

## Research on Practical Strategies of Micro-course Teaching Mode in Higher Vocational Computer Teaching

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**Abstract:** With the continuous advancement of the new curriculum reform, micro-course teaching has become a new teaching method commonly used by teachers. In order to meet the needs of the times, it has become a trend to use micro-course teaching method in Higher Vocational Computer teaching. Through the combination of computer courses and micro-courses, not only can students' interest in learning be greatly enhanced, but also the effectiveness of teacher teaching. The following is a concrete talk about the practical teaching strategies of micro-teaching teaching mode in higher vocational computer teaching, and enhance the effectiveness of computer teaching in higher vocational colleges.

### 1. Introduction

With the continuous development of society, people now pay more attention to the effectiveness of teaching [1]. As an important place to train skilled talents, higher vocational schools undertake more important teaching tasks [2]. As an effective teaching method, micro-course can greatly enhance the efficiency of computer teaching in Higher Vocational colleges, enhance students' interest in learning, and promote their all-round development [3]. From this point of view, this paper makes a concrete analysis of the practical strategies of micro-course teaching mode in Higher Vocational Computer teaching, so as to contribute to the improvement of students' computer application ability [4].

### 2. Problems Existing in Computer Teaching in Higher Vocational Colleges

#### 2.1 Teaching content is more difficult

Because the computer class hours in higher vocational colleges are limited and there are more classroom contents, the teaching task is relatively heavy [5]. If teachers still use traditional teaching methods, they can no longer meet students' learning needs. In addition, the professionalism of computer courses is relatively strong, and the acceptance ability of students is limited. Therefore, the traditional teaching methods can not improve the interest of students, and the students' learning efficiency is not high [6-8].

#### 2.2 The teaching mode is outdated

The traditional computer teaching is often the teacher's listening to the students, and the teachers only explain the knowledge points when they explain, and do not combine the specific courseware, which makes the students feel that the content is very boring and can not improve the effectiveness of teaching [9]. This obsolete teaching mode will make students lose the motivation to learn, thus affecting their subsequent growth [10].

#### 2.3 Emphasis on theory rather than practice in Teaching

The main purpose of computer courses in higher vocational schools is to enhance students' practical operation ability, but because of the contradiction of less class hours and heavy tasks, less hardware equipment and more students. Therefore, teachers can't carry out good practical teaching activities, which makes students' practical application ability not strong. Therefore, higher vocational teachers must recognize the importance of practice in computer teaching, resolve

contradictions, and transform the focus of teaching.

### **3. The Orientation of Micro-Course in Higher Vocational Education**

The micro-course has the characteristics of authenticity, inquiry and deepness. It is especially suitable for the teaching environment where higher vocational education pays attention to operation and students' independent learning. Micro-lesson can not only be used in every link of the classroom, but also let students watch repeatedly, study and discuss independently through mobile devices after class. It can even be an effective way to consult teachers. From this point of view, micro-course not only brings great changes to higher vocational teaching, but also has become an important way to improve the efficiency of Higher Vocational teaching.

On the one hand, micro-lessons have entered the classroom of Higher Vocational education, which has become an effective way to break through the key and difficult points in the classroom of Higher Vocational education. Within a few minutes of micro-class, it can show the specific content of knowledge points and the process of teachers' teaching, as well as the process of students' thinking and practice. Micro-class is short and concise, so it has a strong flexibility and effectiveness, it can let teachers make good use of every minute of classroom time. Micro-courses can not only help teachers to explain knowledge, but also guide teachers and students to carry out related interactions, and also allow students to use their usual learning and practice. This satisfies the individual needs of students for different knowledge points and different learning requirements. Teachers can expand the classroom knowledge points according to the specific needs of the disciplines, so that the teaching of each link can be seamlessly connected, and ultimately improve the efficiency and quality of teaching.

On the other hand, micro-courses can also effectively walk out of the classroom, allowing students to use other mobile devices to conduct mobile learning in anytime, anywhere. Cheng learning also has online learning. Through the micro-study, students can not only check for missing traps, but also strengthen and consolidate them. At the same time, they can also strengthen independent learning and discussion among students, and even carry out related interactions, accept teacher guidance and Confuse. Therefore, micro-lesson can be used as a supplement and expansion of traditional teaching. The teaching method of micro-course has innovated the traditional multimedia teaching method, improved the effectiveness of Higher Vocational teaching, and presented a broader prospect, and has become a new way of learning in the modern higher vocational teaching system.

### **4. The Application Strategies of "Micro Course" in Higher Vocational Education**

Because of the important role and value of micro-courses in Higher Vocational teaching, it has become a realistic and urgent problem to study how to better use micro-courses in Higher Vocational teaching. It can be said that the use of micro-course in computer teaching in higher vocational colleges is an effective way to cultivate talents. The specific method can be the application strategy of micro-course in teaching, the strategy of using handheld devices after class, and some other applications. In order to achieve the best results in the use of micro-courses, teachers must ensure that students use micro-courses on their own, promote students' use of micro-courses, and develop students' awareness and ability to learn independently.

#### **4.1 Basic Application Strategy**

##### **4.1.1 Transforming Traditional Educational Ideas and Renewing Understanding**

From a big perspective, micro-courses are an interactive product between the rapid development of the Internet and the needs of higher vocational education. This is also a way that must be experienced in the development of higher vocational education. It can improve the effect of higher vocational education and cultivate Out of the talents that society needs. From a small point of view, micro-course is an effective means of teaching reform in Higher Vocational colleges. It can lay a good foundation for students to learn at any time and anywhere. In addition, micro-class can also

solve the contradiction of less class hours and heavy tasks, less hardware equipment and more students. Although higher vocational teaching is still in its infancy, we still need to recognize the importance of micro-courses for higher vocational teaching mode.

#### **4.1.2 Determine its target**

The emphasis of micro-class use must be on the use of students, not teachers' teaching. Teachers can use microclasses selectively according to the actual situation of students. More importantly, they should guide students to use microclasses as a learning tool at any time and anywhere according to their own learning situation. Only in this way can we really promote the growth of students.

#### **4.1.3 Enhancing the Integration of Microteaching and Course Teaching**

According to the actual teaching objectives and the situation of students, we can solve the problem of integration of micro-courses and curriculum teaching. In this way, we can not only give students with learning difficulties a way to progress, but also enable students with better learning level to carry out more in-depth learning. At the same time, the leading role of teachers can be highlighted in the classroom, so that students can use mobile devices to conduct related learning after class, and develop their own independent research learning ability and cooperative inquiry ability. In addition, this is not only an extension of current knowledge, but also an extension of later knowledge. It can be used as an aid to teaching and as an effective extension of teaching.

#### **4.1.4 Enhancing the Level of Micro-Course Application**

The use of micro-courses is flexible. What kind of micro-courses are used, when they are used, what kind of problem situations are set, and choices and reflections must be made. At the same time, flexible changes should be made according to the target content and objects of the teaching. Only when teachers make flexible adaptations and choose appropriate measures for timely regulation, can the best balance be achieved between students' independent inquiry and teachers' guidance. For teachers, the most important thing is to consider the introduction time and quantity of micro-lessons. Teachers can ensure the pertinence and effectiveness of micro-lesson application only by combing and preparing before class and reflecting and modifying after class.

#### **4.1.5 Enhancing the Construction of Relevant Guarantee Mechanisms**

Perfect guarantee system is the basic guarantee for the application of micro-courses. It can create a better atmosphere for research and implementation, can build a unified standard for the use of micro-courses, can also ensure that teachers' use level is improved, enhance students' learning effect, and improve the effectiveness of teaching. For the school, it is necessary to better consider the resource development and construction of the high-level micro-course, so that the micro-curriculum resource library can be better used, so that the micro-class can truly become a student learning, the school and teacher development is effective. Way.

### **4.2 Specific application strategies**

#### **4.2.1 Application in Pre-class Preview**

Pre-study is an important part of classroom learning. Knowledge-learning micro-courses allow students to learn knowledge points in advance and establish links between knowledge points before and after, to sort out important learning leads, and to identify important points. In this way, students can be more targeted and improve the efficiency of learning. Especially for some students with learning difficulties, the emergence of micro-classes gives them a chance to fly first and improve their learning efficiency.

For example, in the preview micro-lesson of "Computer Network Protocol", students can begin to introduce TCP/IP knowledge with pictures and texts. Then through the demonstration of the real configuration process, students can better feel the relevant knowledge and actual configuration of TCP/IP. This effect is far better than the teacher's use of projection and blackboard explanation, and the whole process can be more vivid and concise. On this basis, it is easier for teachers to expand

the deep structure and principles of TCP/IP.

#### **4.2.2 Application in Classroom Teaching**

The focus of classroom teaching is to solve the difficulties and difficulties in students' learning. These difficult and difficult explanations often require teachers to guide analysis step by step, and display calculations and reasoning. This is where micro-courses can exert their own strengths. Teachers can make use of the vividness, depth and concreteness of micro-lessons to enable students to grasp the most important knowledge points in a lesson in the shortest time.

For example, in the study of "computer network protocol", teachers need to explain the two parts of "the deep structure and principle of TCP/IP". Many teachers are easy to fall into the "unclear" state. In the face of this Abstract knowledge, teachers can use micro-courses to display related schematics and physical comparison maps. Coupled with some vivid 3D presentations, students can follow the demonstration into a deeper understanding and master the structure of their principles.

#### **4.2.3 Application strategy in experimental training**

Computer network experiments require high hardware and facilities, and not every school can be fully equipped. Micro-course can solve this dilemma very well. The micro-course has a rich picture of the physical and principle, as well as some live video and text materials, etc., which allow the students to clearly understand the purpose of the whole experiment, the steps and the results, so as to ensure that the experiment can be carried out smoothly. Students can watch and operate at the same time, so as to improve the probability of success. According to the relevant practice, micro-lesson is especially suitable for students' independent practice operation, especially for computer, which is a subject with more application and operation, it can reduce the time for many teachers to explain repeatedly.

#### **4.2.4 Use after class**

With the help of hand-held devices, students can carry out targeted learning at any time and anywhere after class. Students can not only make up in time according to the effect of listening, but also expand more deeply, so that they can understand the relevant knowledge points more comprehensively and grasp the key and difficult points. Under the guidance of micro-lessons, students can review knowledge points and review the experiment process anytime and anywhere by using handheld mobile devices, and can slow down the whole course of class and study carefully. In this way, we can truly strengthen knowledge and enhance our capabilities. In addition, the teacher can also make micro-classes for the difficult points according to the actual situation of the students, so as to facilitate the students to consolidate the study. The combination of micro-courses and handheld devices enables students to make full use of the amateur time to learn and discuss, and ultimately to break the traditional learning model, so that learning and training can be perfectly unified.

### **5. Conclusion**

All in all, higher vocational teachers should pay more attention to the use of micro-courses as a teaching method to give play to its teaching advantages. Only teachers can change the thinking of traditional computer teaching, analyze the problems existing in them, and learn the production process of micro-courses, can effectively improve the effectiveness of teaching. Replacing traditional computer teaching with micro-course can improve the overall teaching level, enhance students' interest in learning, and improve students' learning ability.

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