

Teaching Reform of Computer Specialty in Colleges and Universities Based on the Innovative Talent Training Mode

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Abstract: With the continuous progress of society, the rapid development of science and technology, the computer specialty is becoming more and more popular. If the society wants to make rapid progress, it needs the society to continuously inject fresh blood. Based on the social need for more innovative talents of computer major, therefore, in the process of training computer talents, colleges and universities need to train students to master new and old knowledge, cultivate self-study ability, improve practical ability and thinking ability to analyze problems and solve difficulties, and cultivate innovative talents. Therefore, this paper mainly introduces the training and teaching methods of computer talents. The paper puts forward the strategy of classroom reform in the construction of computer talents in Colleges and universities..

1. Introduction

Now the main characteristic of new China is to cultivate innovative talents. All walks of life are constantly innovating for their own development. Therefore, in the computer education industry, it is necessary for colleges and universities to integrate the innovative ideas of the new era into the education process and cultivate the creative ability of computer students. Colleges and universities need to actively reform the traditional education system, promote the innovative personnel training mode, promote the continuous development and progress of the computer industry, promote the computer students to actively learn new knowledge, develop in an all-round way, improve their own quality and technical level, promote the continuous development of the economy, and input high-quality professionals for the society. Therefore, this paper mainly discusses the cultivation of innovative personnel. The strategies and methods of computer talents hope to provide reference help for the future computer teaching work.

2. Existing Problems in Computer Teaching

2.1. The Training Goal of Computer Professionals Fails to Meet the Market Demand

With the rapid development of the computer industry, the demand of the industry puts forward higher requirements for the students majoring in computer. In terms of the current market, most colleges and universities still adopt the traditional teaching methods when they carry out the teaching of computer major, which leads to the disconnection between the trained students and the market. Colleges and universities fail to reform the teaching content and the setting of teaching content according to the changes of the market. Incomplete, the newly developed technology can only not be introduced into the classroom teaching in time, which leads to the disconnection between college computer students and the market, and can not match the needs of innovative talents required by the computer industry, leading to some students' inability to mobilize professional theories and knowledge to deal with practical problems, and feeling very hard in the work adaptation link. Therefore, colleges and universities need to grasp the guidance of the computer market industry, cultivate the talents needed by the computer industry, so that college students can adapt to the society as soon as possible, and choose the right positions.

2.2. The Content of Computer Teaching Course is Old and Lack of Novelty

At present, the current teaching situation of computer specialty is old, which leads to the mismatch between talent cultivation and market demand. The main reason is that the contents of computer specialty courses are old and traditional. The technology that students learn in school will be eliminated by the market very soon. The computer industry develops rapidly. College students learn 3-4 years of knowledge in school, which is not suitable for market demand after graduation, which leads to college students graduating When I felt that I didn't learn much knowledge, the employment rate was not high. The main reason for this situation is that the classroom setting of computer major in Colleges and universities is backward, the teaching content cannot keep up with the trend of the times, the knowledge taught and the training of practice cannot keep up with the rapid development of computer, resulting in computer students unable to meet the needs of Enterprise Talents.

2.3. The Ancient Teaching Methods in Computer Class

Although many colleges and universities begin to pay attention to the innovation of classroom model and the cultivation of students' practical ability, there are still many teachers who adopt the traditional way of teaching, which leads to the decrease of students' interest in learning and classroom attention, and fails to let students really participate in the classroom. Many teachers fail to achieve the "student-centered" teaching mode. In addition, teachers simply look for the corresponding cases from the Internet. Some of the cases are out of touch with the actual life of students, which leads to students' inability to understand easily. Some teaching links are completely inconsistent with the process of relevant enterprises, which makes students' problem-solving ability decline, and it is difficult to find suitable posts after graduation It is difficult to meet the needs of enterprises.

2.4. The Teachers of Computer Major are Poor

Most of the computer teachers in the school are master or doctoral students of computer science. They have no relevant working experience in the enterprise, which leads to the lack of practical ability of some teachers themselves and the inability to grasp the actual dynamic development of the industry. As a result, the relevant computer courses can not keep up with the needs of the times. In addition, some teachers do not have the ability to develop computer courses, only understand mechanical teaching, and lack the awareness of mining teaching resources. Finally, the professional teachers of the school can't cooperate with the guidance teachers of the enterprise, which leads to communication problems in the cultivation of innovative talents and makes it difficult for students to adapt to the society.

3. Innovative Computer Personnel Training Methods and Strategies

Table 1 Reform plan of innovative computer talents training mode

Method	Content	Objective
Course group classification	Basic subjects; innovation and practice; characteristic courses	Personalized development
School enterprise cooperation mode	School enterprise cooperation; training enterprise teacher certification; Industry University Research Alliance	Industrial Development
Computer professional qualification certificate mode	Certificate of computer software capability	Standardization development
Construction of practice and innovation base	Introduce relevant enterprises to cooperate to build practice and innovation base	Innovative development

The cultivation of innovative computer talents needs to meet the following points: first, it needs the personnel of relevant computer enterprises to participate in the cultivation process; second, it needs to strengthen the school classroom teaching mode to cultivate students' personalized characteristics; third, it needs to strengthen students' subject consciousness and actively learn relevant computer knowledge. Fourth, we need to strengthen the classroom setting. See Table 1 for

the specific reform plan.

3.1. Innovating Classroom Teaching Mode and Highlighting Students' Main Position

In the process of computer teaching, teachers need to pay attention to the way of two-way interaction with students. According to certain teaching objectives and teaching plans, according to students' psychological acceptance ability and cognitive scale, Xu Ya guides students to learn new basic knowledge, so that students can develop their own values and outlook on life. Teachers need to innovate the classroom teaching mode, change the previous teaching concept, take students as the main body in the classroom, and train students' innovative thinking ability through the combination of teaching in class and practice in class. In the teaching process, teachers should change their roles from teachers to guides, from preaching to advising, encouraging and cooperating. With the rapid development of computer technology, if only staying in place, it will be out of touch with social development. Therefore, teachers need to cultivate students' application and innovation ability, exercise students' subjective initiative, integrate innovation ideas into the classroom, and give full play to students' subjective initiative in practice to train innovative thinking, so that students can adapt to the technical problems after graduation more quickly, Adapt to the changing information technology industry.

3.2. Perfect the Curriculum and Cultivate Students' Individuality

The knowledge system of computer specialty is huge. When making corresponding training programs, teachers need to adopt different training programs according to the characteristics of different students. Different positions and different enterprises need different talents to master different knowledge. Some students who are directly engaged in the industry after graduation should master more practical application knowledge, while those who want to take the postgraduate entrance examination need to master more practical application knowledge Deep theory. Therefore, it is necessary to formulate relevant personnel training programs and improve the corresponding curriculum. In order to implement the integrated development of production, teaching and research, the curriculum plan for computer talents training in Colleges and universities is shown in Table 2. For the construction of computer courses, three university courses and corresponding course group categories are created respectively to cultivate students' personalized development.

Table 2 Module design of computer talents training course in Colleges and Universities

Curriculum block	Category	Objective
Featured courses	Data engineering and intelligent information; computer and mobile Internet; graphics and image processing and virtual reality course	Personalized development
Comprehensive innovation practice	Innovation classroom; school enterprise cooperation practice	Personalized and professional foundation
Basic deep theoretical plate	Special name of public courses and information	Professional foundation and information foundation

3.3. Strengthen the Cooperation Between Schools and Enterprises and Jointly Cultivate Innovative Talents

Many colleges and universities are lack of practical knowledge about enterprises, and most of the students only know pure theory, which leads to the lack of practical ability of the students. Schools can take the education project of school enterprise cooperation together, introduce teachers and talents from enterprises outside the school, and let enterprises deeply participate in the process of training talents. In addition, the school can also adopt the enterprise certification teacher qualification to train the excellent personnel of the enterprise, and provide the enterprise and the school professional teachers with big data, text computing and Internet of things related knowledge. We can also invite relevant enterprise personnel to participate in the construction of talent training

program in Colleges and universities, revise curriculum syllabus, and cultivate students' innovation ability and engineering ability.

3.4. Establish the Practice Base of Computer Industry and Cultivate Innovative Talents

Reform the teaching mode, encourage students to learn from doing, and promote students to cultivate their own subjective initiative. This requires mutual cooperation and practice between schools and enterprises, establishment of internship and innovation base, establishment of cloud desktop laboratory, and cooperation with enterprises to build innovation base, introduction of social resources, provision of graphic workstation, laser scanner and other software and hardware equipment improvement. The working conditions of the laboratory enable the students to have strong motivation and interest to practice in enterprises.

3.5. Other Reform Strategies

One is to carry out standardized training for school students and implement the model of computer software certification certificate. The second is to attach importance to the computer case display and discussion in the teaching class. Make students master the practical application method of computer from the case, enhance the classroom atmosphere, stimulate students' ideas and passion, and improve students' imagination and innovation ability. The third is to establish a network communication platform between teachers and students, students and students, increase teaching efficiency, save practice between teachers and students, and promote the ability of unity and communication between teachers and students. The main teaching modes are shown in Table 3. The implementation of these two teaching modes can help students better conduct classroom discussion, train students' thinking ability and realize diversified teaching.

Table 3 Teaching mode of network communication platform

objective	Method
Research mode of learning environment	Through the network communication platform, the classroom evaluation between teachers and students, teaching methods are discussed, and the teaching environment atmosphere is improved.
Technical service support mode	When students encounter technical problems, set up corresponding procedures or specially assigned persons to conduct guidance and teaching to provide technical support for students

4. Conclusion

In the teaching process of computer major in Colleges and universities, in order to cultivate the talents needed by enterprises and society, innovative talents training mode is needed. Combined with the common strength of schools, enterprises and students, improve the traditional teaching mode, explore diversified innovative talent training programs, create a good teaching atmosphere, and improve the efficiency of computer classroom teaching. With the rapid renewal of computer professional knowledge system, teachers and students need to catch up with the pace of the times and improve the quality of computer personnel training.

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