

Research on Teaching Reform of Local Universities Experimental Course

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Abstract

As the society changes and demands for talent training mode, deepening reform of education innovation and cultivating the application-oriented talents of innovative capabilities become the training target of higher education. Experimental teaching reform is absolutely necessarily in the whole teaching reform. This paper focus on the cultivation of students' practical ability and innovative spirit, improving teaching methods, combining teaching with research, constructing practical capacity training model, laboratory construction and other aspects of the experimental teaching reform. At last, the improvement measures on the problems and deficiencies of college teaching were proposed.

Keywords

Experimental teaching; Teaching reform; Training mode; College laboratory construction.

1. Introduction

Faced with the rapid development of higher education and the needs of today's society with strong social practice of growing talent, personnel training objectives and consequent pattern of the colleges and universities have undergone major changes.

In October 2015, the Ministry of Education, the National Development and Reform Commission, and the Ministry of Finance jointly issued to promote the development part of the local colleges and universities to application-oriented transformation in Ref. [1-3], especially prominent experimental teaching is the basic means of practical ability of university students. In Ref. [4-7], the authors proposed change fundamentally experimental and teaching methods. Therefore, strengthening the construction of the experimental teaching conditions, focusing on practical ability and innovative ability students, promoting the teaching quality, giving full play to the laboratory, leading role of experimental teaching demonstration center have become necessity.

Of course, along with the state promulgated a series policies and measures for stimulating creativity, innovation and entrepreneurship, it not only provides policy opportunities to practice and teaching methods, but brings more higher challenge. The cultivation of practical ability is the fundamental task of higher education. It is the best way of cultivating the students' knowledge and quality to improve the practical ability. Training Institutes and the students' practical ability should closely around the innovation-driven development, the real strengthening of local regional economic development.

2. Common problems of experimental teaching in colleges and universities

2.1 Lack of attention to experimental teaching

The society has put forward the new challenge to the talent training mode in Colleges and universities directly. The competition of colleges and universities is developing from scale competition to horizontal competition. SCS[2015]36 document pointed out that to deepen education reform, deepen the reform of innovation and entrepreneurship education for colleges and universities, promote the cultivation of innovative ability of high quality graduates. Practice teaching plays an important role in the whole teaching process. However, in the traditional education consciousness, because of many reasons, the experiment teaching in the education system of our country is in a subordinate position mainly. The lack of active innovation, development and comprehensive research, leading to the

students' learning initiative cannot be implemented, so it is imperative to improve the utilization rate of laboratory in teaching and scientific research.

2.2 The experiment teaching system is not reasonable

At present, most of the experimental teaching, whether from the content or form, is attached to the theoretical teaching. The experimental courses deviate from the social and school orientation, mechanical copying experimental teaching system, without its own characteristics and the system is poor. Experimental course teaching goal is not clear and not specific. The content of the experiment involves a single boring, and the connection of the experiment is not strong, resulting in a narrow range of students' knowledge and poor practical ability.

2.3 Heavy theory light practice, resulting in poor students' ability

To our school various disciplines as the object, through field research study, in the actual teaching process, teachers mainly placed on basic theory teaching, did not pay attention to the students' comprehensive quality training. "Heavy theory, light practice," the phenomenon is more serious, to a certain extent, it affect the employment rate of students.

3. Methods and suggestions for the reform of experimental teaching

Premier Keqiang Li puts forward that college students are the main force of the innovation driven development strategy, the colleges and universities should cultivate the applied talents with a solid practical ability and plunge innovation and entrepreneurship. Experimental teaching is a process of combination of imparting knowledge and training skills, and it is a breakthrough to promote the mode of talent training, which cannot be replaced. The colleges and universities must adhere to the spirit of advancing with the Times, with the point of view of modern information education, develop the experimental teaching to a new level, in order to adapt to the needs of personnel training.

3.1 Driving the active learning of basic theory with innovation

Innovative talents should have the knowledge and ability of the basic knowledge and independent innovation. Colleges and universities should take the training ability as the standard, take the national and local economy, the social demand as the guidance, and actively optimize the experimental teaching, and further strengthen the role of experimental teaching for students' innovation and entrepreneurial ability. Experimental teaching is not only to verify the validity of the teaching, but innovative talent training mode. The students should stimulate the inherent potential, innovative thinking to carry out experimental curriculum, and consolidate the basic knowledge, and promote active learning that the required basic knowledge, and put it into practice.

3.2 Integrated training mode of teaching and scientific research

In order to promote the development of teaching and research, the students should promote the healthy development of the relevant professional. Therefore, highlight the thinking methods training, strengthen innovation practice method, break the classroom instruction categories, the different course content blend naturally interrelated, and step by step the new curriculum system.

In a word, in order to truly reflect the strong vitality of the university, it should pay attention to both teaching and scientific research, and teaching and research to promote and harmonious development each other.

4. Conclusion

Now it is a time to pay attention to students' ability and innovation ability, and to cultivate innovative talents is the main teaching goal for the colleges and universities. The colleges and universities should strengthen experimental teaching conditions for common problems, improve experimental teaching, train students' practical ability and the ability of independent innovation, make full use of the laboratory, and deepen radiation and leading role of the experimental teaching center. The higher education should implement the education concept of people-oriented, teach students in accordance with their aptitude, create the integration of theory and practice, and communicate in class and after

class. The students should obtain the professional knowledge and ability with the social development, the organic combination of teaching and scientific research of experimental teaching training mode. In a word, the colleges and universities must establish a scientific experiment teaching system based on the experiment teaching and the reform of the course system, which can improve the overall quality of students, shape the theory with the actual character, cultivate innovative spirit and practical ability, and balance the entire higher education personnel training mode.

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