

# *Practice and Exploration of Flipped Classroom Teaching of College Computer Courses*

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**Abstract:** With the continuous popularization of university education, university computer courses plays a more and more important role in various courses. There have certain difficulties in the teaching of computer courses. With the continuous development of education, the traditional college computer education methods show more and more disadvantages. Therefore, in the teaching process of computer courses, flipped classroom teaching came into being. In the teaching process of college computer courses, the advantages of flipped classroom teaching enable better teaching results. Therefore, this paper summarizes the definition of flipped classroom teaching, and studies and discusses the practical strategies of flipped classroom teaching in college computer courses under the current background, so as to provide some reference for the continuous progress of college computer courses.

## 1. Introduction

With the continuous development of today's society and the continuous progress of economy, information technology plays a more and more important role in human life and education. Computer technology has also been paid more and more attention to under the background of today's information age. In fact, the teaching process of university computer has certain difficulties. And teaching methods and teaching modes of traditional computer courses have certain limitations and disadvantages. With the continuous development of current education and the emergence of flipped classroom teaching, it provides greater convenience and more new possibilities for the development of teaching of college computer courses.

## 2. Advantages of Flipped Classroom Teaching in Teaching of College Computer Courses

### 2.1 With More Flexible Way of Teaching and Learning

In the teaching process of college computer courses, the use of flipped classroom teaching can be more flexible and convenient to improve the teaching effect <sup>[1]</sup>. Flipped classroom teaching can make use of the powerful technical advantages of the network to facilitate students to explore and understand the learning resources of various courses. In addition, it can carry out homework practice and examination detection online. In the context of flipped classroom teaching, students can use their time more flexibly to supplement their shortcomings. And students can also make

more independent and scientific arrangements in their free time, which greatly improves their flexibility and freedom. Students with poor foundation and poor learning ability can watch and learn relevant videos repeatedly to strengthen their learning effect of computer courses. Students with good computer foundation can browse the relevant teaching videos according to their own level, which is also convenient for targeted learning and selective discussion.

In a word, the flipped classroom teaching mode effectively breaks through the space and time constraints of teaching, and the teaching method is more flexible. It helps all kinds of students to be more adaptable to different learning situations, to improve their computer level, and to meet the needs of different students to learn computer knowledge.

## **2.2 With More Abundant Teaching and Learning Resources**

In the context of today's developed network technology, flipped classroom teaching has extremely sufficient teaching and learning resources. Today's advanced Internet technology provides a broader knowledge base and technical foundation for college computer courses, and brings many conveniences to students' learning and college teachers' teaching. Online network has a large amount of information resources, and students can access more abundant and extensive computer learning resources through Internet technology. At the same time, the online learning of flipped classroom teaching can keep up with the update speed of the times and provide students with the latest course learning resources, which is highly advanced and modern. Therefore, in the context of today's era, the advantages of teaching resources are more obvious, which is extremely suitable for the flipped classroom teaching of university computer courses and can help students to continuously improve their learning efficiency <sup>[2]</sup>.

## **3. Application Strategies of Flipped Classroom in the Teaching of College Computer Courses**

### **3.1 To Design Course Videos and Provide Guidance According to Teaching Objectives**

In the teaching process of college computer courses, teachers can use the flipped classroom to grasp the relevant teaching objectives and teaching content, and students can preview the relevant content independently. At the same time, in the teaching process of flipped classroom, teaching videos can either come from the Internet, or can be designed and produced by teachers independently. The specific situation varies from person to person and has great flexibility. Because some teaching resources and teaching videos from the Internet do not have a certain degree of professionalism, they are not completely consistent with the courses that university teachers want to teach. Therefore, teachers need to screen the course videos according to the teaching objectives, and promote the continuous improvement of teaching according to the actual teaching situation.

In addition, the flipped classroom gives more learning initiative to the students, and the central position is grasped by the students, but the guiding position of the teacher cannot be ignored. College teachers still need to give detailed guidance, so that students can fully and accurately grasp the relevant knowledge points, and they can break through difficulties and key points, and continue to realize the ingenious use of computer technology in the process.

### **3.2 To Grasp the Class Time**

The flipped classroom gives the dominant position of the classroom to the students, so the point that college teachers need to pay more attention to in the process of teaching has been shifted. College educators need to continuously help students to conduct induction exercises and expand and extend in the process of implementing flipped classroom teaching. In classroom teaching,

teachers can communicate with students, collect questions and doubts that students have in the teaching process, and answer what students cannot understand [3]. The teaching tasks should be adjusted according to the actual learning situation of the students to promote the success of students' computer course learning<sup>[4][5]</sup>.

### 3.3 To Pay Attention to the Evaluation of Teaching

In the flipped classroom, we pay more attention to the cultivation of students' autonomous exploration and autonomous learning ability. However, teachers still need to properly evaluate students' performance and students' ideas. On the one hand, teachers can constantly encourage students and enhance students' confidence in computer learning. On the other hand, teachers can correct the relevant wrong views, even if they find the students' problems and give necessary guidance, so as to improve their level and improve the teaching effect.

### 3.4 To Realize the Interaction and Management with Students through the Network

Computer course teaching in the context of flipped classroom teaching is conducive to the formation of a more harmonious and benign relationship between teachers and students. College teachers also have more time to understand the actual learning situation of each student, so as to teach students in accordance with their aptitude, so that each student can receive more attention and benefit more.

## 4. Conclusion

Under the background of continuous development of information technology, the application of flipped classroom teaching mode has more advantages and can promote the significant improvement of teaching effect. In the teaching process of college computer courses, teachers need to constantly explore scientific and advanced educational methods and take relevant measures to promote the continuous enhancement of students' computer application ability.

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