

# Research on the Teaching Reform and Practice of Computer Basic Courses Based on the Hybrid Mode of Online and Offline

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## ABSTRACT

With the continuous deepening of curriculum reform, the traditional education model has not met the needs of the new era. In the past, the traditional education mode, which attaches too much importance to academic achievements and neglects the development of students' comprehensive quality, is no longer suitable for the present teaching situation, and is not conducive to the cultivation of more interdisciplinary talents. Through the combination of online and offline teaching methods, students' learning enthusiasm can be fully aroused, their interest in learning can be stimulated, and their independent learning ability can be cultivated. This paper studies the hybrid teaching mode of online and offline for computer basic course in order to provide more references for improving the teaching effect.

**Keywords:** Hybrid mode of online and offline, Computer basic course, Teaching reform

## 1. INTRODUCTION

With the development of society, modern education has been constantly adjusted and achieved some innovative results. Higher education pays more attention to the cultivation of students' comprehensive quality. The use of different teaching methods to improve students' learning interest and ability not only meets the current need of attaching importance to quality education, but also reflects teachers' teaching achievements. Online and offline hybrid teaching is to condense the classroom content into simple and short videos

through the Internet platform to achieve the purpose of online self-study [1]. Combining the form of offline teaching to promote mutual exchanges between teachers and students, it can also achieve efficient curriculum teaching objectives and play an important role in promoting the reform of teaching mode [2].

## 2. CURRENT SITUATION OF COMPUTER BASIC COURSE TEACHING

Computer basic courses are a series of courses that attaches importance to the application of practical skills. Therefore, it is necessary to improve students' computer skills by keeping pace with the times when teaching this kind of courses [3]. At present, there are still more or less problems in the teaching of computer basic courses in China, which are embodied in the following aspects:

### 2.1 The Teaching Concept Is Relatively Backward

The backwardness of teaching philosophy is one of the important factors restricting the development of higher education. Moreover, there are also problems in the teaching of computer basic courses, such as single teaching method, too much emphasis on the teaching of theoretical knowledge and neglecting the cultivation of students' practical ability. Part of the teachers didn't do more reasonable arrangement on computer basic courses teaching content. Most of the teaching classrooms are still led by teachers, and the student's protagonist role is not fully utilized. The classroom

teaching atmosphere is dull and rigid, which makes students not pay enough attention to the basic computer courses, resulting in low interest in learning computer basic courses, which is not conducive to training students. Therefore, the teaching concept of computer basic course should be renewed and the cultivation of students' thinking ability and professional skills should be emphasized.

## **2.2 The Course Structure Is Not Scientific**

At present, the curriculum structure of most computer teaching in China is still subject to certain processes and patterns, and the teaching atmosphere under this curriculum structure is too rigid to reflect the results of higher education. At the same time, the teaching of computer basic course has the problems of simplification, incompleteness and unscientific. The main purpose of learning computer basic courses is to improve the ability of non-computer majors' students to carry out computer-related practical activities upon entering the society. However, the present teaching curriculum has been distorted, which is very harmful to the cultivation of talents.

## **2.3 The Lack of a Reasonable Evaluation Mechanism**

Teaching environment is imperceptible to the formation of students' learning habits, and teachers play an important role in the growth of students. However, in the process of teaching of computer basic courses, some teachers ignore the development of students' personality and the cultivation of their interests and hobbies, and pay insufficient attention to the physical and mental development of students as a whole. Most teachers only pay one-sided attention to the academic performance and skill level and ignore the objective evaluation of students. In such an atmosphere, for students with poor performance in class, they cannot get more care from teachers. Instead, they will receive severe scolding and criticism, which will seriously hurt students' self-confidence and affect their physical and mental health in the long run.

## **3. OVERVIEW OF ONLINE AND OFFLINE HYBRID TEACHING MODE**

### **3.1 The Concept of Online and Offline Hybrid Teaching Mode**

The online and offline hybrid teaching mode takes students as the subject of teaching, and students take the initiative to absorb knowledge, so as to achieve the propose of education [4]. In this innovative teaching mode, it includes online learning and offline teaching, and teachers only play an auxiliary role in the whole process. Online autonomous learning refers to most of the learning time is controlled by the students, usually by allowing students to complete the initial learning of the content through various channels, such as: video learning, reading books, etc. At the same time, students can look up the learning resources they need through various learning websites and discuss with each other on some learning forums to complete online learning goals, so as to meet the students' deep learning requirements. Offline teaching means that teachers carry out targeted offline teaching through the feedback of students' online independent learning, focusing on explaining difficult points and key problems, so as to help students better understand knowledge content.

### **3.2 The Application of Online and Offline Hybrid Teaching Mode in the Teaching of Basic Computer Courses**

The traditional teaching mode of computer basic course only requires students to master the general operation in the preview stage, and it cannot evaluate the effect of students in the preview stage. However, the online and offline hybrid teaching mode can solve this problem well. In the online and offline hybrid teaching mode, students can improve the effect of preview by learning teaching videos and communicating closely with teachers. They can also feedback their difficulties in preview to teachers, which greatly saves class time and enables teachers to guide students to study at a deeper level, so as to strengthen the learning effect of computer basic course and improve the efficiency of students. At the same time, in the information age, the new teaching mode of online and offline hybrid teaching mode can not only

impart the basic knowledge in the computer basic course, but also help students to comprehend the knowledge and stimulate their interest in the computer basic courses [5]. It enables students to express their independent views on teaching design and finish homework efficiently after class. Teachers can also further improve students' comprehensive quality through video teaching.

#### **4. APPLICATION OF ONLINE AND OFFLINE HYBRID TEACHING MODE ON COMPUTER BASIC COURSES**

In the teaching process of computer basic courses, the application of online and offline teaching hybrid mode can activate the classroom teaching atmosphere and fully render and develop students' exploratory thinking [6]. The specific application process of online and offline hybrid teaching mode is mainly divided into three stages: before, during and after class.

##### **4.1 Combining with the Characteristics of Students, Do a Good Job of Preparation before Class**

First of all, teachers must have a general understanding of the content of each chapter of the textbook according to the teaching arrangement of the course and the important and difficult points in teaching. At the same time, we should make clear the key points of learning knowledge and the cognitive load of students to complete the transferring and deepening of knowledge. Students should grasp the opportunity to learn and strengthen the initiative. Secondly, teachers should consider the psychological and psychological characteristics of students and record multiple videos based on the psychological needs of students. Each video should try to present the teaching content to students within 10 minutes. Finally, teachers should speak clearly and easily when making teaching videos, so that students can understand the knowledge taught in the videos. At the same time, teachers should pay attention to the length of the video, explain the important words and the general idea of the paragraph within the appropriate time, and ask meaningful questions. In addition, teachers should ask students to make preparations before class and finish questions raised by teachers before class by watching videos

and looking up relevant materials. The application process of online teaching in the pre-class preparation stage focuses on cultivating students' autonomous learning. Students can learn independently through video to improve their learning effect.

##### **4.2 Optimize the Teaching Design and Enhance Students' Interest in Learning in Class**

The design of computer classroom activities should take into account the topics and teaching content of the class, and select different forms of topics so that students can learn relevant reading knowledge by watching the videos recorded by teachers. Teachers should conduct analysis and research according to the specific learning situation of students, so as to improve the knowledge comprehension level of students. Classroom learning activities are based on students' independent learning before class. Teachers should pay attention to the design of classroom situations, and improve students' learning confidence and enliven the classroom atmosphere by creating personalized classroom learning situations. In classroom teaching, teachers can also design links for students to communicate and interact with each other, so that students can fully express their own views and opinions, and improve students' comprehensive quality through communication and interaction. In this process, the teacher should solve the problems collected by the students in the process of independent learning. For the common problems of the students, the teacher should give centralized guidance and let the students discuss the answers. If the individual students have problems, the teacher can give one-to-one guidance to them. Teachers can teach applied and expanded knowledge in class by setting specific comprehensive cases, and every student should participate in classroom teaching activities.

##### **4.3 Improve Teaching Tasks and Evaluation, and Strengthen After-Class Consolidation**

Teaching design in the part of the class rely mainly on students. Students can learn independently or composition class team for joint review learning activities and teachers can design and record the content of students' review and assign different

review tasks to different students, which is not only to stimulate students' competitiveness, but also to improve their learning ability. At the same time, teachers can also hold activities such as practical works display to let students consolidate the knowledge they have mastered, or let students express their suggestions on teaching videos and teaching design outside class by way of after-class teaching evaluation, so as to continuously improve the teaching level of teachers. There are various ways of reviewing after class. Students should choose according to their own learning characteristics. Teachers should summarize and comment on the completion of learning tasks, and revise the teaching mode and teaching links. The works of students with good completion of learning tasks should be displayed on the teaching platform of the network, so that other students can learn. Students who can easily complete the learning tasks can also challenge the expansion tasks assigned by teachers, which can strengthen the students' knowledge consolidation.

## 5. CONCLUSION

Computer basic courses are a series of basic courses of institutions of higher learning. In order to ensure that students can effectively accept knowledge and complete in extracurricular autonomous learning, and stimulate students interest in learning these courses, teachers should adopt the online and offline hybrid teaching methods in a purposeful and planned way, integrate them into the teaching of computer basic courses, transform abstract knowledge into specific operational ability, and enhance students' learning enthusiasm in a more novel way, so as to cultivate more high-quality talents.

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