Research on Cultivating Students' Creative Ability in College Computer Teaching

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Abstract: In the fierce market competition environment, society has increasingly higher requirements for the innovation ability of college students. Under this background, in the process of teaching computer courses in universities, it can not be limited to traditional computer teaching methods. The theory is indoctrinated, neglecting the teaching mode for students' computer hands-on exercise, butpromotes the innovation ability of students by developing a teaching mode based on the cultivation of creative ability. In view of this situation, we will specifically combine the actual situation of university computer teaching at this stage to explore how to promote the improvement of students' computer innovation ability through innovative research on university computer teaching models in this article.

1. Introduction

With the rapid development of information technology, computer teaching in colleges and universities should also keep pace with the times and keep up with the development of the times. In the teaching process, we should continuously improve teaching methods and cultivate students' innovative ability. Innovative ability is the core content of quality education, and the cultivation of innovative ability is also one of the most important contents of various educational contents. Today's society is an innovative society. Cultivating high-quality innovative talents that meet the needs of the development of modern society is the need of the times. And how to cultivate the innovative ability of college students has become a problem we must consider.

At present, computer education in China's colleges and universities generally has rigid teaching methods, lagging teaching content, and disconnected theory and practice. The talents trained cannot meet the needs of society. At present, employers are increasingly demanding of talents, requiring practical experience, or even being unfamiliar with the current job, they must be trained and able to adapt to job requirements on the basis of existing work. Therefore, colleges and universities that are the cradle of talents should recognize the current social needs, adjust the methods of computer teaching in a timely manner, and cultivate IT talents with real talents. To change the current teaching methods and methods, we must change from the teaching concept, that is, from the transfer of knowledge to the cultivation of abilities. The abilities mentioned here include work abilities, scientific research abilities, learning abilities, and innovation abilities. This article mainly discusses how to improve students' creative ability in computer teaching in colleges and universities.

2. The Importance of Cultivating Students' Creative Ability in College Computer Teaching

We are in the big era of rapid development of information technology. Computers have been widely used in our daily work and life. For college computer majors, only by mastering relevant computer technology can they have good market competitiveness. In fact, from the employment trends in recent years, it can be seen that computer talents have been favored in many fields. For this reason, in addition to expanding enrollment quotas, colleges and universities have also implemented corresponding teaching reforms in computer courses, aiming to cultivate for today's society More computer talents with innovative awareness and ability.

It can be seen that the teaching of computer courses in universities with comprehensive qualities and innovative abilities is very necessary, and at the same time, it will also promote the effective

development of China's social economy.

Looking at the teaching mode of computer courses in colleges and universities as a whole, it is more traditional and singular. It is mainly reflected in the following two points: First, the teaching philosophy of teachers is too outdated. Many computer course teachers always think that as long as they allow students to master some basic skills, such as: how to make ppt; how to make tables, and so on. At the same time, the assessment is mainly based on computer grade examinations, which is used to judge students' mastery of computer basic knowledge. Many students also choose to memorize knowledge points in order to obtain computer grade certificates. In fact, This is still the embodiment of exam-oriented education, and the comprehensive quality and innovative ability of students in this regard cannot be improved effectively.

The second is that students are less motivated to learn by themselves. Influenced by the concept of exam-oriented education for a long time, most college students have never received systematic computer knowledge teaching before, so the overall foundation is relatively weak, and the teaching methods used by professional teachers are difficult to stimulate their interest in learning, which makes students It is agreed that computer courses are dull and boring, and naturally the enthusiasm in the learning process will not be so strong. Therefore, college computer teaching to achieve comprehensive quality and innovative ability is actually an effective subversion and breakthrough of the traditional teaching model.

Improving students' innovation ability is actually beneficial to improving the teaching efficiency of the entire computer course. As a professional teacher, we should consciously motivate students to study professional courses. In order to make classroom teaching more colorful, simulation software can be used, which has proven to be more conducive for students to master the professional knowledge taught in the classroom. Taking the course content of "Building Mapping Virtual Simulation Teaching Software V2.0" as an example, teachers use the "progressive" simulation to try this teaching mode, and the teaching effect obtained is indeed very satisfactory.

For students studying computer science, if they study the course in the traditional way, it is not only difficult, but also requires too much time and energy. But after teachers use simulation teaching software, students' understanding of the building structure will become more intuitive and visual. In a word, on the one hand, it can enhance students' innovation ability; on the other hand, it can improve the overall classroom teaching efficiency.

In the process of university computer teaching, we must fully realize that with the gradual improvement of the society's comprehensive quality requirements for students, the school should fully focus on the cultivation of students' innovative ability in the process of student training. At the same time, university computer teaching is a study involving multiple abilities such as programming ability and analysis ability of students. This requires that in the process of university computer teaching, full attention be paid to innovative research on university computer teaching models. Ensuring that students can improve their computer innovation ability by accepting innovative teaching modes, and adapt to society's ability needs for students. Under this background, in the process of constructing and researching the innovation model of computer teaching in universities, students must be fully encouraged to contact the brain and work hard in the process of learning, effectively improve their computer innovation capabilities, and be able to cope with increasing complexity Changing computer practice issues.

3. Problems in Computer Teaching in Colleges and Universities

The teaching method is old-fashioned, with emphasis on test scores, competence, theory and practice. At present, in China's college examination systems, the assessment of computer subjects takes the theoretical examination results as the most important part of the assessment, and the internship and experimental assessment results account for a small part of the final results. This assessment method is unfair to those students with strong hands-on ability and innovative spirit but poor rote learning ability. Therefore, this old-fashioned assessment method is not conducive to cultivating students' innovative spirit.

Due to the long-term influence of traditional teaching models, some college computer teachers

are accustomed to adopting a single teaching method of "teacher speaking and student listening" in classroom teaching. Usually, teachers occupy most of the classroom time and uniformly impart computer knowledge to class students. Then take a little class time for students to practice, or let students practice by themselves after class. This teaching method, on the one hand, ignores the students 'thoughts and feelings, and the students' learning interest is not high; on the other hand, it uses the "big pot rice" explanation method, which does not start from the actual learning situation of the students and cannot meet the learning needs of each student .

The teaching content is lagging and the knowledge is aging. Computer is an emerging discipline and its updating speed is very fast. Therefore, the relevant computer knowledge needs to be updated constantly. However, some of our computer teachers' lesson plans and teaching contents have not changed for many years, let alone teaching methods. They are mainly based on classroom teaching and supplemented by a small number of experimental classes. Of course, it is very difficult for students to cultivate any innovative spirit. To change this situation, teachers and management need to work together. Teachers need to work hard to improve themselves and update the content of knowledge taught in time; management departments need to provide teachers with more learning and training opportunities.

In general, classroom learning is the main way for students to acquire knowledge. The updating of computer knowledge and technology is fast, but the curriculum materials of computer courses in colleges and universities often have a certain lag and cannot keep up with the update speed of knowledge and technology. At the same time, some teachers teach in accordance with previous teaching programs in order to complete teaching tasks or to save trouble. The content taught is outdated, and they are unwilling to explain new knowledge to students, fearing that it will affect teaching progress. This directly hinders students' knowledge horizons, constrains students' creative thinking, not to mention cultivating students' creative ability in teaching.

The theory and practice are severely disconnected. Computer is a subject mainly based on practice. Only by repeatedly applying the knowledge learned in practice can the purpose of computer teaching be truly achieved. At present, there is a phenomenon that the theory of computer teaching deviates from practice. Many students have very good theoretical test scores, but in practice, they often cannot start. In order to change this situation, we need to increase the number of practical classes and cultivate students' innovative spirit in practice.

In the previous computer teaching process in colleges and universities, teachers usually explained the basic knowledge to students based on textbooks, explained the implementation methods and steps of certain effects, and then let students follow the steps to practice operations. Students rely on the teacher's explanation ideas and guidance methods to carry out Study, even some students can complete the textbook. Teachers usually ask students to submit works when inspecting the learning situation of students. The content requirements of works are usually about the use of format and knowledge points. There are no excessive requirements for creative design and new skills in student works. Students Lack of innovative practice.

4. **Cultivation Countermeasures of College Students' Innovative Ability in Computer Teaching**

Computer courses in colleges and universities from computer public courses to computer majors are all practical and innovative, and are closely connected with the modern information society. Therefore, computer teaching in colleges and universities can help students understand the development of the information society in a timely manner, especially to cultivate their innovation ability and promote Its all-round development.

In the process of computer teaching in colleges and universities, in addition to cultivating students to establish correct values, moral values, and legal consciousness, and mobilizing students 'enthusiasm for learning, they must also cultivate students' ability and spirit of independent innovation. If we want to cultivate students' good innovation ability, we must change the teaching concept of educators in time. First, fully understand the quality education aimed at enhancing the national quality. The most prominent feature of this education is that it is oriented to all students,

enhances the basic quality of students in all directions, and strengthens the development of students' moral, intellectual, and other aspects. Second, in the development of quality education, attention should be paid to the cultivation of students' innovative spirit and practical ability. The purpose of innovative education is to cultivate a group of talents with innovative consciousness. Accelerating the development process of innovative education is a key content that cannot be ignored in the development of quality education.

In order to effectively improve the training efficiency of university computer teaching for students' innovative ability, in the process of university computer teaching, the university computer teaching methods should be updated and researched according to the characteristics of students. In response to this situation, in the process of reforming university computer teaching, teachers of university computer courses must fully grasp the characteristics of students' actual computer learning, create an atmosphere for students to study university computer courses in the classroom, and stimulate students to pursue university education. Interest in computer course learning, building an efficient university computer classroom, and then effectively improving students' computer innovation ability. At the same time, in the process of reforming and creating the computer innovation model of the university, teachers must fully realize the problems existing in the traditional teaching methods, and carry out targeted research on the reform of teaching methods.

For example, in the teaching process of web design for university computers, teachers can organically combine actual cases and teaching content of the use of web pages in daily life. Inform the students of the Taobao shop's web design method and let the students use the data to analyze actual computer problems. In this way, they can not only effectively stimulate students' interest in computer knowledge, but also help students transfer computer knowledge and actual problems. Organically improve students' computer innovation ability and association ability.

Actively create a teaching environment that is conducive to cultivating students' innovative ability, which specifically covers teaching psychology and computer teaching environment. Traditional teaching takes educators as the main body, and students are in a passive position. The modern equal, democratic, and harmonious teaching environment has shortened the distance between teachers and students. Educators take the initiative to communicate with students, forming a good teaching psychological environment of mutual trust, mutual understanding, equality and harmony, ensuring students to actively explore under the condition of psychological safety, establishing a scientific and reasonable sense of innovation, and fully reflecting their creative potential. In the teaching process, educators should require students to show their design ideas and creative ideas, strengthen classroom communication, and finally establish a unified design plan.

In the course of teaching university computer courses, if it is simply for students to inculcate university computer operations and theoretical knowledge, it is easy for students to have a dull feeling about university computer courses. In view of this situation, in the process of teaching university computer courses, interspersed with students 'hands-on practice of university computer knowledge. Under this background, students' interests and attention will be quickly concentrated, and then students will be happy During the study process, you will master the basic analytical computer application skills of the university. Teachers who flexibly interspersed some basic teaching content of university computer courses will help students in a happy learning atmosphere, thereby deepening students' knowledge of university computer knowledge, and laying the foundation for subsequent deeper learning of university computer theory knowledge . In view of this situation, it can be seen that in the process of teaching computer courses in universities, it is not possible to stick to traditional teaching methods. Teachers must find alternative ways to choose teaching methods and innovate targeted computer teaching methods By increasing the students' interest in learning, the university's university computer practice ability is improved as much as possible.

For example, in the second-level C language teaching of university computer teaching, university computer teachers can take the simple programming process to the multimedia presentation in the classroom and experiment with the programmed program for students. In this way, you can quickly absorb students 'learning interests, create a strong learning atmosphere in the

classroom, and promote the improvement of students' computer innovation capabilities.

As everyone knows, the practical application value of computer courses is extremely high, so educators should encourage students to make full use of their knowledge to deal with problems encountered in reality. When dealing with problems encountered in reality, educators can arrange students to conduct competitions to promote the formation of problem-solving capabilities and innovative capabilities through debate and communication.

In the process of teaching university computer courses, in order to ensure the innovative effect of the teaching model, university computer teachers must update the teaching model in a targeted manner, promote the formation of a good university computer learning atmosphere, and then ensure that students are performing university computer In the course of the course learning, we can spontaneously explore and study the knowledge of university computer courses, improve the teaching efficiency of university computer courses, and then effectively improve students' computer innovation ability. At the same time, as a traditional discipline, in the process of teaching computer courses in universities, a set of teaching models have been formed. Therefore, in the process of university computer teaching model innovation, we must pay full attention to the reform and exploration of traditional teaching methods. At the same time, it is necessary to fully ensure that students can have an independent awareness of university computers and improve the teaching efficiency of university computer teaching. In the process of innovating the teaching model of university computer courses, we must pay full attention to the actual analysis and research of students. Ability training allows students to improve their computer innovation ability through continuous practice calculations.

The computer is very practical, and the cultivation of students' practical ability and problem-solving ability is the key to the cultivation of students' innovative ability in computer teaching. This requires strengthening the students' practical training. Therefore, colleges and universities should speed up the construction process of computer labs and build an experimental environment suitable for the cultivation of students' innovative ability. In the actual construction process, it is necessary to strengthen the cultivation of a group of excellent laboratory teams

Computer technology has the characteristics of fast update speed, so in the process of computer teaching, educators must update the content of teaching materials in time in order to keep pace with the times and meet the needs of computer professionals in modern society. The optimized setting of computer courses also plays an important role in the formation of students' innovative ability.

First of all, when constructing teaching goals, it must be accurately positioned, and its positioning mainly follows the following basis: mobilize students' learning initiative and creativity. If the teaching goals do not follow these foundations, computer teaching will be difficult to achieve the expected Teaching effect. In general, cultivating students 'innovative ability is the ultimate goal of computer teaching, and to implement this goal requires educators to give full play to students' inherent potential and enthusiasm for learning. Secondly, each subject teaching has its own regularity, so computer teaching also has its own regularity.

In the process of teaching college computer courses, college computer courses can adopt cooperative teaching methods, allowing students to practice by forming small groups to help each other and make progress together. At the same time, by adopting the group cooperative learning method in university computer courses, students' hands-on efficiency can also be effectively improved, thereby improving the teaching efficiency of university computer courses.

For example, in the course of university computer practice, teachers can assign students to groups according to the actual situation of study, and give each study group a university computer task. For example, topics such as "use a level two C language knowledge to compile a simple calculation software" and let students independently use university computer course knowledge to solve practical problems. Give corresponding guidance, let each group member contribute their own strength, let students complete the verification of the project independently on the basis of mutual cooperation. Through this teaching method, students can cooperate with each other to improve their knowledge of university computer knowledge.

5. Conclusion

In short, teachers should use the creative education factors in computer teaching to boldly allow students to play freely and tap their potential creative factors, reform the classroom structure based on teaching materials, optimize teaching design, and use advanced theories to show brand-new teaching ideas. Great progress has been made in creative thinking and personality, so as to improve the overall quality of students.

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