## Publicly-funded Education: Object of Educational Reform in China

Hu Shuhua, Li Jun

School of Management, Wuhan University of Technology, Wuhan, P.R.China, 430070 (E-mail: sjxwhsh@163.com, ttandme@126.com)

**Abstract:** The real situations of publicly funded colleges in China have monotonic teaching model, low level of scientific research and weak teaching ability of special teachers, through the systematic analysis, the concept of innovation in the teaching model of publicly funded colleges is put forward for facilitating the improvement of teachers' qualities from all aspects. In the meantime, new measures of higher vocation education was explored from a multiple of dimensions and proposed, and made in-depth analysis of the fund input in the development of publicly funded education.

Key words: Cooperation in running schools; Fund input; Professional quality; Conceptual innovation

#### **1** Introduction

It is the springhead for senior publicly funded education that persistently improve senior publicly funded teachers' abilities, recovering education resource, arousing teachers' enthusiasm, inspiring teachers' wisdom potential, and strengthening the construction of teachers' comprehensive qualities. Especially, improving senior publicly funded teachers' abilities of experimental implementation and scientific research innovation should be taken as the significant construction goal for senior education reform. The concept of people-oriented and teacher-first and a group of high quality teachers with both professional theorization teaching and professional experimental skills and research abilities guarantee the talent providing for high level senior publicly funded teaching and the high quality of scientific research quality.

## 2 The Current Status of Teachers for Specialized Courses in Senior Publicly funded Colleges

Recently, colleges and universities in our country are popularly equipped with all sorts of systematized and professional laboratories of certain scale and there are special groups of teachers for the experimental course teaching. Compared to this, the construction scale and inputs in senior publicly funded colleges' laboratories and the management for experimental courses teaching lag behind a lot and there are a series of problems urgent to be solved. For example, there are not any special experimental course teachers and the experimental teaching tasks are still undertaken by professional course teachers. Objectively, it may be a good model worth carrying out for senior publicly funded education, but the problems lie in the professional course teachers' comprehensive qualities that must meet the standard that the unity of knowing and doing with which talents can both pass on knowledge and demonstrate their practice. Only these excellent teachers can be capable of the "lessons plus experiments" double model. The professional course teachers' ability is very crucial to the cultivation of senior publicly funded talents. It is said that an accomplished disciple owes his accomplishment to his great teacher. Then what are the contents of professional course teacher's ability? Specially speaking, it should involve deep professional theory background, experimental teaching ability and experimental study innovative thinking, including experimental organization management, design of experiment, the experimental operation, drill skill, result analysis, result analysis, fine optimal refining, divergent innovation etc. They should cultivate the students' practical skills by experimental teaching. An outstanding senior publicly funded professional teacher should be both a teacher and an engineer who can teach professional courses with facility and practice experiments skillfully. At present, common professional teachers in senior publicly funded colleges have started their teaching jobs soon after their graduation. Because they are lack of work experience in their professions and corporations, these teachers' theoretical foundation is not solid and there exist gaps between their theoretical knowledge and actual situation. Additionally, their practical ability is so weak that it is hard for them to teach according to actual trend. Due to their deficiencies of professional skillful quality, they are lack of technical application and innovation ability. Professional course teachers are usually limited by the analysis of cases in the textbook, but they need the practical skill like drawing, physical sampling, model design and domo to play the verification teaching and dissect questions intuitively. They are unconfident enough and often just repeat what the book says, lacking the spirit of thinking and truth-pursuing and the skills of stimulating students' study interest and rendering the teaching atmosphere before introducing theories. Their poor teaching effect resulted from the deficiencies of the spirit of the age that running after the teaching trend and innovation. The urgent issue lies on the recreating and cultivating of the professional teachers' qualities. Some of them have rare divergent thinking and others just stay in the existing level of theories, they pays little concern on the fresh development in their professional field, lacking the age spirit for innovation. Take technological knowledge for example, what you have read is not what you have perceived and what you have perceived is not what you have mastered. Even if you have mastered it, you need not be able to use it, which plays the dialectical materialist principle and the practice law of "learning, learning and still learning". A man whose mind has broad and level width in the extension of education must be a never satisfied picker facing the ocean of knowledge. Therefore, it has become a significant research subject to upgrade the comprehensive qualities of professional teachers in publicly funded colleges continuously, make them follow the development of modern scientific technologies, and improve the poor situation of low efficiency teaching objectively and creatively.

## **3** Persisting in the Scientific Outlook on Development and Doing a Great Job on the Construction for Professional Teacher Group

Professional teachers make up a necessary part of the publicly funded college teacher group and they are also one of the important forces for guaranteeing the training of gualified talents. With the rapid development of economic construction and advancement of scientific technologies, the current professional teacher group can hardly satisfied the need of publicly funded education development and social economy development, which is asynchronous in the strategy that the national development should keep pace with education and becomes the bottleneck part for publicly funded education's sustainable development. At present, many publicly funded colleges usually adopt in-service training practice, upgrading degrees, employing external professionals as methods to improve the level of professional teacher group. Although these practices have received certain effect, but due to the short term and the shallow involved extent, they cannot systematically master relevant professional experience. The poor method of employing external specialized talents only figures eager for quick success and instant benefit, not a long-term plan, which defeats the basic state policy of developing the country through science and education and the policy of granting the state education priority for development. Consequently, we must persist in Scientific Outlook on Development, stand on the view of talent powers, make long-term plan, develop sustainably, overcome impatience thinking of poor one-sided, and do a great job on the construction for professional teacher group.

## 4 Research on the Feasibility of the Construction of Publicly Funded College Professional Teachers

#### 4.1 The government should enlarge the capital input and enhance the conduction for education

An ancient philosopher has said, "One that cannot view the whole situation is unable to administrate a country and one that cannot plan each side must fail in controlling a single moment." It means the dominator should look far ahead and aim high and it also means the train of thought decides its way out. However the form of thought is decided by the conceptual innovation. Abandon absolutely the wrong concept of valuing general education and neglecting publicly funded education, persist in Scientific Outlook on Development, propose the diversification development of education, and explore the strategic thinking according to Chinese social facts. So according to the situation of weak teaching force of the current publicly funded education, the government should regularly enlarge the capital input for financing the infrastructure, improving the teaching equipments. Meanwhile, according to the economy development, the government should conduct the establishment of professions, the choosing of teaching books and the allocation of human resource. In addition, the state should also set up policy-oriented incentive mechanism by which inspire the subjective initiative of professional teachers, enhance the teaching basis and upgrade their teaching experience. Make publicly funded colleges as education base for talents and scientific achievements as soon as possible.

# 4.2 Constructing multi-functional laboratories and establishing the platform for improving professional teachers' skills

Practice education plays a significant role in publicly funded teaching. It is also one of basic segments of cultivating application talents, impacting unique effects of improving professional teachers' technologies, operating skills and innovation ability and forming the new structure of knowledge. So, it is the basic project of scientific education to construct various laboratories, which is the way to establish

a platform for improving professional teachers' skills. This platform is the arena where teachers exchange their experience and compete on their technical skills and it is the platform where they can follow leading knowledge and improve their research abilities. It also serves as the band linking colleges and corporations, the industry-study-research base in college. Constructing teaching talents, developing autonomously, and improve the inner situation consist of the strategy of changing the professional teachers from knowledge owners to technology masters. The enlarging of input to various laboratories aims at shorten the distance between classes and the society, realizing the dynamic environment where the campus become firms and students act like workers, performing the pursuit of truth ,fact, and application. It has also provide an arena for cultivating students' practice skills where they can stay in the scene by their selves and operate with their own hands. In this way, they can accumulate coordinating skills of thinking and operating, and they will grow to be technical human resource for economy construction.

## 5 Strengthening School-enterprise Cooperation, an Important Way to Improve the Professional Teachers' Technical Capabilities

Strengthening school-enterprise cooperation is not only the key to improve the construction of the professional course teacher group in advanced publicly funded schools, but also an important way to improve the professional course teachers' technical capabilities. Professional course teachers are required by the modern advanced publicly funded education to be equipped by the comprehensive ability to combine theoretical knowledge with practical skills, which could not be achieved efficiently simply by post teaching practice, job training and improving academy degree. They must be deep involved in the whole process of the engineering projects, which can combine the theoretical knowledge with practical skills organically to a certain degree, and fully fills the gap between theory and practice. Only in this way, can knowledgeable and skilled professional course teacher group be built.

The active involvement of enterprises has injected new vitality into the reform and development of the advanced publicly funded education. While the traditional teaching model will have to face the challenge of the enterprises, the age mission of private education will encourage enterprises to be the catalyst and strong driving force of the rapid reform and development of the advanced publicly funded education. Enterprises can provide school with counterpart equipment, apparatus etc. in a planned manner to enhance the teaching ability of the school laboratory; And they can also convert the technical advantages to the teaching advantage of the advanced publicly funded schools, by making their engineers participate in the professional instruction, technical seminars, field exercises etc., who can also be the friendly rivals to the professional course teachers and learn from each other, which can improve the skills of the professional course teachers rapidly. As a result, the enterprises will naturally become the counterpart off-campus internship base of the advanced publicly funded schools. In turn, the schools will also become the oriented training and teaching base for the enterprises, thus a new mechanism of customized training and employment between school and enterprises is created, which can not only improve the practical skills of the professional course teachers, but also lay the foundation stones of the success for the students. So we can see that school-enterprise cooperation is the objective needs of both sides and shows a gratifying excellent situation, in which the two sides complement each other and enjoy mutual benefits and collaborative development. Now the school-enterprise cooperation has shown a strong vitality and support to the modern education development, enhancing which may has a far-reaching strategic and strong practical significance to the reform of the advanced publicly funded education in China.

#### **6** Conclusion

Back to the origin of education, to the pure environment of education, to the function and value that education should hold for the social progress and human civilization, are the ultimate goals of education reform. New powers are needed to create new situation, along with new tasks to pursue new goals. To strength the nation and national, first to strength the education, and the great economic development can't survive without great education development, in which advanced publicly funded education takes an important role. So, the advanced publicly funded education can never be neglected in the education reform.

#### References

[1] Zhang Yang, Zhu Shaoqiang. Positive Factors for Teaching in the Research Evaluation Process of Universities[J]. Higher Education Development and Evaluation, 2010,(01) (In Chinese)

- [2] Yi Yan. The Current Development and Reform Thinking of Vocational Education[J]. Science and Technology Innovation Herald, 2010,(08) (In Chinese)
- [3] Tu Xiaoming, Tu Jianming. Analysis of Independent Colleges Standardized Development in China[J]. Higher Education Development and Evaluation, 2009,(01) (In Chinese)
- [4] Shi Haixia, Liu Xiaoyan, Liu Ning. Some Points about College and Corporation Coorperation on Education[J]. Northern Economy and Trade, 2010,(06) (In Chinese)
- [5] Guo Yifu, Kuang Lingzhi. Cooperative Education of Production, Education and Academy and Students Entrepreneurial Ability Cultivation[J]. Higher Education Development and Evaluation, 2009,(03) (In Chinese)
- [6] Zhang Liang. Problems Existed in Teaching Management of Higher Vocational Education under the Model of Working and Learning Combination and The Countermeasures[J]. Vocational and Technical Education, 2010,(11) (In Chinese)
- [7] Du Li. Theoretical Analysis and Empirical Research on the Development of China's Vocational Education[D]. Wuhan University of Technology, 2009 (In Chinese)
- [8] Leng Quan. The Generation and Innovation of the Educational Model[J]. Higher Education Development and Evaluation, 2009,(04) (In Chinese)
- [9] Tu Qunfeng. Satisfaction Degree Survey among Graduates from Vocational Colleges[J]. Higher Education Development and Evaluation, 2009,(03) (In Chinese)
- [10] Liu Donghua, Ma Guohong. Training of High Skill Technicians and Characteristic of Businiss Education[J]. Manufacture Information Engineering of China, 2010,(11) (In Chinese)
- [11] Guan Zhonghe. Inner Problems in Higher Education[J]. Higher Education Development and Evaluation, 2010,(02) (In Chinese)