Research of College English Teaching Methods Based on New Engineering Talents Training

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ABSTRACT. The new engineering construction is an important move of the higher engineering education reform in China. As a basic course, college English should grasp the development opportunity and positive change. According to the requirements of new engineering construction, This paper analyzes the current challenges of college English teaching, such as the construction of professional disciplines, the change of knowledge system and the learning state of students, and puts forward the adjustment of training plan and teaching content requirements according to the characteristics of the industry. This paper puts forward some measures such as improving teaching methods, selecting and compiling suitable teaching materials, and improving the quality of the teaching staff. In the process of new engineering construction, we should explore the reform measures actively and accumulate experience constantly of college English teaching.

KEYWORDS: College english, Engineering talents training, Engineering education

1. Introduction

Higher education and industrial development are closely linked and mutually supported. The level of higher education development is an important indicator to measure a country's development level and development potential. The experience of developed countries shows that adjusting the structure of higher education and developing new frontier disciplines are the core elements to promote the transformation of national human capital structure and realize the transformation from traditional economy to new economy.

In response to the new technological revolution and industrial reform, China is implementing innovation-driven development and new construction. In order to achieve the goal of China's higher engineering education by 2020, all disciplines should seize the opportunity of new technology innovation and new industry development, grasp the requirements of new engineering and explore the engineering education [1].

The goal of engineering education is to cultivate leading talents in engineering through the reform of learning content and learning method. As a public basic
course, college English has an important influence on students' learning habits and ability. As an international common language, English is an important tool for compound talents. With the development of internationalization of enterprises, foreign language talents have been paid more and more attention by enterprises, and the market demand has shifted from foreign trade to engineering manufacturing.

2. The Current Situation of Engineering College English

With the reform and opening up and socialist modernization construction of our country entering a new stage, the science and engineering colleges have also ushered in a new era of educational reform and development. Since 1999, colleges and universities in China have begun to expand their enrollment, and the enrollment scale has been expanding year by year. In 1998, 1.08 million students were enrolled nationwide, with 9.8% enrollment rate. In 2006, 5.4 million students were enrolled in nationwide, the enrollment rate increased to 22%. The total number of college students reached 25 million, ranking first in the world, and entering the internationally recognized stage of popular development. [2]

The cultivation and transportation of a large number of talents has transformed China from a country with a large population to a country with a large human resource. It provides a basic guarantee for the rapid growth of China's national economy and the sustainable development of society, but more senior high school students enter the University, some of them have poor English level, which is an objective problem Therefore, English teaching for engineering students needs to be strengthened.

3. Requirements of New Engineering for College English Teaching

New engineering should be based on the study of engineering education history and reform experience at home and abroad, and cultivate innovative engineering talents with international vision. Therefore, college English teaching faces many challenges.[3]

Firstly, the new engineering focuses on the development of industry. Compared with traditional knowledge systems, new knowledge systems are characterized by integration, complexity, connectivity, autonomy and sustainability. English is an integral part of a new knowledge system and an important tool for solving complex engineering problems. College English teaching should have a clearer focus, clearer goals and more professional applications.

Secondly the new engineering education should cultivate students' comprehensive ability of engineering thinking and thinking. College English teaching should not only improve students' language expression ability and communicative ability, but also become an important part of cultivating students' engineering thinking ability. However, college English teaching has shortcomings in the aspects of training system, training theory, learning materials and teacher resources. In the training system, college English learning is difficult to complete the
transformation from basic to application, from reading to communication, which is not conducive to the improvement of students' ability.

Thirdly, the new engineering education centers on students, pays attention to students' learning methods and contents, and respects students' individual needs and interests. In the teaching process, teachers should consider the students’ differences and arouse their enthusiasm. The change of teaching methods also puts forward higher requirements for teachers' quality.

4. Exploration of Reform Measures

4.1 According to the Needs of Industry, We Should Optimize Major Setting, Adjust Training Plan and Integrate Teaching Content.

With the deepening of globalization of China's industry, many employers are eager for talents with global vision and strong foreign language ability. According to the requirements of industry development, the original engineering specialty should adjust its direction and increase its training objectives to adapt to the international development of the industry. It is necessary to adjust the talent training plan, update the knowledge content, improve the teaching method, strengthen the training of English application ability according to the actual work scenario, cultivate the talents needed by the enterprise, and help the students to have the ability to learn through English continuously.

4.2 Compile Appropriate Teaching Materials and Improve the Teaching Resources.

Due to the lag in the publication of textbooks, there is a shortage of college English textbooks that can meet the requirements of new engineering. Therefore, it is necessary to integrate the course content reasonably on the basis of optimizing the professional training program. There are two steps to optimize the basic college English teaching materials. firstly, it is to choose the teaching material with appropriate content as much as possible. Secondly, on the basis of accumulated experience, special textbooks are compiled. In order to improve students' interest in learning, professional English textbooks should select scientific frontier literatures with strict logic and elegant style. In addition, it is necessary to make full use of network resources to find video and voice resources that are closely combined with professional development, so as to enhance the learning effect in multiple dimensions.

The comprehensive quality of teachers is the guarantee to achieve good teaching results, so it is urgent to improve the comprehensive quality of English teachers. Basic College English teaching is usually undertaken by public English teachers, but they lack professional knowledge of engineering; professional English teaching is usually undertaken by professional teachers who are familiar with professional knowledge, but their language teaching skills are relatively weak. Therefore, the
A team of engineering English teachers should be composed of public English teachers and professional teachers.

4.3 Make Full Use of Scientific Educational Methods and Continue to Improve Teaching Reform

There are many kinds of educational means, which need to choose scientific teaching methods. Scientific teaching methods need to have a solid theoretical foundation, conform to educational rules and students' cognitive characteristics. According to the characteristics of students, the characteristics of knowledge and the needs of the society, it is a long-term process to systematically transform knowledge into students' quality to meet the needs of the society. Similarly, the reform of engineering education is also a process of continuous improvement, and all work should be promoted in the process of continuous exploration, revision and improvement.[5]

5. Summary

The reform of English teaching in new engineering universities should break through the traditional narrow teaching concept, broaden the vision of English reform in the height of complete talent training, adhere to the deep integration of language teaching and professional knowledge teaching, and realize the training program that is compatible with the progress of science and technology and social development. New engineering construction is an important measure of higher engineering education reform in China. As a basic course, college English should seize the development opportunity and change actively. We need to use dynamic and developing thinking to continue to explore.

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References