimization direction secondary college educational administration management, based on this, advances the information and network educational administration management concept, and provide the secondary college educational administration work optimization strategy of the implementation of the scheme.

Keywords: secondary school; Educational administration; Educational administration management optimization

#### 1. INTRODUCTION

Since the end of last century, the domestic cultivation of high-level talents is becoming more and more attention, the number of all kinds of institutions of higher education is increasing, its operating mode is perfect, gradually formed a training mode can meet the demand of era, the most clear change is a lot of colleges and universities are in the original school, department, on the basis of teaching and research section management level, increase the school structure, the structure is also known as the secondary school.In the secondary school of management is to play a leading role in the process of educational administration administration, educational department is responsible for the complete implement supervision and management on the teaching activities, and to cooperate with the school other secondary colleges in university management work together. The current domestic most college secondary school have build a relatively perfect system of educational administration, through this system to complete the teaching in colleges and universities, student status, the management of logistics, examination, etc, with the increasingly sound management system, comprehensive education work in colleges and universities have a better role in promoting, and fundamentally improve the level of schools for the cultivation of the students.

First 、 The role and status quo of college secondary school educational administration

College secondary school educational administration

work is mainly in the school office and the returning of the participation of complete, implement the educational administration department of school activities, its essence is a series of work in colleges and universities policy was applied to practice, and effectively connect the relationship between different subjects in university, the chain of benign communication between schools, students and teachers, as a result, college secondary school educational administration management system is an important part of the entire university educational administration management system, the branch of the former to the latter, the branch of progress directly determines the whole progress of educational administration management system in the university. From the point of the overall development of the colleges and universities, the secondary institute of various guidelines and policies set by the dean's office and the task implementation result has decisive influence on university development prospects. Due to the role of secondary college educational administration management system is to complete the campus planning and management, in this school facilities, teachers, students learning play an important role in the process of management, etc. Participate in the secondary school educational administration work of personnel is given priority to with associate dean, in charge of the whole teaching management, and the head of the department and each course cooperate to finish the work, vice President of the assistance, the participants' own quality and comprehensive ability and cooperation between each other have a decisive influence on teaching management effect. Fundamentally speaking, the secondary school educational administration management system responsible for the entire teaching management work within the colleges and universities, therefore, the secondary school educational administration management system of its own integrity will be reflected from its management effect, and in the process of implementation of management policies, the need to focus on the plan formulation, organization and coordination, execution practice, the operation situation of supervision and management and so on each link, ensure the actual results of college teaching management. Although compared with the teaching staff, the university educational administration personnel not directly involved in the concrete teaching process, but the educational administration personnel responsible for completion of the teaching work of supervision and

management, combined with the teaching staff to improve teaching efficiency, to provide good logistical support for teaching, is one of indispensable members in college teaching management.But from the actual situation, found that many colleges and universities are showing obvious importance to teaching but despise management concept, and even some managers think that teaching work is the important benchmark of college self image and social influence, through teaching exhibition show the comprehensive strength of the colleges and universities, the educational administration work is subjunctive work, basic don't need any technical content, at the same time also won't bring obvious effects for colleges and universities, As a result, many colleges and universities only attaches great importance to the training and the training of teaching staff, almost no attention to educational administration personnel basic quality, usually just arrange educational administration work, but rarely for such personnel to carry out training on a regular basis. This situation leads to many educational administration personnel in daily work can only handle a large number of repetitive work, but I do not have good creative thinking and strain capacity, still can be brought about because of the lack of corresponding incentives educational in administration personnel lack the necessary work enthusiasm, work for a lot of negative, and there is not enough aggressive momentum. From the actual investigation found that over the past few years major domestic colleges and universities of a growing number of students, in which case the colleges and universities teaching forces and teaching facilities as well as a result of the increase in the number of management staff but the Senate compared with that have not changed significantly. A university in Beijing, for example, in the process of its long-term development, a number of secondary school teachers' current campus has nearly 200 people, more than 2000 students, dozens of undergraduate programs, but it kept constantly the educational administration personnel number about 5 people, almost no any plan, causes the educational administration personnel workload increased, chronically high work load, rarely participate in related training opportunities at the same time, improve their comprehensive skills, unable to make the educational administration management is gradually becoming the teaching logistics personnel, deep hard to develop their own potential. Leaders in many colleges and universities as educational administration management is auxiliary personnel, at any time will not play a role of teaching main body, is basically dispensable role, therefore in the teaching management staff, have a problem in university leaders rarely make responses in time. also won't think of educational administration personnel work from the perspective of tolerance, the educational administration personnel in the work is difficult to maintain long-term passion, and the future career planning brings negative effect. On the other hand, influenced by their own ideas and outside factors, a lot of educational administration

#### International Journal of Education and Management

colleges and universities personnel in also insufficient understanding of their own career orientation, ignored due to their own work, and in the process of development of colleges and universities also have no too many decisions, so these researchers have inferior idea, sometimes even think your salary is lower than the faculty is very normal phenomenon. Most colleges and universities within the secondary school educational administration personnel are only two or three people, the two or three people in a work of a small team of basic is in a state of closed, do their job, all the year round to communicate with the outside world less, coupled with almost no participation in professional training opportunities, it is difficult to make outstanding achievements in position, and can also be difficult to play its sparkle. Most of the educational administration personnel do not have enough professional basis, often comes from other post transfer, therefore, they do not have good educational administration management skills, lack the necessary management theory and practice experience, understanding of college educational administration management work does not reach the designated position, in the practical work can only do simple task of educational administration, it is difficult to guarantee the educational administration innovation and professionalism.Plus a lot of colleges and universities high-level leaders didn't really attaches great importance to the secondary college educational administration on thought work, also does not pay attention to use modern information technology to improve such architecture, still give priority to with the traditional artificial management way, lead to educational administration slow to improve work efficiency, waste a lot of resources of colleges and universities, and further perfect of college educational administration secondary management system hinders, difficult to fundamentally improve the quality of teaching management in colleges and universities.

Second Optimization of secondary college educational administration management work in universities

In order to further optimize the secondary college educational administration work, must start from the following several direction.

of 1.Change the understanding educational administration work and ideas between teachers and students. To guarantee the effectiveness of secondary college educational administration management work at colleges and universities, we must make the teachers and students in colleges and universities are really aware of the importance of educational administration work on thought, and able to put related theories into practice. So that we can provide good basis for the implementation of educational administration system, at the same time improve the hero of the teachers and students to participate in school management concept.To deeply understand to the educational administration college teachers and students in the school play a role in the whole comprehensive management system, update secondary college educational administration

#### International Journal of Education and Management

management processes and details, to make it more simple and efficient.World famous management gurus, Abraham Harold maslow, there is a widespread global's words, the highest state of said management is no management of management, its essence is not without regulation, it can make people from their own ideas, moment and can realize management guidelines constraints themselves, in their own unique personality, to observe the regulations again at the same time, this is a kind of more in line with the characteristics of the modern new type of management style.

2.Build more good quality secondary college educational administration management team. Due to the secondary school educational administration work belongs to the work of relatively complex, and nature have strict requirements on work time, work any of the details wrong, will greatly influence the working effect. Therefore, must build a good quality of secondary school teaching management team, ensure that the secondary school educational administration personnel overall quality standard, and there is plenty of innovation ability and problem solving ability. Secondary school administrators must always pay attention to the assessment of staff involved in the educational administration work, try to choose good basic knowledge and good professional quality of the people as a educational administration personnel, increase the staff's professional and innovative, and provide corresponding learning opportunities and training plan, ensure the long-term sustainable development of secondary college educational administration team. From different angles, through various channels to secondary school educational promotion administration personnel of comprehensive literacy, such as the famous academic affairs management experts at home and abroad can be arranged for the educational administration management team to provide the seminar activities, carry out secondary college educational administration management competition, the implementation of educational administration jointly with other secondary college talent exchange scheme, etc., and the secondary school educational administration work provide a good capital and personnel support, for there are various problems in a timely manner to find the corresponding countermeasures, so as to effectively improve the comprehensive quality of the secondary college educational administration management team, and then improve the effect of secondary school teaching management in an all-round way.

3.Strengthen secondary college educational administration personnel business skills.Qualified school educational administration secondary management should have good university educational administration management theoretical basis, and have to, you can turn theory is reasonable and applied to the practice, the theory of practical work. Also should understand the laws of college educational administration work potential prospects and objective, the different professional training strategy of secondary colleges have clear cognition and

121

positioning, and then combined with the status quo to creat more content related to this business. In general, each secondary school contains several professional direction, and have close business relationship between each secondary school, so every secondary school in the educational administration work cannot work alone, but need each other mutual cooperate collaboration, finally under the strategic vision of global system get good educational administration management work. Secondary school teaching management staff should have good communication and coordination ability and the ability to find and solve the problem, in handling their own secondary administration college educational business effectively combined with the present conditions of other secondary school, in the form of a more global improve rapport between each secondary school, guarantee the teaching order will not be affected. This flexible with principles of educational administration management mode is very important work, also is each educational administration personnel should have basic business skills.

4.Improve secondary college educational administration management work. Due to the secondary college educational administration management work have important influence on the overall management work, therefore, must improve secondary school educational administration work. Improving the cyclical and efficiency of the secondary school of management, to ensure every year can complete educational administration work target in the shortest time.

Third The secondary school educational `` administration work of optimization and implementation In the colleges and universities second-level college educational administration management work, on the basis of optimizing direction, should implement the optimization scheme from four aspects.

1.In secondary college educational administration management in colleges and universities develop good concept of teaching archives management.

Secondary school teaching situation mainly through its teaching files, and teaching archives are the important resources for teachers to carry out the follow-up teaching, so that secondary school teaching archives play an important role in the process of its long-term development, is also the key of teaching resources, to find and analysis the resource content at any time, to develop a more scientific and effective teaching approach provides a good reference. As a the secondary school educational result. administration management should develop good concept of teaching archives management, according to certain classification standard and arrangement principle teaching archives preservation, to ensure the authenticity and integrity of teaching archives. Should also be put in practice the teaching archives management situation for evaluating the secondary college educational administration management one of the important standards of work performance, set up the correct consciousness of teaching archives management.

2.Build a flexible and efficient coordination mechanism. College secondary school educational administration work relative to the complex, the workload is relatively large, and the couple of less manpower and energy, to the maximum extent, ensure the timeliness, the job will leave the flexible and efficient coordination mechanism. College school educational administration secondary management is the core of teaching management goal, in the process should be done with the help of a flexible and orderly cooperation mechanism to coordinate the distribution of secondary school teaching activities. Firstly, we should deal with the educational administration relationship between school and secondary school, when any problems in the secondary school educational administration work, should first consider the problem of the influence of the educational administration work of colleges and universities, and the balance between the whole and local state, Educational administration management in colleges and universities under the guidance of general policy to develop the secondary college educational administration management strategy, to ensure that their allegiance to the colleges and universities the articles of association of the integrated management of quality, innovation and on this basis, fully reflects the uniqueness of the diode college educational administration management educational work.University administration management system with the secondary school teaching management mechanism should exist between close contact, and also have certain difference, between the two kinds of management mechanism should be mutual cooperation and support.Second, in the secondary school teaching practice should give play to the role of coordination mechanism, deal with the relationship between the various branches teaching practice, and guarantee the stability of various branches teaching activities, need to make sure that teachers and students in the process, the relationship between the secondary college managers such as healthy and harmonious.Current our country colleges and universities has been implemented throughout the campus network management goal, through the campus network to carry out various teaching and management work, and the secondary college educational administration network level is relatively backward, some colleges and universities in the secondary school network become a mere formality, did not play a role of forecast in practice, and the linkage between the colleges and universities and the whole network platform does not reach the designated position, not only takes up a lot of school resources, also to the secondary college educational administration management system to further build an adverse impact, flexible for building the collaborative mechanism in colleges and universities bring certain obstacles. So, must be developed more in line with the current demand in university secondary school educational administration management system.

#### International Journal of Education and Management

improve secondary school 3.To educational administration of innovative technology, achieve the informatization and network. Under the conditions of a new era in the use of modern information technology and the increasing frequency of the problem, and these new technology will also for all types of industries for added convenience. College secondary school educational administration management way also gradually shift from the previous artificial management for intelligent information management, greatly improve the automaticity of educational administration. Adoption of more innovative educational administration platform can fully improve the efficiency of the secondary college educational administration work. 4.Specification of students admitted to the university

related information management system.College secondary school needs to be done in a timely manner to each student's student status data update and management, including student transfer, registration, degree certificate and keep file, etc., in order to complete the management process fair and open way. Colleges and universities, for example, the secondary school need to use the corresponding specification to keep a record of the evaluation of student achievement and proficiency of the subjects to fraction defective is controlled in a certain range; Report by the new platform instant freshman enrollment and registration operation, improve the efficiency of new management; Query system of the development of students' status files, to ensure that the teacher can see detailed student student status information in the system and its changes.

Source: subject of nantong university Project name: audit evaluation of secondary school teaching research archives information construction, the project number: 2015GJ006

#### REFERENCES

[1]Secondary college educational administration of colleges and universities be enforced and [J]. J Zhang Yue. Journal of longyan college. 2014 (05)

[2]College secondary school educational administration management present situation analysis [J]. J JiXia, high-cost. Heilongjiang education (higher education research and evaluation), 2012 (10)

[3]The undergraduate course colleges and universities teaching secretary team present situation investigation and analysis of independent secondary colleges in neijiang normal college as an example [J]. Chen hui. Journal of huainan vocational and technical college. 2012 (05)

[4]Problems existing in the local undergraduate colleges and universities of secondary educational administration and optimization [J]. Journal of henan institute of science and technology. 2010 (6)

[5]Under the new situation, colleges and universities, the construction of the contingent of teaching secretary study [J]. J Li Qintao. Heilongjiang education (higher education research and evaluation), 2010 (05)

# The Consideration of Issues and Solutions for Educational Management of College Students under 'Micro-Era'

Benyu Zou, Investigator of Industry Promotion Bureau, Beijing Development Zone Administration Committee, Beijing, 100176, China \*E-mail:zoubenvu@126.com

Abstract : 'Micro-era', a new-fashioned vocabulary quietly appear in our lives. Micro-blog, WeChat brought convenience to life, also some problems at the same time. The issues of the education management for college students under 'micro-era' need to be deeply considered. This essay begins with the impact of 'micro-era' on college students, discusses the influences of 'micro-era' on educational management of college students, and then analyzes the optimized path that targeted for educational management of college students under 'micro-era'. Key words: Micro-era, college student, educational management

The arrival of 'micro-era' makes the lives of college students more convenient, however, it brings many negative influences to the society as well. Comparing with the traditional information broadcasting media, the information transmissions under 'micro-era' are more speedy and unconstrained, which makes the college students can get quick access to these information and improve their comprehensive qualities. But the anonymity, virtualness, and timeliness of the 'micro-era' make Micro-blog and WeChat to be easily exploited by the unkind people who disseminate information such as violence, pornography, reactionary and superstition, which brings about the complexity of the network environment. And the mobility and virtualness of 'micro-era' make the Western decadent thoughts, hedonism and other negative ideas can easily invade in. College student is the largest group of 'micro-people', who are under huge impact of 'micro-era', and this directly affects the effectiveness for educational management for college students.

I. The impacts of 'micro-era' on college students

There are always two sides to everything, so does 'micro-era'. There are both positive and negative impacts of 'micro-era' on college students.

A.The positive impacts of 'micro-era' on college students

China's network industry has evolved rapidly at an unprecedented rate since 1994, and made it possible for people to know what's happening all over the world without stepping out of their house. The birth of 'micro-era' is the landmark that we entered the 'micro-era'. The curiosity towards new things of the college students, made them become the very first and the largest group of users in Micro-blog. In the university campus, mobile phone network application software covers all the aspects such as: teaching, research, management, logistics services. Micro-blog, WeChat and other application software becomes an indispensable part of the lives of college students, it provides them another virtual world for living and learning. Therefore, the contemporary college students are particularly affected by the 'micro-era', which are mainly reflected in their ideas, behavior awareness, value orientation, emotional expression, language habits are deeply branded by "micro-era" style, this just brings positive impacts on college students.

First of all, it is conducive to update the ideas. Micro-blog, WeChat has always been attracting college students to join the 'micro-era' with its unique charm, and imperceptibly promoting the innovations ideological ideas of college students. College students are the largest group of Wei-people, who have the highest frequency in using Micro-blog & WeChat, and the deepest influence by 'micro-era'. Thus, under the influence of 'micro-era', the updates of the ideas are more obvious, which help students form the following four kinds of concept awareness: open concept, equality consciousness, efficiency concept, participation consciousness.

Secondly, it is conducive to improve the quality of knowledge. "micro-era" broadens the channels for students to get access to the knowledge and enriches the content of information, which is conducive to improve the knowledge accomplishment of college Traditional information dissemination students. media is mainly via television, newspapers, radio and so on. In the traditional campus environment, the only method that college students can obtain information and knowledge is through the traditional campus communication information media or taught by the educators who are in the prior position for information. But the information dissemination through these two ways is single-content, quantity-limited, and not first-handed. College students always learned about the things several days after the occurrence, this caused the lag of college students information for college students. But the emergence of Micro-blog, led us into the "micro-era" and completely broke the deadlock.

Finally, it is conducive to strengthen the subject

consciousness. Under "micro-era", college students are able to freely get access to knowledge and information, entertainment, games according to their own personal interests, and cultivate personal hobbies and amateur skills, in order to strengthen their own subjective consciousness. With the continuous deep developing of 'Wei-era', people's ideas and individual consciousness has also been developed by leaps and bounds. Micro-blog, WeChat and other information sharing platforms is a highly free and independent space.

B.The negative impacts of 'micro-era' on college students

The mobility and timeliness of "micro-era" accelerate people's accessing to information through Micro-blog and WeChat, meanwhile college students are in a period of booming desire for knowledge, therefore, Micro-blog and WeChat become the most important tool for college students' learning and living. College students possess the consummate skills in using mobile phones, while the mobile phone has the feature of portability, so that wherever they go, or whatever they do, they always carry mobile phones with them. College students can use Micro-blog, WeChat and other information sharing platform anytime, anywhere. Under the unconsciously influence, Micro-blog and WeChat not only bring college students many positive effects, but also some negative impacts.

Firstly, the information has been misguided by the unhealthy information under 'micro-era' is like the waters that were muddied, the bad became mixed with the good. The information resources are massive and various, coupled with its timely dissemination and the anonymity, leads to great difficulties in supervision and govern of information. To a certain extent, Micro-blog, WeChat is a garbage dump full of "spam". Violence, pornography, reactionary and superstition and other bad information has occupied the most 'territory' in 'micro-era'. In "micro-era", there are many violence, pornographic elements hidden in the articles; those dizzying dating software are crying wine and sell vinegar. These negative factors in "micro-era" will have serious impacts on the building of correct values and ideology, and affect the physical and mental health of college students. College students are a group of people with physically mature but psychologically immature, they are lack of life experience, not able to properly distinguish the political sensitivity, vulnerable to the misleading of these unhealthy information and forming the wrong values.

Secondly, the threat of addiction to social network. College students use Micro-blog, WeChat and other social network platform for virtual interpersonal activities, which will have negative impacts on their interpersonal relationships. Compared with the high school period, the college period has some differences in study and life, but the biggest difference is the establishment and maintenance of interpersonal relationship. How to establish and

#### International Journal of Education and Management

maintain a good interpersonal relationship in a strange environment has always been a problem that plaguing the contemporary college students. Some college students only have a few friends in real life, but a lot of Wei-friends. As time goes by, they gradually step out of the real life, so that their social network in reality gets smaller and smaller, and their interpersonal relationships become more and more apathetic. And there are a large number of uncertainty in virtual interpersonal relationships, a lot of Wei-friends would suddenly disappear after interaction for some time; some micro-friends hold the indecent motivation in the relationships with college students, there are issues like fraud and so on. The uncertainty of virtual interpersonal relationship, is seriously affecting the normal establishment and maintenance of interpersonal relationship.

Finally, the danger of addiction to mobile games. It will make college students form the wrong ideology if they are addicted to mobile games. Mobile games which are full of unhealthy ideas have a strong appeal to college students, they will be easily affected by these unhealthy ideas. This will destabilize their original healthy outlook on life and world, and cause enormous negative impacts on the mental health of university lives.

2. the effect of "micro era" on education management of students

The development of mobile technology and the R&D of mobile app have accelerated the Communication and acquisition, which provide a new way for people to know the world. Micro-blog, WeChat and other information sharing platforms have satisfied the need of college for exploring the world. "Micro era" has catalysed the education management of college students and made a great effort to the development of education management of college students. However, it also brings bad effects on college students life, such as addicted to the Internet, Wechat or mobile games, which brings negative influence on their study, work and values and adds more difficulties on education management of college students. So Micro-blog, WeChat and other information sharing platforms have brought great opportunities for education management of college students, along with severe challenges. Thus we should see this situation in a proper way.

A.The opportunity of "micro era" on education management of college students.

The popularization and development of information sharing platform, such as micro-blog and WeChat, have brought a huge change in college student life and widen the communication approach. Meanwhile, it also brings a new opportunity for education management of college students.

First of all, the load of education has been reformed. "Micro era" brings more energy into the pattern and content of education, which improves the efficient of education management of college students. Traditional college student education management load is consisted of class, meeting, seminar and other

#### International Journal of Education and Management

forms. The efficient of educated college students is influenced by many factors, such as limitation of knowledge and information or sameness teaching. But "micro era" has advantage of spreading digital information, such as pictures, videos and it also can transfer all the information into pictures, videos or to other people. Micro-blog, WeChat and other information sharing platforms can combine with college student education management, using the pictures, videos as new educational load to help teach, which makes the method of teaching more lively and modern. The new information sharing platform shows the technical of modern science and various information, which is way beyond the traditional college student education management. "Micro era" brings huge positive change for education management on college students, including two parts: the pattern of education becoming more interesting and the way of acquiring information becoming more convenient. With the improvement of education management on college students, Micro-blog, WeChat and other information sharing platforms have been a part of students daily life. Students can acquire any information in the world through this way, including politics, economy and culture.

Second, the method of teaching has been innovated. We put the information sharing platform into college student education management and innovate the teaching method in a thorough way. Traditional college student educating management is used to put a lot of knowledge to students in one time, with strong mandatory to help students to build right value and thoughts. It doesn't end until the Micro-blog appears, which brings hope of traditional education management. In "micro era", we no longer use the old school to manage students. On the contrary, we guide them in a proper way, which looks like more acceptable. In this way, both educator and students will feel comfortable during study and it will have more support on college student education management.

Last but not the least, the content of education has been enriched. In "micro era", education manager of college students can gain the latest news and information to meet the demand of college students. What's more, students still can answer the questions listed in Wechat, Micro-blog to improve the education management. The subject of education management is mainly college students. The key to improve education management on college students is to know students.

B.The challenge of education management on college students under "micro era"

The popularization and development of information sharing platform, such as micro-blog and WeChat, have brought a qualitative leap on people's life. Bill Gates said when society relies on information too much, it will be stuck. Indeed, it is urgent to solve the problem of how to do well in education management on college students under this "micro era".

First of all, the lash between the information sharing

platforms and education. Micro-blog, WeChat and other information sharing platforms have plenty contents and ways to promote college students not to rely on traditional college information spreading way to gain knowledge, which have already made damage to college student education management.

Second, mobile information technology has higher requirement of education team. Under "micro era", the managers and the applying of mobile information in education management will decide the efficient of the movement on education management.

Last, bad information will complicate the education environment. A good value is based on pure education environment partly. Different opinions can exchange by Wechat, Micro-blog under the mobility and virtuality of "Micro era". Meanwhile, it also promote different culture to integrate. Many western countries use these platforms as strategy tools to invade, trying to build culture hegemony in information platforms like Wechat, Micro-blog.

3. The optimized paths of education management on college students under "micro era"

The popularization and development of information sharing platform, such as micro-blog and WeChat, have brought a precious opportunity for not only propelling a better education management on college students, but providing new ways for developing management as well. However, each thing has two sides. Micro-blog, WeChat and other information sharing platforms have brought great opportunities for education management of college students, along with severe challenges. Therefore, it is urgent to solve the problem of how to do well in education management on college students under this "micro era".

A. Change the concept of education management

Convenient access to the information sharing platform has made campus environment complicated. In other words, the challenges faced by education management of college students under "micro era" are different from the traditional ones. The basis of carrying out well management under this new era is to strengthen the understanding of education management of college students, and to actively change the concept of education management. Therefore, education management of college students needs facing all the challenges brought by "micro era", and setting up the educational concept of "keeping up with the times". Nowadays, China has entered the "micro era". Micro-blog, WeChat and other information sharing platforms have already influenced much on people's living, learning and working. At present, the education management of college students doesn't carry out the "student oriented" educational idea. Instead, it focuses on "teacher centered" educational model, neglecting the development of individual quality among college students. Under such circumstance, educators just regard college students as "knowledge receiver", lacking sufficient communication with their students. A good understanding of two "micro instruments"

means involving micro-blog and WeChat into education management in a rational way, because these two instruments are indispensable to college students, and play an important role to education management.

#### B. Enrich the content of education management

Enriching the the content of education management on college students can enhance students' attention to state and society, so as to cultivate their sense of responsibility and sense of the times. Under new era, educators should enrich education content with core values of socialism and hot social topics, thus the efficiency of management can be improved. It is necessary to introduce socialist core values, because the information sharing platforms like micro-blog and WeChat are filled with violence, pornography, superstition, reactionary discourses and other negative information. However, the students' ability to identify right or wrong is poor, and their ideological consciousness is not yet mature, so they are easily misled by these negative information. Therefore, the practitioners of college students' education management should fill educational content with core values of socialism, in the aim of helping students to establish correct values and ideology. Introducing current social topics are inevitable, because micro-blog, WeChat and other information sharing platform have become the important constitutions of college students' daily life, and these platforms are their essential ways to get political news and social current events. Via micro-blog and WeChat, the social hot topics are widely expressed, so that college students' attention to country and society is greatly improved, reaching the aim of enriching their depth of knowledge and broadening their horizons. College students in the present age possess active thinking and are good at expressing their views, and micro-blog and WeChat just offer them a very open, equal platform to speak freely.

#### C. Improve the methods of education management

With the rapid development and popularization of micro-blog, WeChat and other information sharing platforms, the traditional management methods have already not met the requirements of the times and the needs of college students. Therefore, accelerating the innovation of management methods is the urgent problem to be solved to those relevant practitioners. "micro era", management Under the new practitioners should involve educational information into micro-blog, WeChat and other information sharing platforms, which makes it exposed to college students and contribute to a better education. That is, the education management on college students should use two "micro instruments" into daily teaching, so as to improve the enthusiasm of students, and guide them to establish a correct concept of value.

#### International Journal of Education and Management

#### D. Improve the literacy of the educated

College students are the future of our country, and the successors and builders of socialism. Their growth and development are crucial to Chinese nation, and are the best test for verifying education managements' achievement. Under the background of "micro age", college campus environment is not simple anymore, which is caused by popular mobile phone games, wide spread of pornographic information, and Western decadent ideas. They have triggered serious physical and mental harms to college students, therefore strengthening the cultivation of students' physical and psychological quality and improving their network ethics are urgent. First, strengthen the physical quality of college students. Second, fortify their psychological quality. To improve the network literacy of college students is to protect themselves. In 21st century, college students are full of the sense of justice, lack of emotional control, immature ability of justify events and other properties, so they are easy to be utilized by criminals. While, micro-blog and WeChat's virtualization and anonymity can make college students freely publish, forward, comment on the reactionary, superstitious and other negative information in the process of browsing information. Therefore, it is necessary to strengthen the network moral and cultural education of college students, so as to improve their online resolving ability.

Here comes the conclusion: "Micro era" brings not only convenience to life, but also some problems. Therefore, it is a challenge as well as an opportunity. This paper starts from the influence of "micro era" on college students, expounds the effect of "micro era" on education management of college students, and analyze the optimized paths of education management on college students under "micro era". Let's create a better China together under this "micro era".

#### REFERENCES

[1]The application of new media in higher education management [J]. RaoJianhua, LiJiajia.Jiangxi Social Sciences. 2014 (12)

[2]Analysis of the change and development of higher education management from the perspective of network safety [J]. Hu Quanyu. 2015 (01) News Front

[3]Information construction of higher education management [J]. Liu Liedong. Culture journal. 2015 (06)

[4]Research on the application of micro-blog in higher education management [J]. Zhang JiaXiao. Management Observer. 2015 (08)

[5]A study on the development of higher education management from the perspective of media supervision [J]. Chen Lingping. News Front 2015 (09)

### Conceptual Metaphor Theory to English Vocabulary Teaching and Research

#### Zhang Juan

Eastern Liaoning University, Liaoning Dandong 118000 China E-mail:zhangjuanjulie@hotmail.com

Abstract: Introduces the related knowledge of conceptual metaphor theory, and attempts to explore how to apply theory of conceptual metaphor in English vocabulary teaching practice, so as to reveal the conceptual metaphor theory for English vocabulary teaching and learning, metaphorical thinking ability can help students better understand and use English.

Key words: conceptual metaphors; Cross-domain mapping. Vocabulary teaching

#### 1.CONCEPTUAL METAPHOR THEORY

Metaphor has long been regarded as a special kind of rhetoric means, thus has long been the research object of rhetoric, stylistics, literature, etc. Abroad on the study of metaphor has a long history goes back more than 2000 years ago Aristotle period. However real metaphors from the cognitive perspective and research and be included in the field of linguistics, and metaphor study to upsurge in the field of western linguistics is George Lakoff and Mark Johnson[1].Chinese language educational world also influenced by the tide. After extensive research, beam dingfang and soup this celebration pointed out: "the theory of conceptual metaphor language has a positive guiding role and application value.

Language teachers can use metaphor theory to reveal the meaning of language change development process, explain the relationship between lexical meaning; At the same time, still can use the conceptual metaphor theory to explain the various forms of metaphor in language between systemic and mutual relationship"[2]Obviously, the positive role of conceptual metaphor theory in foreign language vocabulary teaching is language scholars and foreign language teachers' close attention and in-depth research. This paper intends to combine foreign language vocabulary teaching practice, through the theory of conceptual metaphor in English vocabulary teaching in practical application, specific and deeply discusses the theory of conceptual metaphor in foreign language vocabulary teaching.

George Lakoff and Mark Johnson published in cooperation of "metaphor" to the survival of our (Metaphors We Live By) the book puts forward a new cognitive theory, conceptual metaphor theory. They say, "metaphor is ubiquitous in our daily life, not only exists in people's language, but also exists in people's thinking and behavior.Our thinking and action is based on daily concept system, its essence is basically metaphorical"[3]."The essence of metaphor is to understand and experience one through another things"[4], In daily life, people often through the familiar, tangible, concrete things to know, understand and experience are not familiar with, invisible and abstract concepts. Visible, metaphor is not only a linguistic phenomenon, more important is the human common cognitive style and the way of thinking; Is people to know, understand, think the things, to express the process of the other things, is the conceptual; Is an important means to perceive the world, forming concept.

Lakoff in regard to the interior structure of metaphor when first introduced the original domain and target domain, cross-domain mapping, image schema terms.he thought, "the original domain is better known, specific things, easy to understand; the target domain is relatively new, abstract concept, difficult to understand".Based on Lakoff's point of view, "metaphor, is the original domain knowledge, structure through the image schema mapping onto the target domain, so as to understand the purpose of the target domain knowledge, structure"[5].Of course, this kind of mapping is not arbitrary, but a unidirectional, are constrained by the principle of "constant".[6]Lan Chun pointed once out: "metaphorical mapping in a way of inner structure is consistent with the target domain preserves the source domain of image graphic structure".For example, in the life and the journey of the two concepts, life is very abstract, it is difficult to accurately describe the; The journey is relatively specific, because most people have the travel experience, know that there are travelers in travel, departure, arrival, luggage, beautiful scenery, difficult, etc. Through the following schema mapping, it is easy to use Journey this image of specific things to understand and experience the life the abstract concept:

- journey → life
- Travelers -- and people in their lives
- Origin -- the beginning of life

Destination -- - > life goal

- Luggage - - the problems encountered in the life
- Beauty - - the happy thing in life

Difficult -- -- > the hardships of life

George Lakoff and Mark Johnson, according to different attribute domain, the conceptual metaphor into three categories: structural metaphors, space (location) (orientational meta - phors) and ontological metaphors.George Lakoff and Mark Johnson thinks, structural metaphor refers to a concept to build another concept.[7] Pure blue further pointed out that "structural metaphor refers to by the concept of a clear structure, defined clearly to build another fuzzy structure, define vague or complete lack of the internal structure of the concept". Such as conceptual metaphor "travel" is love, is to "travel" category structure projected onto the abstract category "love". Thus, we have the following daily expressions[8] :

We are at a crossroads.

Our marriage is on the rocks.

### 2.THE APPLICATION OF CONCEPTUAL METAPHORS IN VOCABULARY TEACHING

Grammar and vocabulary learning is to learn a foreign language must have two basic skills. Compared with the grammar learning and mastering, is more difficult to a lot of vocabulary acquisition, and more important. Wilkins believes "no grammar, can express little; while no words cannot express." Vocabulary control is not only the quantity on the breadth of learning a language, but also the understanding of language in depth and the application.For a long time, therefore, vocabulary teaching has been the emphasis and difficulty in foreign language teaching. Vocabulary learning is not a simple rote learning at the same time, it is a complex, active and multi-level language cognitive process, and is there any way to follow. And powerful cognitive conceptual metaphors for vocabulary teaching and learning is of positive significance.

2.1.Conceptual metaphor theory to the interpretation of the phenomenon of polysemy

Usually, the meaning of vocabulary is roughly consists of original meaning and metaphorical meaning. Polysemy phenomenon is vocabulary through metaphor and metonymy evolve to a variety of the meaning of the phenomenon. According to conceptual metaphor theory explanation, the phenomenon of polysemy is through the human cognitive and reasoning ability will be a concept domain systematically mapped to another domain, whereas human metaphorical thinking can make people notice the potential similarity between different conceptual domain.Just because of this similarity, vocabulary is likely to expand the different produce more meanings and metaphorical meaning. Thus, the ambiguity of the vocabulary was due to the metaphorical expression of the vocabulary in essence, is metaphorical mapping mechanism in terms of concrete and practical.Such as the image of "head to head" in Chinese, and the concept of concrete structures can map by similarity of words lenovo onto the target domain, thus, such as "fingers" branches "toe" "" "peak "" hometown""needle" "tap" "leader" and so on the expression of image and appear as.

"Leadership" and "head" and "leadership" and "leader" abstract meanings such as the extension of the word. In turn YuSiWei, under the action of "understanding", "imagination" "brain power" "intelligence" talent "and" one IQ has the relationship of the abstract meaning and expanded.

2.2.Conceptual metaphor theory to explain the cultural similarities and differences between foreign language vocabulary learning

Language is the carrier of culture, but also the embodiment of culture. Understanding of metaphor to a large extent also has close correlation with their culture. Although metaphor has universality, human cognitive model has generality, and English and Chinese conceptual metaphor to a large extent, also

#### International Journal of Education and Management

has the similarity, but after all, different language carries different cultural connotation, this is two completely different English and Chinese language, must carry the distinct cultural connotation, and reflect on the concept of metaphor, inevitably there are certain cultural differences. It is this difference, constituted a big obstacle to students learning a foreign language, become the difficulties of students learning a foreign language. So vocabulary teaching, teachers should be the focus of teaching. In order to make students better understand the teaching material of metaphor, in daily teaching, the teacher should be a contrastive analysis of metaphorical concept, through the analysis of English idioms, proverbs, etc, stimulate students' learning enthusiasm, causes the student to have a better understanding for the culture of the target language countries, to better understand the metaphor.

#### 3. CONCLUSION

Based on the cognitive theory -- the application of conceptual metaphor theory in English vocabulary teaching practice, emphatically discusses the theory of conceptual metaphor in English vocabulary teaching actively promoting effect, proposed the teacher must consciously the conceptual metaphor theory into the foreign language vocabulary teaching to the point of view.Since "metaphor thinking ability is along with the development of people's cognition and produce a kind of creative thinking ability, is the advanced stage of the development of people, is that people know the world, especially abstract things of a kind of cognitive ability", the teacher in teaching English metaphor will gradually cultivate the students' thinking ability.Only in this way, students can understanding metaphor, the understanding and the use of metaphor, can achieve using metaphor better master English express, flexible use of English and native English.

#### **REFERENCES:**

[1]Lakoff G, Johnson M . Metaphors We Live By[M].Chicago: University of Chicago Press, 1980:3-6.

[2]Lakoff G, Johnson M. Philosophy in the Flesh: The Embodied Mind and Its Challenge to Western Thought[M]. New York:Basic Books, 1999.

[3] Saeed J I . Semantics[M] . Oxford:Oxford Blackwell, 1997:313.

[4]Wilkins D A . Linguistics in Language Teaching[M].London: Edward Arnold. 1972:111.

[5]Chen Jiaxu English and Chinese metaphor cognitive contrast research [M]. Shanghai: Stanford university press, 2007.

[6]Lan Chun. Cognitive linguistics and metaphor research [M]. Beijing: foreign language teaching and research press, 2005:116-123.

[7]Shu dingfang, Tang Benqing. Some problems and research topics in the study of metaphor [J]. Foreign language study,2002(2):1-6.

[8]Zhao Yanfang Language metaphor of cognitive structure [J]. Foreign language teaching and research.1995(3):67-72.

# Research on the Data Processing and Rotation Mode Transfer of Cloud Computing Based on the Virtual Machine (VM)

#### Zhu Wenzhi<sup>1</sup>

<sup>1</sup>Zhongnan University of Economics and Law, Wuhan, Hubei, 430073, China \*E-mail: 61525963@qq.com

Abstract: In this paper, the author studies on the design of network security situation sensor based on Net Flow. In this paper, the technique principle and the application of the Net Flow is firstly illustrated, as well as network situation information Net Flow contains, and the advantages and disadvantages if it is taken as the data source is discussed. Secondly, characteristics of the Net Flow information are studied and corresponding capturing method is proposed. Then the change law of the Net Flow data caused by network anomalies like scanning, worms, Trojan horses, DOS/DDOS attacks is also studied, and a layered detection model that combines baseline-based detection layer and signature-based detection layer is proposed. Net Flow-based Network Security Situational Awareness Sensor is carried out and the experimental results show that the sensor can efficiently and accurately detect malicious activities with notable traffic patterns or connection patterns.

Keywords: Network Security; Situation Sensor; Net Flow; Data Flow Analysis

#### 1. INTRODUCTION

With the fast development of Internet technologies, computer networks have played an increasingly important role in the fields of politics, economy, military, and social life. However, there are too many attacks, Trojans, viruses and other threats in Internet, which make the network security situation even worse. Although the firewalls, VPN, IDS, anti-virus software, identity authentication, data encryption, security audit and other network security management products have been widely used, these devices are often limited to single point and single security issues which cannot mutually support each other or work together [1-3]. There are so many redundancies and false alarms in the logs that make them cannot satisfy the security monitoring requirements of global network or large-scale network. As a result, this paper does research work on security alerts correlation analysis, network threat & macrco situation assessment and situation trend prediction.

2.CHARACTERISTICS OF THE NET FLOW INFORMATION

With the rapid development of global information and the increasing dependence on network for people, network has become an indispensable part in many domains including social life, economic activity and military, and so on [4]. However, traditional heterogeneous single-point security defense technologies, such as IDS, Firewall and VDS, can enhance security performance of network system to a certain degree, but among which lack of effective collaboration leads to be unable to monitor the whole network security situation. Under the circumstances, study of large-scale complex network-oriented security situation awareness is put forward to fuse security components in different security domains and form a seamless security system [5].

At Present, research on network security situation awareness (NSSA) is still in its infancy stage, and there exists many technical problems. Combining with specific requirements of the project, system architecture, situation element extraction, situation quantitative evaluation, situation dynamic prediction and situation visualization need be solved. Aiming at this, an overall solution for network security situation awareness system (NSSAS) is used widely in network analysis, and the core technologies consisting of security situation element extraction, situation evaluation and situation prediction are deeply studied in the net security area.

Combined with the application requirements, network security situation awareness system architecture based on multi-sensors is studied with using the idea of 'distributed acquisition, multi-domain processing, and then the corresponding ring physical architecture and hierarchical conceptual model of NSSAS are put forward. The architecture of NSSAS is composed of three levels, including information acquisition level, element extraction level and situation decision-making level from bottom to top successively. The modules of every level are designed in detail, and the solution of multi-source heterogeneous security information XML format is important to the architecture. The NSSAS architecture based on multi-sensors is an open and extensible ring architecture that can reduce system implementation complexity and avoid single-point failure problem. At the same time, it can clearly describe the relationship among levels and components, and guide the development of engineering practice and key technologies.

For the sake of fusing multi-source heterogeneous security information and extracting security element information about the whole network, network security situation element extraction method based on Dissimilarity Computing (DSimC) and Exponentially Weighted DS Evidence Theory (EWDS) is divided into two phases including multi-source alert clustering and alert fusing. First of all, multi-source alert clustering method is constructed through computing different characteristics dissimilarity of alert to judge the dissimilarity among alerts. After multi-source alert fusion method based on EWDS is constructed through fusing different sources to identify intrusion attack behaviors. Experimental results indicate that the method does well in True Positive Rate (TPR), False Positive Rate (FPR) and Data to Information Rate (DIR), remarkably reduces the number of alerts and enhances detection performance, and supplies data sources for network security situation evaluation and situation prediction. In order to predict the security situation more accurately, quantitative prediction method of network security situation based on Wavelet Neural Network with Genetic Algorithm (GAWNN) is studied. The Structure of Management Information (SMI) is

described in RFC 1155 "Structure of Management Information for TCP/IP-based internets" shown in Fig. 1.





IP Packet attributes used by Net Flow in each packet which is forwarded within a router or switch is examined for a set of IP packet attributes. These attributes are the IP packet identity or fingerprint of the packet and for determining if the packet is unique or similar to other packets. Traditionally, an IP Flow is based on a set of 5 and up to 7 parameters. The IP packet attributes are IP source address, IP destination address, source port, destination port, layer-3 protocol type, class of service and router or switch interface. Network information is condensed into a database of Net Flow information called the Net Flow cache. Traffic flow in the Net Flow cache is shown in Fig. 2 International Journal of Education and Management



Figure 2 Data flow in the Net Flow cache 3. THE ARCHITECTURE AND ALGORITHM

The network in Fig. 3 is setup server with Net Flow Analysis to collect Net Flow parameters on the routers. The location of server is a central site and close to the server farm and internet for collecting data flow from user that access to data center. The Net Flow data that occurred in database of conversation for finding parameters that is anomalous utilize traffic shown in Fig. 4. The table of Net Flow analysis show is characteristics of data flow such as Source IP, Destination IP, Application, Port, Protocol, DSCP and Traffic.

Set  $\omega_s t = Y$ ,  $\omega_c t = X$ , then the basic equation of the proposed equation is shown in equation (1):

$$X = 2\pi k + \pi - \alpha_1 - \pi M \sin Y \quad (1)$$

$$u_{P1}(X,Y) = \frac{A_{00}}{2} + \sum_{n=1}^{\infty} (A_{on} \cos nX + B_{on} \sin nY) + \sum_{n=1}^{\infty} (A_{mo} \cos mX + B_{mo} \sin mY)$$
(2)
$$\sum_{m=1}^{\infty} \sum_{\pm 1}^{\pm \infty} [A_{mn} \cos(mX + nY) + B_{mn} \sin(mX + nY)]$$

In the above formula

$$A_{mn} + jB_{mn} = \frac{2}{(2\pi)^2}$$
(3)  
$$\int_{-\pi}^{\pi} \int_{-\pi}^{\pi} u_{P1}(X, Y) e^{j(mX + nY)} dX dY$$

Take the formula (2) into formula (3)

$$\frac{1}{\pi} \int_{0}^{\pi} e^{jmM\pi\sin Y} e^{jnY} dY = J_{n}(mM\pi) \frac{e^{jn\pi} - 1}{2} \quad (4)$$
$$\frac{1}{\pi} \int_{0}^{\pi} e^{-jmM\pi\sin Y} e^{jnY} dY = J_{n}(mM\pi) \frac{1 - e^{jn\pi}}{2} \quad (5)$$

Then,

$$A_{mn} + jB_{mn} = \frac{E}{j6mn}e^{jm(\pi - \alpha_1)}$$

$$[J_n(mM\pi)\frac{e^{jn\pi} - 1}{2} - J_n(mM\pi)\frac{1 - e^{jn\pi}}{2}] \quad (6)$$

$$= j\frac{E}{6mn}J_n(mM\pi)e^{jm(\pi - \alpha_1)}[1 - e^{jn\pi}]$$





Traffic	Application	Source	Destination	QoS Convo	rsation NBAR	
⊙ IN ○ 04	Last 6 Hou	irs 💌	From: 2555-05	-20 08:57 To:	2555-05-30 14:57	]
tesolve DNS	Show Network	Group by Non	e	Sho	ving 1 to 100	liew per page 100
5rd 1P	Dst IP	Application	Port	Protocol	DSCP	Traffic
63.66.78.19	0 10.177.00.131	http	80	TCP	Default	246.52 MB
122.146.11	1.1 10.177.80.131	http	80	TCP	Default	13.13 MB
210.241.130	0.1 10.177.80.131	http	80	TCP	Default	12.27 MB
10.1.34.20	10.177.80.139	http	80	TCP	Default	3.45 MB
BC 10.1.34.20				TCP	Default	1.83 MB

### Figure 4 The tables of conversation on router 4. RESULTS AND DISCUSSION

In this section, we present numerical results obtained by applying the ILP model and the heuristics on Sprint's North America IP backbone network (SNAIB-NET) with real traffic. We consider traffic carried on all links between gateway rosters and backbone routers. We choose to enable Net Flow on gateway routers because it is more cost-effective to upgrade gateway routers than backbone routers as we found out by going through the router configurations.

To make the presentation concise, we assume all line cards are upgradeable to support Net Flow. The heuristics can be easily generalized to cover the other case. We first develop a heuristic called "Max-Plus (MP)" and a formal specification is in the algorithm. In MP, we start with a network with no Net Flow and keep adding Net Flow-enabled roister slots until the required traffic coverage is met. Collectors are added as needed. The admissibility of a slot is based on traffic flowing through the slot and the associated cost for enabling Net Flow, including the necessary collector deployment as well. After each selection, slot with the currently largest traffic/cost ratio will be added as Net Flow-enabled.

The second heuristic, called "Least-Minus (LM)" approaches the problem from the opposite direction and a formal specification can be found in the algorithm. In LM, we start with a network with full Net Flow coverage and keep removing Net Flow-enabled roister slots and collectors until the traffic coverage is right at or below the required threshold.

The admissibility of a slot for Net Flow removal is

also based on traffic associated and the "cost" for enabling Net Flow on this slot, including both the upgrade cost and a "fair" share of the collector cost at the PoP. After each selection, slot with the currently lowest traffic/cost ratio will be removed. At the end, if the resulted traffic coverage is below the requirement, the last slot that has been removed (and its associated collector if applicable) is added back.

We solve the ILP models using CPLEX (9J running on a 2.4 GHz Xeon processor with 1 GB R.AM space. The time it takes to solve the ILP models for SNAIB-NET gateway routers ranges from a few seconds to 30 minutes. Note that we solved for several hundred of routers which is a subset of SNAIB-NET. Therefore, for networks of sizes less than hundreds of routers, it is feasible to use the ILP model to find an optimal solution for ONLP. The heuristics runs much faster, it takes sub-seconds to seconds for each heuristic to solve the problem for all coverage ratios.

#### 3. CONCLUSION

Although the firewalls, VPN, IDS, anti-virus software, identity authentication, data encryption, security audit and other network security management products have been widely used, these devices are often limited to single point and single security issues which cannot mutually support each other or work together. Net Flow-based Network Security Situational Awareness Sensor is carried out and the experimental results show that the sensor can efficiently and accurately detect malicious activities with notable traffic patterns or connection patterns.

#### REFERENCES

[1] Cheng Xiaorong, Lang Su, Li Mingxuan. "Research of Network Security Situational Assessment Quantization Based on Mobile Agent". Physics Procedia, 2012, pp. 25-38.

[2] Ruijuan Zheng, Wangyang Wei, Mingchuan Zhang, Qingtao Wu, Dan Zhang. "Network Security Situation Evaluation Strategy Based on Cloud Gravity Center Judgment". Journal of Networks, 2014, pp. 92-103.

[3] Zhenhua Xu. "Demand-oriented Traffic Measuring Method for Network Security Situation Assessment. Journal of Networks", 2014, pp. 94-102.

[4] Zhang Xiang, Yao Shuping, Tang Chenghua. "Assessing the risk situation of network security for active defense". Wuhan University Journal of Natural Sciences, 2006, pp. 116-128.

[5] Ji-Bao Lai, Hui-Qiang Wang, Xiao-Wu Liu, Ying Liang, Rui-Juan Zheng, Guo-Sheng Zhao. "WNN-Based Network Security Situation Quantitative Prediction Method and Its Optimization". Journal of Computer Science and Technology, 2008, pp. 232-246.

### Research on Teaching Reform and Practice Based on Virtual Reality Technology

#### Yi Quan<sup>1</sup>, Guanghui Xu<sup>1,\*</sup>, Bo Fu<sup>1</sup>

<sup>1</sup> School of Electrical and Electronic Engineering, Hubei University of Technology, Wuhan, 430068, China \*E-mail: no2kenk98@sina.com

Abstract: Aiming at design a practical engineering teaching system and improve its performance, the interactive virtual technology is proposed in this paper. This paper elaborates the important role that practical engineering major plays in industrial economics and puts forward that the major's development lies in innovation by researching. The engineering major education innovation must abide by the open character and build scientists' teaching and curricula system and quality judgment criteria and mechanisms. On the profound level, we need to be guided by interdisciplinary, combine science with highlight engineering, distinctive university management with scientific teaching system and transform students' intelligence cultivation into wisdom and creation. All in all, we need to build the new mode of practical engineering talents cultivation. We can exploit practical engineering major education with creativity, so invigorated practical engineering stimulates education develops soundly, orderly and creatively.

Keywords: Practical Teaching Reform; Engineering Specialty; College Education; Virtual Reality Technology

#### 1. INTRODUCTION

Practical engineering learning management system is based on the increase in practical engineering professional development and employment needs while growing up. Engineering and design talent will be growing demand; practical engineering learning management system based on interactive virtual technology helps to better train practical engineering talent. Practical engineering information technology and the perfect combination of engineering, fully demonstrated the expressive arts. At present, domestic and foreign research and application of practical engineering education system does not reach the potential expected in the current situation and effects, there is a great development.

This paper mainly studies the application of the interactive simulation technology in engineering teaching from five parts. The first section is the preface which introduces the study purpose, background, content and methods of this paper. The second section is the overview part. It summarizes the related researches of the interactive simulation construction in Engineering teaching, both at home and abroad. The third section is an important part of this article which dissects the necessity and viability to establish an interactive simulation in the Engineering teaching. It reveals the interdependence and promoting relationships between the interactive simulation technologies in the Engineering teaching. It introduces the basic algorithm in the Engineering teaching. The fourth section makes a detailed mode of the interactive simulation technology in the Engineering teaching. The experiment is done in this part. The fifth section discusses the comparison result and data obtained in the fourth part.

#### 2. METHOD AND ALGORITHM

A brief description of the main technology of NET puts forward the background and function of NET, the important language C# and ASP. NET was discussed in detail, then in-depth analysis and comparison of technology in .NET, finally analyzes all kinds of role and function of the database management system, and analyzes and illuminates the SQL Server 2005 system. In this paper a flexible multi-alternate distributed interactive virtual reality system framework based on OGRE is introduced to solve the cooperative controlling of scene rendering. By importing the cooperative alternation technique, the control platform, the web server platform and the render platform are designed and the distributed cooperative rendering method based on OGRE is proposed [2-3]. This system is basically realized the practical arts courses related to teaching management and remote access capabilities, which defines the teaching core of teachers, and so it enhance the teaching effectiveness. The framework of the system is shown in the following figure 1.



#### Figure 1 The kernel of the system

Practical engineering major enables integration and communication of science and engineering, which makes them become complementary. The complementarity not only exalts the advantages of science and engineering but also covers the shortages. Scientific logical thinking makes people sensible

#### International Journal of Education and Management

which constitute the order while arts imagine thinking makes people sensitive and makes world become engineering's maze. Scientific speed, strength and depth truth can build platform and create imaginable miracle, e.g. powerful computer and software can create different virtual situations and images. However, engineering's imagination and association with its unbeatable skills and wisdom shape the beautiful artistic image. Any free, elegant, romantic, reserved and humorous images can lead people to endless aftertaste. Teaching system and approaches guarantee practical engineering major education. Scientific and rational teaching system is important in teaching innovation. What is more, artistic teaching method has an important effect on teaching system.

System and scientific character means exact, sensible, effective and distinctive teaching system. There exist isolated parts which combine to produce different levels, thus interweave to an organic whole. To judge and weigh the system's standard needs to be effective. The powerful system needs operational mechanism to regulate and control, for it involves two aspects: static and dynamic state. Without good operational mechanism, system's superiority can't be brought into full play. Moreover, because of teaching systems different subjective and objective factors, it has vivid individuality [4]. The figure 2 shows the teaching classroom based on the interactive visual technology. The basic algorithm is shown in the following equations:

$$\hat{F} = \hat{W}^T \Phi(\mu) \quad (1)$$

It's provided by the adaptive weight law. So estimation error of the weight is

$$\tilde{W} = W - \hat{W} \quad (2)$$

The positive values W<sub>max</sub> as follows:

$$\left\| W \right\|_F \le W_{\max} \quad (3)$$

The adaptive weights law is defined as

$$\hat{W} = -kG \|z_2\| \hat{W} - z_2^T G\Phi(\mu)$$
(4)

It plays an important role in education quality and the major education innovation. Teaching approaches are the integration of style and methodology which are in close relationship with teachers' comprehensive ability and quality. They are incorporated the knowledgeable, academic and artistic character into a whole. Therefore, teaching is an engineering which can be divided into superior, average and inferior class. In the process of expressing artistic teaching language, students' reception depends directly on teaching artistic level [5].

It's the mental hint and activity based on motivating students' learning emotion. It needs the teacher to expound the knowledge points clearly and in simple language. What's more, the teacher needs to grasp the main points. In the process of knowledge-transference, the teacher and students need to have a close rapport, or the questions teacher puts forward can't be answered by the students, thus the atmosphere becomes embarrassed. Therefore, on the discipline knowledge structure, it puts emphasis on rational, scientific, artistic and humanistic features. The system module is shown in the figure 3.



Figure 2 The teaching classroom based on the interactive visual technology



Figure 3 The visual scene of the design of exhibitions display

#### **3. EXPERIMENT RESULT**

Integrated innovation is the absorption and application of human beings' advanced cultural fruits. By drawing on educational ideology, modes, approaches and system from home and abroad, we can form our own new mode of talents development. Because the new mode can't be copied, fit for our university's reality and gives full play to the energy of the mode, it can cultivate talents who can adapt to the need of cultural innovative and other economic industries. Especially after students enter the society, their potential can be brought into full play and they can become creative and valuable top talents. Thus, it can prove the success of the new mode of talents development. This judge is persuasive, influential, and attractive and shock in the society [6-8].

In conclusion, the problems that practical engineering major involves are complicated. Because from the perspective of educational history, the history of this major from home and abroad is not long. Because the major is emerging, the experiences we can draw on are confined. The study of this major education lacks system. Therefore, the major education innovation must abide by the open character; build scientists' teaching and curricula system and quality judgment criteria and mechanisms. We can exploit practical art major education with creativity, so invigorated practical art design stimulates education develops soundly, orderly and creatively. There are 9 levels of the 16 universities, and the result of the sub-items was as followed Table 1.

From the experiment above, we may conclude that be particular about engineering teaching artistically should be ideal engineering teaching surely, be appropriate to be ideal most as for engineering teaching. Being appropriate implies that engineering teaching should be aesthetically and significantly for a student from content, form, method etc. As a result, appreciation of the beauty all the time of the teaching course may be one kind of very advanced teaching engineering to other disciplines, but to the discipline of engineering teaching is one kind of necessary and fundamental request. Otherwise there is no way to realize the aim of appreciation of the beauty and educating people. But for engineering teaching which teaching artistically needed most, the theoretic study about the artistically teaching is not satisfied. Theory and practice always are effected and promoted mutually .theory originates from practice, the lag of theory will lead to lag of practice directly, the lag of practice makes the theory get in further difficult position. Without investigation and discussion about engineering nature of engineering teaching, without the description to engineering teaching engineering appreciation of the beauty particularity, without the rational thinking to engineering appreciation of the beauty dimension about engineering teaching, without discovering a problem and extracting elite from the teaching course, there would be no way to urge the engineering teacher to scan and create their own artistic teaching methods consciously. As a result the main body of a system have been attempting to carry out investigation and discussion on above-mentioned problem, an entire theory system of engineering teaching may be not calculating, but the efforts would be achieved on putting the theory and practice developing towards the benign direction all the time, promoting the engineering teaching to a finer condition ceaselessly.

category	1	2	3	4	5
1st level	0.94	0.91	0.78	0.98	0.91
2nd level	0.84	0.78	0.66	0.90	0.74
3rd level	0.86	0.81	0.68	0.92	0.77
4th level	0.81	0.75	0.61	0.89	0.70
5th level	0.78	0.72	0.60	0.83	0.67
6th level	0.76	0.68	0.57	0.82	0.62
7th level	0.71	0.64	0.53	0.75	0.58
8th level	0.65	0.58	0.49	0.68	0.50
9th level	0.57	0.50	0.43	0.57	0.39

#### Tab. 1: The 9 levels of sub-items

#### International Journal of Education and Management

#### 3. CONCLUSION

Aiming at design a practical engineering teaching system and improve its performance, the interactive virtual technology is proposed in this paper. The engineering major education innovation must abide by the open character and build scientists' teaching and curricula system and quality judgment criteria mechanisms. We can exploit practical and engineering major education with creativity, so invigorated practical engineering stimulates education develops soundly, orderly and creatively. Against the background of knowledge-based economy and explosive information age, the big problem of practical engineering major construction is how to be in line with international education and cultivate creative, application-oriented talents of well-round abilities in the vision of multicultural.

#### REFERENCES

[1]Wang X, Wang J W, Zhong Y F, et al. "Research of data mining technology application in personalized distance education platform". Journal of Heilongjiang Institute of Technology, 2010.

[2] Ji C, Fan M. "The application of web data mining in personalized modern distance education". Energy Procedia, 2011, 13:714-720.

[3] Li Y, Sun J, Qiang W. "Application of Data Mining in Personalized Remote Distance Education Web System". Open Cybernetics & Systemics Journal, 2015, 9(1):1769-1775.

[4] Li P. "Based on Data Mining Technology in Distance Education System Applied Research". Applied Mechanics & Materials, 2014, 496-500:2260-2264.

[5] Y. Gandole, "Computer Modeling and Simulation of Ultrasonic System for Material Characterization," Modeling and Numerical Simulation of Material Science, Vol. 1 No. 1, 2011, pp. 1-13.

[6] Xu, J., Chen, L., Gao, W. and Zhao, M. "CBTC Simulation Platform Design and Study". Journal of Computer and Communications, vol. 7, pp. 61-67, 2015.

[7] Yang, J., Fan, M., Wang, G. and Kong, Z. "Simulation Study Based on Somewhat Homomorphic Encryption". Journal of Computer and Communications, vol. 7, pp. 109-111, 2014.

[8] Wang, Y., Zhu, W., Gen, H. & Wang, H.. "Multi-Agent Based Social Integrity Simulation and Its Evolution". Sociology Mind, vol. 7, pp. 302-305, 2012.

#### 134

# Research on evaluation method of teaching reform and practice based on big data

#### Guanghui Xu<sup>1,\*</sup>, Yi Quan<sup>1</sup>, Bo Fu<sup>1</sup>

<sup>1</sup> School of Electrical and Electronic Engineering, Hubei University of Technology, Wuhan, 430068, China \*E-mail: no2kenk98@sina.com

Abstract: In this paper, the author researches on the evaluation method of teaching reform and practice based on big data. Big data is a new birth concept in the rapid development of modern network. But big data impact college students' education, it should not be overlooked. This article is consisting of both principle analysis and experimental simulation. We used causal analysis to research the influence of big data to college students' education. First, the paper briefly introduced the causal analysis, as well as big data. Secondly, collation and analysis of data is done in this work. Through data analysis, we found that: there are less college students using network platform and big data platform for the purpose of release class information, class content and activity arrangements. This shows a great impact on the college students' education in the background of big data. Finally, we used correlation analysis and logistic curve to validation and prediction.

Keywords: Measures Evaluation Method; Teaching Reform; Practice; Big Data

#### 1. INTRODUCTION

Teaching reform is the core work of teaching in higher education. Organize teaching reform research high-quality is an effective way to promote educational reform and improve the quality of personnel training. The teaching reform of higher education, including teaching content, curriculum, training models, teaching methods and teaching means, experimental and practical teaching system and many other reforms, is complex system engineering [1-2].

The quality of education is the fundamental of higher education, and instructional reform is the core one of all reforms in higher education. In order to motivate the instructional reform and enhance the quality of education, the department of education in China has evaluated and rewarded the study performance in instructional practice of educators in higher learning instructions since 1989 [3]. This means has pushed enormously the process of the instructional reform in higher learning institutions and enhanced the quality of higher education. However, evaluating and rewarding the excellent study performance of educators in higher learning institutions still depends on the qualitative evaluation by the expert's intelligence and experience. Some questions have been exposed gradually [4-6].

#### 2. PRINCIPLE ANALYSIS

Causal analysis method is also known to be due to the quality characteristics analysis. Its basic principle is that aiming at each characteristic or quality problem, using the method shown, layer by layer depth investigation and possible causes.

Between the social and economic phenomena, causality can be divided into several functional relationships, relationship, relationship factors, such as different types of deductions.

In order to predict causal analysis in market forecasting, there are two common methods: regression analysis, econometric methods: regression analysis, econometric method [7].



Figure 1 The causality analysis application steps Causality analysis application steps as follows:

(1)Using data analysis of causality between market phenomenon, as well as to determine the predicted target Variables;

(2)According to the type of causal relationship between variables, select the mathematical model, and through the operation, find the relevant parameters, build predictive models through statistical tests;

(3)Predictive analysis to determine the predictive value.

In today's rapid development of information network, all kinds of micro elements is becoming more and more frequently present in the public view. This article mainly aims at micro big data.

Micro-blogging in China has millions of users. Micro-payments is gradually leading e-commerce. Micro plastic quietly changed many people. Micro public welfare is with the power of the individual affects the society. "Big data" has been gradually among social individual, and bit by bit changing people and people around the world.

Network era of fast rhythm and real-time building for

the production of micro big data,At the same time because of the network gather the staggering number of micro power,This growing penetration of micro big data step by step,it is also changing people's life.

In the era of rapid development of the network, micro-blogging and micro-channel is widespread. The flowing is changes in recent years and the number of people using the micro-blogging micro-channel.

In order to more intuitive comparison the changes, now these data are drew into the following data. Then we will give the conclusion.

Big data has been integrated into the lives of college students.In addition, the big data always influences the ideas of college students. The most common phenomenon is that the use of mobile phones on the course, play micro-blogging and micro-channel.We investigated the purpose of college students who use micro-blogging micro-channel.

In order to more intuitive comparison the changes, now these data are drew into the following data Fig. 3. Then we will give the conclusion.

Through the above chart can be concluded that: In the class, college students use high frequency micro-blog and micro letter and the proportion is 35%, and the purpose is chat and Internet. In contrast, there is less university student regard the micro-blog and micro-channel as a way to spread knowledge. It isn't the purpose for them to release class information, class content and activity arrangements.

In order to verify the correctness of the results above are the credibility of the conclusion by establishing a mathematical model for the test. The first to use correlation analysis method, Observed in the above four purpose in table 2, which one purpose and college students for micro big data under the background of relationship between the change of education concept is the largest.

Pearson correlation coefficient is one of the correlation analysis,Used to represent the similarity between the two variables of mathematical statistics, which can be used to quantitatively calculate the similarity between the two variables.Its computation formula is as follows:

The algorithm can be expressed as following equation (1-2) [8]:

$$\left. f^{(\alpha)}(x0) = \frac{df(x)}{dx^{\alpha}} \right|_{x=x_0} = \lim_{\delta x \to 0} \frac{\Delta^{\alpha}(f(x) - f(x_0))}{(x - x_0)^{\alpha}}$$
(1)

for  $0 < a \le 1$  where

$$\Delta^{\alpha}(f(x) - f(x_{0})) \cong \Gamma(1 + \alpha) \lim_{x \to \infty} \Delta(f(x) - f(x_{0}))$$
<sup>(2)</sup>

And local integral of f(x) defined by Eq.3.

International Journal of Education and Management

$${}_{a}I_{b}^{(\alpha)}f(t) = \frac{1}{\Gamma(1+\alpha)} \int_{a}^{b} f(t)(dt)^{\alpha}$$

$$= \frac{1}{\Gamma(1+\alpha)} \lim_{\Delta t \to 0} \sum_{j=0}^{j=N-1} f(t_{j})(\Delta t_{j})^{\alpha}$$
(3)

When the two variables of Pearson correlation coefficient is close to 1 or-1. Illustrate the correlation is large, or closely related. Tend to be 1 say both are related, and vice is close to -1 said negative correlation between them.

Through calculation of SPSS software can get the following results:

Through the above data correlation form can get the conclusion:College students use micro-blogging and micro letter online chat with the college students' ideological concept shift correlation,Followed by using twitter and micro letter to ideological education activity schedule.This shows that in the above, on the basis of correlation analysis,In Logistic growth curve method is used to predict college students' ideological knowledge used in the study of micro-blogging and what is the purpose of the letter.

Calculated by the software, so as to get the following data tables.Forecast says college students using twitter and the use of micro letter purpose.

Whether to publish content in class, the class information, or ideological education activities, the use of level were improved. It also suggests that under the background of big data of ideological education, college students' conceptual change also played a role, education courses of the opening is not without reason.

The evaluation score of this project is 4.227, which belongs to the better level. The teaching reform evaluation index design parameter is 0.389, which is the maximum weight of the first level index. Among them, index weight of the orientation, practical correlation coefficient and course construction is 0.389, 0.278 and 0.333.

On the membership degree, 75% of people think that the evaluation system construction prospects very good, so single factor evaluation matrix R = (0.466, 0.319, 0.214, 0). 46.6% of people think that is very good; 31.9% of people think it is better; 21.4% of people think that it is general. In accordance with the principle of maximum membership degree, the overall design parameters belong to the level of very good.



Figure 2 The results of the survey

#### 136



Figure 3 The results of the survey

Practical correlation coefficient has the highest weight of the first level index. Among them, practical correlation time, the practical exercise location, the practical exercise arrangement, the practical exercise importance are respectively 0.273, 0.273, 0.227 and 0.227. Single factor evaluation matrix is R = (0.125,0.487, 0.361, 0.027). 12.5% of people think that it is very good; 48.7% of people think it is better; 36.1% of people think that it is general, 2.7% of people think that it is worse. In accordance with the principle of maximum membership degree, the coefficient belongs to the level of better as a whole. Weight of thermal insulation coefficient is 0.278. 29.8% of people think that it is very good; 64.9% of people think it is better; 4.7% of people think that it is general. In accordance with the principle of maximum membership degree, so the thermal coefficient belongs to the good level. The overall score is 4.227, indicating the project is in the average level and most of the indicators evaluation results are more average. The experiment result shows the proposed method can improve the performance for the construction of teaching content system based on big data and data mining.

Tab. 1: The results of the survey

	2010	2011	2012	2013	2014
Ratio	0.44	0.59	0.67	0.77	0.82

Tab. 2: The results of the survey

Number	Objective	Percentage
1	Simple chat, Internet	0.35
2	Release of activities	0.28
3	Announced the class	0.22
	content	
4	Release the class	0.15
	information	

**3. CONCLUSION** 

In this paper, the author researches on the construction of teaching content system based on big data and data mining. Teaching reform and its

evaluation system occupies an important position and plays an important role in application-oriented talent training. The article establishes the professional skills center around teaching cultivation plan for major of engineering student, including the professional skills cultivation frame, cultivation forms, the method ensuring measures about system and the implementation of professional skill cultivation plan. Taking a real University as an example, this paper analyzes the construction of teaching reform and its evaluation system by using big data and data mining, and puts forward some ideas for development and construction in universities and colleges, such as formation of teachers, establishment of special and advantage major, formation of guaranteed system and improvement of cognition degree for major. The experiment result shows the proposed method can improve the performance for the construction of teaching content system based on big data and data mining.

#### REFERENCES

[1]Jie-Chao W U, Ding D, Tan C S, et al. New Exploration of Adult Students' Teaching Modes—based on the perspective of confucian thoughts inheritance. Journal of Changsha University of Science & Technology, 2014, 21(7):1163–1168.

[2]Bracale A, Carpinelli G, Lauria D, et al. The evolution of human resource management in Italy: a historical-institutional perspective. Chapters, 2014, 192(1):117-127.

[3]Sezerel H, Tonus H Z. The Soft Element of Strategic Human Resource Management: The Employee's Perception of Diversity Climate. Procedia - Social and Behavioral Sciences, 2014, 150(11):354-359.

[4]Redman T, Wilkinson A. J. Contemporary human resource management: text and cases. Facts for You, 2014, 24(4):74-74.

[5]Ozolina-Ozola I. The Impact of Human Resource Management Practices on Employee Turnover. Procedia - Social and Behavioral Sciences, 2014, 156:223-226.

[6]G. Eason, B. Noble, and I. N. Sneddon, On certain integrals of Lipschitz-Hankel type involving products of Bessel functions, Phil. Trans. Roy. Soc. London, 1955,24(7): 529–551.

[7]J. Clerk Maxwell, A Treatise on Electricity and Magnetism, 3rd ed., Oxford: Clarendon, 1892.

[8]Y. Yorozu, M. Hirano, K. Oka, and Y. Tagawa, Electron spectroscopy studies on magneto-optical media and plastic substrate interface, IEEE Transl. J. Magn. Japan, August 1987: 740–741.

# Research on Talent-training Model of Transportation Engineering Full-time Professional Degree Postgraduates under the Background of "Internet+"

Heng Wang\*, Zhenfeng Wang, Jianhua Qu, Limei Wu, Xiaofang Zhang College of Mechanical and Electrical Engineering, Henan Agricultural University, Zhengzhou 450002, China \*E-mail: dawn\_wangh@163.com

Abstract: With the rapid development and wide application of Internet technology, the traffic and transportation industry gives a higher request to the talent-training. Major problems, which are existing in the talent-training process, were analyzed. Then, combining the teaching experience, talent-training model was put forward from the aspects of teaching reform of major course, practical teaching, patents and papers.

Keywords: Internet+; Transportation Engineering; Full-time Professional Degree Postgraduates; Talent-training Model

#### 1. INTRODUCTION

In the background of "Internet+", it is a challenge for our country to train useful talents, which master the theories and skills of transportation and are familiar basic theories with the of network and technology<sup>[1]</sup>. communication Therefore, the talent-training model of transportation engineering full-time professional degree postgraduates under the background of "Internet+" was studied, in order to meet the needs of the society for qualified personal in the new era.

2. MAIN PROBLEMS EXISTING IN THE CURRENT POSTGRADUATE TRAINING MODEL 2.1 Main problems existing in curriculum system

Teaching courses are still the major carrier to cultivate students' theoretical basis. Currently, regarding the course structure for the transportation engineering postgraduates, most universities still set up a majority of courses closely related to the transportation engineering technology supplemented by the software experimental operation, but ignore the importance of network and communication technology as well as the combination of informatization and transport engineering $^{[2]}$ . The imbalance has been clearly demonstrated in the following aspects: (1) limited amount of intelligent-transport-related courses without a deeper exploration of the network technology; (2) Long update cycle of textbooks as the basic knowledge delivered is somehow outdated, so that the students fail to follow the direction of the cutting-edge knowledge and scientific research; (3) The course system is limitative and arbitrary. The current course system over-emphasizes the principle of discipline division. Except for the compulsory public courses, most major courses exactly follow the secondary-discipline setting, involving a small range of knowledge; (4) Undergraduate and graduate course structures are not well stratified and remain inconsistent. rather than а vertically-deepened knowledge structure.

2.2 Behindhand practice teaching with theories being overemphasized and practice being neglected

Practice teaching is an important way to cultivate high-quality creative talents. In the traditional practice teaching mode, though the cultivation of experiment capability is also valued, the capability is only considered as skills and taught in the form of "knowledge", resulting in that students lack the cultivation of "creative" application. Its weakness is reflected in the following aspects: (1) Little emphasis on the practice teaching. The practice teaching is considered as the verification of rational understanding and thus attached to the theory teaching. Students are expected to well master the theories but pay little attention to the practice capability. The credit hours distributed to course experiments and internship are getting fewer and fewer. (2) Postgraduates lack the necessary technical knowledge training. Without the support training in the actual application environment, postgraduates learn the knowledge blindly and cannot meet the demands of the current information society.

2.3 Imbalance between papers and software and hardware copyrights

In the current stage, most universities do not care about the declaration of students' software and hardware copyrights<sup>[3]</sup>. The application and realization of software and hardware copyrights is a practical process to cultivate students' research,

#### International Journal of Education and Management

practice and innovation capabilities. Dissertations only reflect student's creativeness "to some extent", rather than the final "achievement". Course learning and paper research are just two different ways to cultivate the students' creativeness in the school and lay certain degree of theoretical foundation for their future career. But the research of practice topics focuses on the cultivation of sustainable innovation capability. Apparently, the engineering scientific research projects are the key to cultivating students' creativeness.

3. CONSTRUCT THE NEW APPLICATION TALENT CULTIVATION MODE IN THE INTELLIGENT TRANSPORTATION ENVIRONMENT

3.1 Management innovation is the basic guarantee for constructing the new application talent cultivation mode

The management policies of the school play a critical guiding role, determining whether postgraduates could improve their innovation and practical application capabilities. In the environment of "Internet+", the application talent cultivation mode should be developed according to the individual characteristics of postgraduates as well as socialist information society's demand for the new era talents. The school is expected to lead correct postgraduate cultivation mode and adopt a variety of teaching methods to promote the customized teaching and cultivate a new generation of transportation engineers with sufficient innovative capabilities by employing the teaching principle of "scientific practice supplementing the theoretical teaching and theoretical teaching guiding the scientific practice".

3.2 Optimize course structure and open up-to-date courses

By analyzing the development trend of the transportation engineering industry, the network-technology-related courses are recommended to be introduced into the teaching plan, along with a variety of teaching methods to offer more practical chances in the classroom teaching, so that the existing transportation engineering major courses could be further optimized. It is also necessary to open up-to-date courses, shorten the course update cycle, connect with the development trend of intelligent transportation and form an application talent teaching course system combining the transportation engineering technology and the network technology.

3.3 Adopt the form of "Going out" to be closely concerned with practical demands

The transportation engineering major is

significantly involved with engineering and application. The major career direction for its postgraduates is the automotive enterprises and transportation planning divisions. These corporates usually expect high for the application knowledge and practice capabilities, as well as the knowledge base. It is suggested to adopt the mode of "Going out" to immerse students in the frontier of the related companies and participate in the production, engaging them in the specific career roles at the meantime of studying.

3.4 Balance the relationships between practical and theoretical innovation as well as between papers and software and hardware copyrights

It is important to realize the balance between the theoretical and practical innovation and enhance the combination of theory and practice. The focus should be laid on both the theoretical innovation capability and the practical innovation capability. The balance between papers and software and hardware copyrights could be realized through encouraging postgraduates' declaration of the software copyrights to enhance their competitiveness in the market.

#### 4. CONCLUSION

Innovative consciousness. innovative spirit. innovative quality and creative ability are the core of graduate education and teaching. In this paper, the problems of the traditional training mode of full-time professional degree postgraduate in traffic engineering are analyzed. Talent-training model was put forward from the aspects of school management mechanism, curriculum optimization and practice teaching, to explore a talent-training model under the Background of "Internet+".

#### Acknowledgments

This work has been partly supported by Henan Province Institution of Higher Learning Youth Backbone Teachers Training Program (2016GGJS-036), and Key Science Research Program of Henan Province (17A480004, 16A413010).

#### REFERENCE

[1] Shi hongguo, guo hanying. Traffic and transportation engineering specialty postgraduate education mode at different levels [J]. 2012, 5(23):5-9.

[2] Yu Xiaohua, Zhang Sifeng, Li Meiling. Exploration on the training mode of full-time professional graduate degree of engineering major: A case study on transportation discipline in Shandong Jianzhu university[J]. 2016, 10(24): 144-146.

[3] Peng qiyuan, Ma si, Wen chao, Reform and practice in the development of talents for traffic and transportation industry[J]. 2011, 6(12): 5-10.