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Research on the Cultivation of Talents for the Integration of Production and Education of Computer Software Technology Based on the Concept of CDIO

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Abstract- According to the development and reform of CDIO concept in China in recent years, we can know that it can greatly improve the scientific quality and systematic quality of talent training mode in China's education industry[1]. At present, the continuous improvement and innovation of computer software technology makes our education industry constantly appear the hope of reform. Some experts believe that the industrial economy of computer software technology has a bright future. According to the application of the combination of industrial economy and education, we can find that in theory, the application of CDIO concept can help the integration of production and education of computer technology and establish a perfect talent training mode. This paper will provide the corresponding conclusions.

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Research on the Cultivation of Talents for the Integration of Production and Education of Computer Software Technology based on the Concept of CDIO

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I. INTRODUCTION

We often say that the talent training mode refers to the system of talent training objectives, training standards and training process. Through the optimized combination of different components, we can build a lot of different training modes[2]. Computer science is a new technical industry in China in recent years. Relevant experts suggest that we can carry out multiple training of different forms of computer talents by strengthening the management of teaching reform and innovative experiment projects and carrying out extracurricular activities of CDIO project. In order to improve the ability of engineering practice and innovation of college students. At present, China is strengthening the transformation of the new mode of economic progress. Strive for the information technology industry to promote the interaction of industrialization and Industrialization to promote the information technology industry. As a popular information technology major, the emergence of computer science makes the economic progress of information industry faster and faster. With the occurrence of China's education reform and the emergence of CDIO concept, the new mode of talent training of computer professional integration of

production and education has emerged. There is no doubt that this will lead to the establishment of a new chapter in the education reform of Computer Science in China.

II. THE MAIN THEORY OF PRODUCTION EDUCATION INTEGRATION BASED ON COMPUTER

a) *Industrial economy and educational ideas*

The integration of industry and education refers to the development of the integration of industrial economy and education concept of an industry[3]. Generally speaking, the object of the concept of integration of production and education is a relatively clear target industry. Moreover, the establishment cycle of its industrial chain can not be too long. We can think that the industry that can obtain the integration of industry and education belongs to the innovative industry in the new era. Generally speaking, this industry will be recognized by the national education department.

b) *The supporting idea of computer industry education integration*

According to the above description, we know that the computer industry economy is an innovative industry with short development cycle in the new period. If it can obtain the support of industry education integration, it will be recognized by the Ministry of education. Then we can think that the development of computer software technology industry economy is prosperous and prosperous. Under the influence of social environment, the progress of computer major in school has also been concerned by people. The combination of industrial economy and educational ideas is essentially the combination of practical requirements and theoretical knowledge. There is no doubt that this combination can implemented (see Figure 1).

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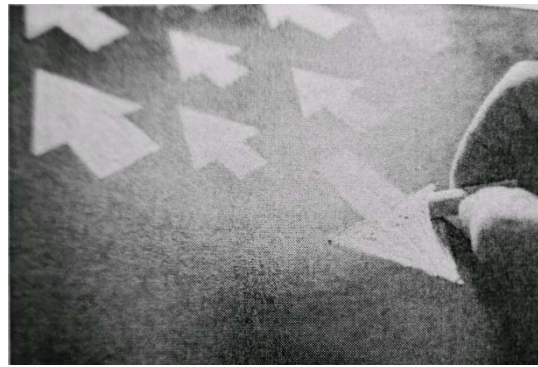


Figure 1: Different thinking modes of CDIO concept

c) *National support for the combination of production and education of computer*

The development of computers makes it obvious to all. Compared with the traditional engineering industry, the progress of computer industry is also very rapid. As its application technology is closely related to our life, its update has also been strongly supported by the state. Similarly, computer related industrial economy has become an important part of China's national economy[4]. Therefore, its national support for the combination of production and education is relatively strong.

III. PROBLEMS EXISTING IN THE CULTIVATION OF TALENTS INTEGRATING PRODUCTION AND EDUCATION IN COMPUTER SOFTWARE TECHNOLOGY SPECIALTY

Computer software specialty is a branch of science which has the fastest progress in the field of technology. With the development of software technology and the increasing demand for the ability of talents, the traditional talent training mode of computer specialty can not be applied in today's information environment. At present, there are many problems in the computer talent training mode of the integration of production and education in China.

a) *Emphasis on theorization and weaken practice*

According to a lot of research, we can find that there are a lot of software talents in our country. However, the level of their software production is generally low. We know that enterprises need high-level computer software development talents. However, the computer talents trained in Colleges and universities focus on the memory of theory and forget the significance of practice itself. This training mode is not conducive to the growth of computer talents.

b) *The practical conditions can not meet the needs of personnel training*

It can be confirmed that many a small part of the school computer professional students' social practice effect is good. However, the number of

students majoring in Computer Science in our country is very large. We can think that most students can not get good social practice training. Of course, more often than not, schools are unable to provide students with mature practical conditions.

c) *Lack of Teachers*

A good teacher makes a good apprentice. The meaning of this proverb is very huge. There is no doubt that the cultivation of talents needs the support of powerful teachers. However, the lack of teachers in many schools is not the lack of teachers but the lack of teachers' level. Although many teachers have strong academic ability, their comprehensive practical ability is not satisfactory. This kind of education will only make students fall into the cycle of focusing on theory but lacking practice once again.

IV. THE CONSTRUCTION OF TALENT TRAINING MODE BASED ON CDIO FOR COMPUTER SOFTWARE TECHNOLOGY SPECIALTY

a) *Introduction of CDIO concept*

Before using the concept of CDIO, schools need to have a deep understanding of the specific content and connotation of this concept. In fact, the concept of CDIO inherits the concept of Engineering Education in European and American countries. It systematically puts forward the standard requirements for the cultivation of operational ability. The framework of this concept is divided into four main parts. They include conception, design, implementation and operation. Today's schools should make clear the main contents of these four parts and implement them(see Table 1).

Table 1: CDIO concept of computer software technology professional production teaching integration of personnel training mode

Build steps	Requirement
Introduction of ideas	Clear objectives
Construction of teaching system	The cornerstone of technical level
Practice	The best proof of theory

b) *According to the concept of CDIO, the construction of theoretical teaching system should be carried out*

The cultivation of talents is inseparable from the construction of teaching mode. A solid professional foundation is an important cornerstone for the improvement of students' level. It is also the foundation of the cultivation mode of CDIO concept[5]. The school should reform the teaching system according to the development of students and the structure of CDIO. This reform does not need to be too deliberate. It can be reformed on the basis of the traditional teaching system.

4.3. The establishment of the practical link of the combination of production and education based on CDIO The combination of industrial economy and education can improve the maximum profit of enterprises. This is a business truth. The school gives students a lot of knowledge theory. Compared with the social CDIO. Only in this way can we ensure the development of the combination of theory and practice.

V. BASED ON CDIO CONCEPT OF COMPUTER SOFTWARE TECHNOLOGY PROFESSIONAL INDUSTRY EDUCATION INTEGRATION OF THE IMPORTANCE OF PERSONNEL TRAINING

a) *It is conducive to the rapid rise of computer industry economy*

At present, the computer industry economy is an important part of our national economy. It can be regarded as a great contribution to the economic development of modern China. Some experts predict that the future development of computer industry is limitless. Its rise should be strongly supported by the state and the people[6].

b) *It facilitates the use of CDIO's concept of domestic innovation*

In fact, the CDIO concept is a talent training concept invented by European and American countries. In recent years, due to the needs of China's national conditions, we have introduced this concept to China. At present, our use of this concept is in imitation of European and American countries. This paper describes the establishment of the talent training mode of integration of production and education, to a certain extent, innovates the domestic CDIO concept. It is of great significance across the ages.

c) *It can help promote the CDIO concept in other industries*

The combination of production and teaching of computer and CDIO concept is a relatively new use of skills. Before that, there were few successful cases. In theory, the case of the combination of production and education is successful. Then it will also lay the foundation for the application of CDIO concept in the combination of production and education in other industries.

VI. CONCLUSION

The combination of production and teaching of computer and CDIO concept is a relatively new use of skills. Before that, there were few successful cases. In theory, the case of the combination of production and education is successful. Then it will also lay the foundation for the application of CDIO concept in the combination of production and education in other industries.

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