

Application of Modern Educational Technology in College Computer Teaching

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Abstract: In the current teaching field, with the rise of modern educational technology, a new teaching thinking and technology concept came into being. This technology is not only actively adopted in the actual teaching process, but also plays an important role in helping teachers organize classroom activities effectively by optimizing the education model and enriching the teaching content. Compared with traditional classroom teaching methods, modern educational technology shows its forward-looking and advancing with The Times characteristics, and becomes one of the indispensable strategies of educational reform. Therefore, in the teaching of computer subjects in institutions of higher learning, we should fully recognize the importance of using these modern technologies, not only consider the specific situation of students, but also adjust and innovate for teaching objectives. In this paper, the application of modern educational technology in college computer teaching will be analyzed in detail for reference.

Keywords: Modern educational technology; Colleges and universities; Computer; Teaching; Apply

Along with the popularization and development of modern technologies such as Internet and artificial intelligence, the process of education informatization is accelerating, which not only helps the modernization of education, but also greatly promotes the training of high-quality talents. In higher education institutions, computer-related courses may encounter problems such as low participation of students and passive acceptance of knowledge if they simply rely on traditional teaching methods due to their abstract content, strong logic and practical needs. However, with the introduction of the latest educational technology, the course content can be presented in a more vivid form, through the introduction of diversified teaching methods, not only enhance the attraction of the classroom, but also effectively stimulate the enthusiasm of students.

1. Overview of modern educational technology

Through the integration of modern educational concepts and the application of information technology, modern educational technology plays an important role in integrating and enriching educational resources. In all aspects of teaching, teachers not only focus on integrating and utilizing existing educational resources, but also devote themselves to collecting and developing new classroom teaching materials to ensure the effective use of educational resources. The introduction of this information technology has not only injected new vitality into the traditional education mode, but also promoted the innovation and perfection of educational ideas, and accelerated the development process of China's education industry. The difference between modern and traditional educational technology is mainly reflected in its emphasis on the role of active education. By introducing new teaching means and methods, modern educational technology has formed a significant impact and challenge to the traditional teaching mode. In the process of educational reform, we should pay attention to the development and application of modern educational technology, and pay attention to its extension in the field of education and other levels. This sets higher standards and demands for educators in their daily work. Therefore, educators need to deeply study advanced educational theories and information technology, accurately grasp the essence of modern education, and skillfully use modern teaching methods, in order to better use the characteristics and advantages of modern educational technology for effective teaching. In the process of implanting knowledge, more emphasis on the leading role of teachers and the subject status of students' learning can better bring the value of modern educational technology into play^[1].

2. Overview of modern educational technology

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2.1 Studio teaching under multimedia technology

In today's age of information explosion, educational methods need to innovate to meet the new learning needs. Studio teaching, as a new education model, came into being under such a background. It relies on the support of multimedia technology, through pictures, video and audio and other forms of auxiliary teaching, not only deepen students' understanding of knowledge, but also greatly attract students' attention, and stimulate their desire to actively explore. Compared with the traditional teaching mode, this teaching mode shows significant advantages and differences. First of all, studio teaching is very contagious. Through the combination of visual and auditory diversity, it effectively enriches the teaching content of computer and other subjects, so that students can grasp complex concepts and operations more intuitively and vividly. This form can not only help students better understand professional knowledge, but also make the overall operation process of the computer clear and easy to understand. With these living teaching resources, students can absorb and understand knowledge faster, so as to achieve better teaching results. In addition, studio teaching has changed the traditional mode of talent training. By activating students' visual and auditory senses, the teaching process is no longer monotonous and boring, but becomes lively and interesting. The implementation of this teaching method is not only the imparts of knowledge, but also a process of thinking training and creativity stimulation. It jumps out of the framework of traditional teaching and focuses on the exploration of new knowledge and the cultivation of innovative ability. Under this model, students are encouraged to participate in learning in a more active manner, which not only enhances students' interest in learning, but also lays a solid foundation for their future development^[2].

2.2 Interactive teaching under telecommunication technology

In today's rapidly developing information age, telecommunication technology, with its unique advantages, has completely reformed the traditional education model and created a new world of learning. Through the application of this technology, it not only breaks through the geographical and time constraints, realizes the optimal allocation of resources, but also greatly enhances the interaction and flexibility of learning. Students are now free from the constraints of the classroom and can use modern tools such as computers to acquire knowledge anytime and anywhere, which greatly expands their learning channels and ways. With the introduction of telecommunication technology, learning has become more personalized. Students can arrange their own learning time and content according to their own learning pace and needs, so that the learning efficiency and quality can be significantly improved. More importantly, in this process, the communication and interaction between teachers and students have been strengthened. Through the application of software and hardware tools such as the Internet and computers, teachers can easily publish learning tasks, and students can conveniently conduct information retrieval and self-study, and raise questions to teachers in time. This timely feedback mechanism not only enlivens the teaching atmosphere, but also makes teaching more efficient. On the other hand, telecommunication technology provides teachers with powerful analytical tools through modern technological means such as artificial intelligence. Teachers can use these tools to summarize the common problems of students, and adjust the teaching strategies accordingly, so as to make the teaching content more suitable for the actual needs of students. At the same time, this technology is also very useful for guiding students to practice. It not only promotes the cooperation between students, but also strengthens the communication and interaction between teachers and students, which undoubtedly provides an important support for cultivating students' independent

thinking ability and practical ability^[3].

2.3 Simulation teaching under virtual reality technology

Virtual reality technology, as a cutting-edge technology, is gradually becoming an important force to reform the traditional education model. Through its distinctive simulation and three-dimensional characteristics, VR technology is playing an increasingly important role in the field of computer science education. This technology can effectively transform boring and abstract computer knowledge into a visual, perceptible and interactive learning experience, creating a feeling of being in a real operating environment for students. This immersive learning atmosphere greatly improves students' interest in learning and the efficiency of mastering skills. For the traditional computer teaching, practicability is often an insurmountable shortcoming. Virtual reality technology elegantly circumvents this problem, allowing students to find software programming problems in a secure virtual environment, so that they can more intuitively locate and solve these problems. Through virtual simulation, students can closely combine theoretical knowledge with practical operation, which not only deepens their understanding of knowledge, but also cultivates application-oriented talents who can solve practical problems. In addition, virtual reality technology has significant advantages from an economic perspective. It reduces the cost of laboratory construction and daily maintenance in higher education institutions, so that schools with limited budgets can carry out high-quality practical teaching. In this way, students can not only benefit from theoretical learning, but also improve themselves in practical operation, ensuring the effective implementation of practical courses.

Conclusion:

In summary, with the rapid development of science and technology, the combination of modern educational technology and computer science education in colleges and universities has become an inevitable choice to adapt to the trend of The Times. This integration not only greatly enriches the teaching resources, but also creates a diversified and high-quality learning environment for students. At present, with the continuous progress and expansion of the application of modern educational technology, its role in the future education is becoming increasingly important, indicating that it will play a key role in stimulating students' innovative thinking and improving their problem-solving skills, helping them better adapt to the rapidly changing social environment.

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