

Countermeasure of Cultivating Students' Innovative Ability in Computer Education

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Abstract: The development of the times is inseparable from innovation. The ability to innovate is one of the necessary requirements for talents in the new era, and it is also one of the main contents advocated by quality education in China. The rapid development of science and technology requires that talents in the new era must have the ability to innovate to meet the needs of the development of the times. In the teaching of computer education in China, more and more attention is paid to the cultivation of students' innovation. In recent years, the way to improve the ability of innovation has been deeply explored. This paper analyzes the significance of innovation in computer and the current status of innovation in computer education, and puts forward corresponding countermeasures to cultivate innovative ability to promote the innovation of college students in China.

Keywords: Innovation, Computer teaching, Cultivating countermeasures

After entering the 21st century, computers have developed rapidly and have had a profound impact on people's lives and work. Many people pay more and more attention to computer education. With the development of the times, innovation is particularly important in computer education. In recent years, the cultivation of students' innovative ability in computer education has become a research hotspot. This paper analyzes the current situation of cultivating students' innovative ability, and proposes some methods to promote the development of students' innovative ability in computer education, for example, stimulating students' interest in learning, cultivating their subjective initiative, innovating education models and combining theory and practice.

1. Analysis of the importance of students' innovative ability in computer education

The great achievements made in economic reform of China have greatly improved people's living standards and changed the way of daily life. The most obvious is the use of computers. Nowadays, people can't live or work without computers, such as Wechat and Taobao, which are the most common ones in their lives. They have changed people's lives tremendously. The state has paid more and more attention to the development of computer. In recent years, it has put forward the mode of innovation and entrepreneurship, such as Internet +, and has gained rapid development. It requires modern young people to master the computer skillfully, and use the computer for creative development to promote social progress^[1~2]. Therefore, in the teaching of computer, students should not only master cultural knowledge, but also cultivate the ability of innovation to adapt to the rapidly changing society. The development of students' innovative abilities will enable students to use computer knowledge in application and learning as well as in the style of life in order to become a useful tool for students.

However, at present, there are severe challenges in the cultivation of students' innovative ability in the teaching of computer science. Students' innovative ability is not enough to adapt to the development of today's era and to meet the requirements of modern talents, which hinders the progress of computer in China. Therefore, it is of great practical significance to analyze the ways of cultivating students' innovative ability in computer education.

2. Analysis of the current situation of cultivating students' innovative ability in computer education

Modern society is an information society. The demand for computer talents in the market is getting higher and higher. Higher education attaches great importance to computer teaching. The cultivation of innovative ability is the key point in computer education and the requirement of training talents in higher education. However, there are severe challenges in computer education in China, which is not conducive to the cultivation of students' innovative ability. First of all, the content of computer education is seriously lagging behind, and some content arrangements are unreasonable. Computer technology belongs to high and new technology, and its speed of renewal is very fast. The content of computer education should conform to and keep pace with the trend of the development of the times. But the content of computer textbooks in colleges and universities in many areas of our country is updated slowly, and the knowledge points about computers are relatively old, which has not met the requirements of the development of the times. The curriculum arrangement of computer education is also unreasonable, the teaching plan is not innovative, and it can not reflect the advanced nature of the times. Furthermore, it lacks clear teaching objectives, and the content of computer teaching is relatively empty, which is not conducive to the training of professional computer talents and hinders the improvement of students' innovative ability^[3]. Secondly, the teaching teachers themselves lack the ability to innovate, lag behind in thinking and fail to innovate in teaching mode. Teaching thought is the soul of teaching, and the backwardness of teaching thought will inevitably lead to the backwardness of the course. Computer is a very creative subject. Having teach students in accordance with their aptitude will naturally hinder the expansion of students' innovative thinking. Old teaching ideas are not only unfavorable to computer teaching, but also not in line with the requirements of the development of today's era, which restricts students' innovative ability. Finally, in traditional methods, there exists a phenomenon that the teaching is emphasizing results and ignoring process, and focusing on theory and ignoring practice. While in the process of computer education and teaching, we should attach equal importance to the theoretical knowledge and practice of computer, and take the basic cultural knowledge and practical operation as the main way of assessment. However, many colleges and universities do not pay enough attention to the practical operation of computers, which is very harmful to the cultivation of students' innovative ability, resulting in the general low innovative ability of students.

3. Strategic analysis of cultivating students' innovative ability in computer education

3.1 To change the teaching mode and improve students' subjective initiative

In the teaching of computer education, teachers should pay attention to the cultivation of students' innovative ability to meet the requirements of innovation in the current era. In the teaching classroom, the teacher is an important organizer, and plays a role in guiding students. The computer teacher must

strengthen the cultivation of his own innovative ability, change the understanding of the ability to innovate, and transform the traditional innovative concept^[4]. In the computer teaching classroom, the students' subjective initiative is given enough respect to affirm the students' dominant position in teaching. The school strengthens the cultivation of teachers' innovative consciousness. Only when teachers' innovation consciousness is promoted can they innovate teaching methods and instill the spirit of innovation in the whole computer teaching to stimulate students' inherent innovation potential. The rapid development of information technology requires computer teachers not to teach according to traditional teaching methods. The contents of the textbooks should be combined with the actual situation to continuously update computer knowledge, so that students can harvest the latest computer knowledge and keep up with the development of the times. Teachers encourage students to conduct computer learning independently, and use theoretical knowledge effectively to solve practical problems. As a result, students' subjective initiative can be cultivated.

3.2 To arrange the curriculum reasonably and stimulate learning interest effectively

In the years of education reform, some colleges and universities still adopt old-fashioned education methods. In the process of teaching, they often adopt “cramming” for computer teaching, which makes students gradually lose interest in learning. A qualified teacher should be able to arrange the course for the students, change the traditional way of education in time, and encourage students to participate in the classroom teaching in the classroom to enhance their interest in learning. Because the school does not pay enough attention to the computer, the curriculum arrangement is not reasonable enough, which has seriously hindered the cultivation of students' innovative ability in the process of computer teaching. Teachers should clarify the importance of innovation ability, thoroughly change the traditional concept that the teaching is emphasizing results and ignoring process, and focusing on theory and ignoring practice. In addition to strengthening students' computer theory knowledge education, they should pay more attention to students' practical ability. Only in actual operational practice can students develop their innovative consciousness and cultivate their innovative ability so that students can use theoretical knowledge to solve practical problems.

3.3 To innovate teaching mode with the use of multimedia technology

The traditional computer teaching mode has not met the requirements of the development of today's era, and it is dull and inefficient. Schools should introduce a large number of high-tech modern teaching software, and teach by projectors and other teaching equipment, and attract students' attention by using images combined with words, so that students can understand computer content more easily and deepen their impression and generate interest^[5]. As a computer teacher, using multimedia information technology to teach is the most basic operation. Through multimedia information technology, teachers can reasonably arrange the content of classes and better combine advanced computer technology knowledge at home and abroad, so that students can have a broader vision. In addition, teachers can adopt various forms of classes, stimulate students' thirst for knowledge, and establish a good atmosphere for innovation to encourage students to think actively. Students' knowledge of computer will not simply stay on the surface, but have their own deep insights, which is conducive to the expansion of students' creative thinking. Therefore, computer teachers should learn to innovate teaching mode with the use of multimedia information technology, adopt a combination of various teaching modes to guide students to think actively, and explore problems actively, so that students can find problems in specific operations and improve their innovative ability in exploring

answers.

3.4 To emphasize the position of practical ability in examination

Computer teachers should change the traditional teaching assessment methods, constantly reform the students' assessment methods, and highlight the practical ability assessment in the assessment. Different assessment methods can reflect students' innovative ability from the side, while traditional assessment methods severely restrict students' innovative thinking and make students stay on the theoretical knowledge of computer. Therefore, computer teachers should pay attention to the position of practice in the assessment methods according to the requirements of the development of the times ^[6]. At the same time, the traditional way of computer examination is paper-based examination paper, which mainly inspects students' mastery of basic computer culture knowledge. It is difficult to test students' innovative ability by means of examination without computer operation or practice. When assessing the assessment methods, we should attach importance to the status of practical ability in the assessment. In addition to answering in the form of paper papers, we also require students to answer on the computer to test students' ability to use theoretical knowledge. In the process of computer operation, students use knowledge to solve practical problems, which will prompt them to think and is conducive to the cultivation of students' innovative ability.

4. Conclusion

All in all, computers have penetrated into every aspect of people's lives, and strengthening the use of computers by students is a requirement of the development of the times. In the process of computer science education, we must innovate the education model and adopt modern methods for teaching. Teachers should change their understanding of innovative ability, attach importance to the status of innovation ability in curriculum teaching. Furthermore, teachers should create a good atmosphere for students to encourage them to dare to ask questions, be willing to think, and to promote students' innovative ability.

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