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# Analysis of Network Teaching Mode of Computer Courses in Colleges and Universities

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***Abstract:*** In the development of computer network in recent years, more and more students will choose computer as their university major. The development of network technology has also brought certain changes to the education of computer courses. The computer course education in colleges and universities presents a teaching transformation mode that is advancing with each passing day, and faces huge challenges. The educational model is imperative. This article mainly discusses in depth from the perspective of the network teaching mode of computer courses, and proposes the corresponding network teaching mode. It also hopes to improve the educational efficiency and quality of computer courses and improve the learning level of students.

***Keywords:*** Colleges and Universities; Computer Courses; Network Teaching

## Introduction

The development of network technology has brought opportunities and challenges to technical education in colleges and universities. In order to adapt to the future development model of computer education, network-based education is imperative. Major colleges and universities have developed computer-based teaching methods. This new model has improved the efficiency of teaching to a certain extent, and has also had a certain impact on traditional classrooms. Through network teaching, teachers can use remote resources to complete the control of all aspects of teaching, including students' classroom teaching, answering questions, homework correction, examinations, etc. It is believed that in the development of the next few years, network teaching will also become a mainstream of computer education in the future, forming a development model for the cultivation of computer application talents.

## 1. The main content and links of network teaching

## 1.1 Online teaching

Online teaching is an important way of computer network teaching. At present, many schools have adopted advanced network multimedia teaching methods to create network multimedia classrooms. Using computer network technology, various teaching information can be introduced into classroom teaching, so that students can of online learning. Including text, images, animation, sound, etc., introduced into the basic teaching of computer. It shows a new vivid image for students, and creates a teaching environment with pictures and texts. Through this multimedia teaching environment, it helps students to better learn and understand computer professional knowledge, stimulate students' interest in learning, and increase the quality of classroom teaching. amount of information dissemination. When students study computer courses, using multimedia teaching methods, they can introduce specific network production software to students, perform detailed software operations and demonstrations for students, and realize the innovation and development of integrated teaching and practice. When students encounter learning problems, they can give feedback to teachers through online channels for help, which greatly enhances the interaction between teachers and students.

## 1.2 Online tutoring

In order to enable students to master the professional knowledge and content explained by teachers in a relatively short period of time, it is necessary to practice students' online education, tutoring, answering questions, and correcting students' homework through online teaching, so that students can teach online in such a way. environment to improve self-professional knowledge and abilities. The traditional way of answering questions is mainly arranged by teachers at a fixed time and place to answer the questions raised by students face-to-face, but the networked teaching method has changed the predicament of traditional teaching and is not limited by time and space. In addition, the current students' learning tasks are relatively heavy. If the online question-answering and online tutoring methods are used, teachers can provide targeted teaching guidance to students, and students can also use their spare time to solve problems in self-learning. The problem. Students can communicate between teachers and students about their own problems or difficulties through online channels, which is conducive to teachers' targeted guidance, complete online tutoring, and improve students' learning efficiency.

## 1.3 Online assessment

Students can complete online assessments in the form of online self-study, so that students can expand the breadth and depth of self-study content in the context of information-based teaching, so that students can successfully complete self-study activities. Teachers provide students with relevant teaching reference materials, such as teaching plans, syllabuses, electronic lecture notes, electronic teaching materials, etc. Students can conduct self-study online. After students complete their studies, teachers can grasp the specific learning situation of students through online assessment. In addition, the methods of network assessment, the detection forms are various, the time and content of the detection are complex and changeable, and they will not be as rigid and rigid as the traditional assessment methods.

# 2. Current situation of network teaching of computer courses in colleges and universities

There are some serious obstacles in the process of network-based teaching activities in computer education in colleges and universities, which are not conducive to cultivating high-quality computer application talents. In teaching activities, teachers should strive to make students master basic computer information and working principles, and improve students' computer application thinking and experimental ability. However, it is difficult to achieve such application goals in basic computer education activities at present. The main teaching tasks can be roughly divided into letting students understand the history, current situation and trend of computer development. Guide students to understand the system composition and working principle of computer, and be familiar with basic office software. However, in the process of the development of information technology, network-based teaching has received more attention from teachers, which is also the development trend of the current education reform. For example, online self-study, online tutoring, online practice, etc. The way of online education is just in its infancy. Many schools and teachers are still in the stage of exploring the time, and the teaching model is not perfect. It is still difficult to achieve comprehensive quality education for students. In addition, some teachers do not have a clear understanding of network teaching. In practical teaching activities, they do not actively improve and perfect the network teaching model, which leads to certain problems in students' network teaching.

# 3. Network teaching strategies of computer courses in colleges and universities

## 3.1 Integrate traditional teaching and online teaching

After the implementation of online teaching, some teachers focus on finding materials before class, preparing lessons, writing lesson plans, etc., relying too much on modern multimedia technology, ignoring the interaction with students, resulting in the phenomenon of "listening to the class" in classroom teaching , thus affecting the quality of classroom teaching. Although the traditional education method is simple, teachers have accumulated a lot of teaching experience after

years of practice, and formed unique characteristics. In particular, heuristic, seminar and other teaching methods can effectively achieve teaching interaction and enable students to better grasp the knowledge they have learned.

Many modern teaching techniques are used in online teaching, so that the abstract and complex principles of some teaching contents can be visualized. However, when some teachers use multimedia courseware, there will be dependence on network teaching, thus ignoring the demonstration behavior in some teaching. Some teachers make a simple lesson plan very complicated, which makes people confused, but it backfires. The goal of implementing online teaching is to improve the quality of education, but blindly pursuing "talking on paper" is contrary to the original intention of implementing online teaching. You must know that computers can never replace the brain, and "face-to-face" communication cannot be replaced by online teaching. Therefore, in the implementation of online education, traditional education cannot be completely abandoned, and its advantages should be absorbed. Pay attention to the combination of traditional teaching and online teaching, and strive to form complementary advantages.

## 3.2 Strengthen the practice teaching link

What is most needed in today's society are applied talents with creative thinking ability, who can use computers to creatively solve problems in a specific field. Therefore, online education should take application as the starting point, cultivate students' creativity, and focus on strengthening the practice link. I believe that a good online education system must first be easy to operate, and the teaching system must be lively and lively in form, because there are many online teaching activities, such as online practice, online self-study and so on. Students are required to complete it consciously without the supervision of teachers. Only in this way can students' interest in learning be stimulated to the greatest extent. In the teaching system, the test question bank of each subject should ensure that it can meet the needs of students at different levels and increase the content of teaching practice. The forms of test questions for online exercises and online tests should be diversified, so as to increase students' understanding of the test questions.

## 3.3 Teachers should improve their own quality

With the rapid development of computer technology and the continuous updating of teaching content, as well as the popularization of network education, it has had a huge impact on the traditional teacher's identity, and put forward higher requirements for the work of university computer teachers. In this context, teachers must pay attention to the improvement of their own quality to ensure that they can keep pace with the development of computer technology under the new situation. In their spare time, teachers should not only extensively consult the latest information on relevant technologies at home and abroad, and master the latest teaching methods, but also actively learn relevant network technologies, proficient in the use of multimedia technology, skilled use of multimedia technology, and use of various methods. , and continuously improve their professional knowledge and skills. Network education is the inevitable trend of future education development. However, the implementation of online teaching does not completely exclude traditional teaching. There are certain differences in teaching methods and means, but the purpose is the same. To this end, we must be based on reality, attach importance to the combination of traditional and online, and strive to complement each other's advantages.

# 4. Conclusion

To sum up, in the teaching activities of computer courses in colleges and universities, teachers need to understand the advantages and characteristics of the network teaching mode. Combined with the method of network teaching, the advantages of network education are brought into play, the comprehensive learning efficiency and level of students are improved, and today's teaching innovation and transformation are considered from the perspective of network teaching.

# References

[1] Zhang D, Li Y, Wang Z. Research and practice of networked mixed teaching mode of university computer basic courses. Times Education 2016; (7): 186-187.

[2] Li Q. Analysis of network teaching mode of computer courses in colleges and universities. China Information Technology Education 2015; (10): 143.

[3] Mo Z. Talking about the network teaching mode of computer courses. Netizen World 2014; (10): 77.

[4] Liu Y, Zhang R, Zhang Y. Exploration on the construction of networked mixed teaching mode for university computer basic courses. Xueyuan 2014; (13): 11-12.