# Discussion on the Application of "Micro Course" in the Teaching of Computer Information in Colleges and Universities

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Abstract: with the Further Deepening of the New Curriculum Reform, the Computer Information Teaching in Colleges and Universities Should Break the Traditional Teaching Mode, Realize the Diversity of Teaching Forms and Content, Stimulate the Students' Active Learning Consciousness, and Guide the Students to Study with Interest. Using Micro Course Teaching Mode to Carry out Computer Information Teaching in Colleges and Universities Enlivens the Classroom Teaching Atmosphere. Students Are More Willing to Participate in Classroom Activities, Interact with Teachers in Operation, Not Only Effectively Grasp Theoretical Knowledge, But Also Improve Practical Application Ability. Taking a Positive Attitude Towards Learning Computer Knowledge in Colleges and Universities Not Only Cultivates Students' Creative Ability, But Also Improves Knowledge Creation New Capabilities. This Paper Focuses on the Application of "Micro Course" in Computer Information Teaching in Colleges and Universities.

#### 1. Introduction

In the field of education, due to the development of information technology, teaching content and teaching form have changed, which is more in line with the needs of students, making classroom teaching full of the sense of the times, and students' adaptability to the information environment has also been enhanced. The most representative of the effective application of information technology in college computer teaching is micro course teaching mode. The application of micro Course Technology in computer information teaching in Colleges and universities, the classroom teaching atmosphere is no longer static and rigid, especially in the teaching of computer basic knowledge, because the knowledge makes the theory very strong, and more abstract, it is difficult for students to concentrate in the classroom. With the micro course teaching mode, students' thinking will be activated, students are full of passion for the learning of computer knowledge in Colleges and universities, the teaching quality will be improved, and students' learning effect will be better. (Figure 1: college computer basic knowledge teaching courseware)

单元一计算机基础知识

Fig.1 Teaching Courseware of Computer Basic Knowledge in Colleges and Universities

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### 2. The Application of Micro Course in Computer Information Teaching in Colleges and Universities

Micro courses have been widely used in computer information teaching in Colleges and universities, but some schools have not achieved good results when adopting this teaching method. The main reason for this phenomenon is that the application method is not correct enough. It's not enough to apply micro course in the computer information teaching of colleges and universities, but to use micro course reasonably in the study before class [1]. Using micro course in the class emphasizes the key content and difficult content, so that students can have a definite aim in the study.

### 2.1 The Application of Micro Course in Computer Pre Class Learning in Colleges and Universities

In order to achieve good results in computer teaching in Colleges and universities, students should do a good job of pre class preparation, which is a very important link. However, different preview methods lead to different results. If the traditional preview method is still used in computer teaching, students' Preview objectives are not clear enough, and the scope of preview content is not clear, which will inevitably affect the preview effect and waste time. Using micro classroom teaching method to guide students to use the correct preview method can not only guarantee the preview quality, but also improve the preview efficiency [2]. Before class, teachers make the core content of computer teaching into micro video and transmit it to the teaching platform. Students log in to the designated platform, and learn computer knowledge independently by watching the micro video with preview effect. The advantage of micro video is that it can be watched repeatedly, students can ask the teacher if they don't understand it, and the teacher can explain it in a targeted way in class, which makes the teaching more targeted and improves the classroom efficiency.

For example, when explaining the knowledge of computer electronic technology in Colleges and universities, let students watch the preview of courseware [3]. The teaching content is played in the form of animation. The main content is the principle and formula of electronic technology, and it is illustrated with the computer examples in Colleges and universities. Students are more likely to acquire key knowledge through preview. They learn in class, with more clear objectives, higher learning quality and better learning effect. (Fig. 2: computer teaching with micro computer version)



Fig.2 Computer Teaching with Micro Course Computer Edition

### 2.2 Explain the Application of Key Knowledge and Difficult Knowledge to Micro Class

With the application of information technology in computer teaching in Colleges and universities, teachers can play the role of micro course in teaching. Through micro course, key knowledge of computer discipline and difficult knowledge that students must master can be displayed. For schools with limited experimental conditions, we can use the method of micro curriculum design to create virtual experimental space [4]. Students conduct experiments as if they are on the spot. Teachers use micro curriculum to guide students to use correct operation methods, so that the computer knowledge of colleges and universities can not only be expressed in words, but also can be explained in pictures, words, or even in Animation videos, and with background sound Rendering

makes the whole classroom active. At the same time of arousing students' curiosity, the paper explores the computer knowledge of colleges and universities displayed in courseware, and expands students' knowledge field through continuous exploration and learning. The once quiet classroom becomes active, the abstract computer knowledge in Colleges and universities is no longer the trouble of students. The visualized knowledge is presented in three dimensions, students are interested in learning computer knowledge, and the computer teaching in Colleges and universities becomes more vivid [5]. In the process of application of micro course learning, students can choose their own knowledge of computer specialty according to their ability to accept knowledge and hobbies, adopt correct learning methods, make learning plans according to the guidance of teaching, and solve problems with micro course. In the process of learning computer knowledge, students can get good learning results only by choosing their own learning methods.

For example, in the teaching process of the computer system in Colleges and universities, students should not only master the knowledge of the relevant basic principles, but also master the operation procedures of the computer system, the characteristics of the system operation and the operation change law. University computer teachers can use micro courses to make simple animations, and use animations to reflect the teaching content, so that they can enjoy both sound and emotion, which has great attraction for students [6]. It should be noted that teachers can process the animation of relevant content and play it with multimedia. Students can master the operation process and changes of the system by watching the animation, from which they can also understand the basic principles of knowledge, have a more direct understanding of the details of the system, and dynamically present and change the image in real time. Students can compare pictures through observation and find out the law of picture change.

# 3. The Solutions to the Problems in the Application of Micro Course in the Teaching of Computer Information in Colleges and Universities

There are some problems in the application of micro course teaching in the computer information teaching of colleges and universities, and there are many solutions that can be adopted. The key point is that micro course can not win the competition in the classroom teaching, and micro course should be used scientifically in the computer information teaching of colleges and Universities.

### 3.1 Micro Class Can't Win over Others in Classroom Teaching

Micro course plays an important role in the application of computer information teaching in Colleges and universities. However, in order to create a classroom atmosphere, some college computer teachers will over use or even produce a dependence on the micro classroom, which will turn the students' attention to the micro classroom technology and ignore the college computer knowledge that needs to be learned. Although micro classroom is used in classroom teaching, it can not achieve the expected teaching effect. The application of micro classroom technology is to make students study happily, but teachers do not make full use of this tool to promote the interaction between teachers and students, which makes micro classroom become a medium of communication between teachers and students, so it is difficult for teachers and students to face-to-face communication. Communication lacks effectiveness. The application of micro courses in computer information teaching in Colleges and universities mainly plays the role of auxiliary technology, which can not be overemphasized, avoiding the illusion of the importance of micro courses for students. Generally speaking, there are no more than two micro courses used in the classroom. The whole classroom still adopts the way of teacher's explanation, and plays the role of micro course properly, which is helpful to adjust the classroom atmosphere of computer information course and make students interested in learning computer knowledge in Colleges and universities. Another important advantage of using this teaching mode is that it can avoid repeated teaching, save time and improve teaching efficiency. (Figure 3: University Digital Education Platform)



Fig.3 University Digital Education Platform

## **3.2** Using Micro Courses Scientifically in the Teaching of Computer Information in Colleges and Universities

It is a challenge for university computer teachers to use micro courses scientifically and reasonably. College computer teachers should not only master professional knowledge and skills, but also have the ability to operate information technology. The computer knowledge in Colleges and universities is very practical, and the computer knowledge accepted in teaching materials is relatively abstract. The application of micro course in computer teaching in Colleges and universities can make abstract computer knowledge intuitive and play a certain role in promoting the cultivation of students' practical ability. Micro course teaching can show the computer knowledge of colleges and universities by video or image. Teachers play the role of mentors, integrate the content of teaching materials, practice content and related resources, and establish logical relationships so that they can be seen in front of students. By watching the courseware, students can grasp the teaching focus and have a clear understanding of the application of knowledge. It is worth noting that teachers' micro class teaching should be able to stimulate students' interest, meet students' knowledge needs, and meet students' cognitive level. In order to improve the quality of micro course teaching, junior middle school needs to organize teaching to receive systematic training, so that teachers can skillfully operate courseware and improve the quality of teaching.

#### 4. Conclusion

Through the above research, it can be clear that the application of information technology in teaching is mainly reflected in the application of micro courses. Give full play to the role of micro course assisted teaching, optimize the traditional teaching mode, improve the teaching quality and efficiency, and make the learning effect of students better. In the computer information teaching in Colleges and universities, the traditional teaching mode is not only tense in the classroom, but also time-consuming and laborious, and students' learning efficiency is not high. To play the role of micro course in the computer teaching of colleges and universities. The teaching situation is more flexible and diverse, the classroom becomes relaxed, the students are happy to learn, and the learning quality is significantly improved.

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