# **Application of Online and Offline Mixed Teaching Mode in Computer Course Teaching**

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Abstract: Traditional vocational education teaching mainly adopts the subject-object teaching mode of "teacher's classroom teaching", which emphasizes that teachers are the main body of teaching activities, and teachers dominate and dominate the whole teaching activities, while students are the opposite objects and passively participate in teaching activities. In order to better mobilize students' learning initiative, teachers can actively encourage students to form study groups for cooperative learning, express their opinions on the problems in the classroom, and let students actively explore computer-related knowledge to achieve better learning results. This model can help teachers make use of big data, databases and mobile devices to prepare more abundant teaching resources for students. The use of online and offline mode in computer course teaching has high use value and can effectively improve the current teaching status of computer courses in higher vocational colleges.

#### 1. Introduction

The traditional vocational education teaching mainly adopts the subject-object teaching mode of "teacher's classroom teaching", the mixed education of "online" and "offline" should not only integrate the four elements of teachers, students, textbooks and media in depth, but also expand in terms of time, space and resources, so as to complement, coordinate and cooperate with each other, the combination of online and offline computer courses in secondary vocational schools can not only make up for and expand the traditional offline teaching, but also provide more learning materials for students, so that they can better plan their academic plans; At the same time, in the teaching evaluation, the combination of online and offline mixed teaching has broken the traditional "equal treatment" teaching evaluation method, making the secondary vocational education and the professional development of secondary vocational students closely combined, and laying a solid foundation for future entry into society[1].

With the introduction of new technology, it is possible to carry out offline and online mixed teaching mode in computer course teaching, realize the teaching mode of students and teachers spanning time and space through the network platform, and effectively transform the teaching quality of current computer courses in combination with traditional teaching methods. The content of online classroom teaching covers the basic knowledge of the course, the common knowledge and ability, and the explanation is complete and comprehensive. Online and offline teaching is a harmonious and unified whole. In the teaching cycle, online learning is the starting point of each iteration cycle and the key link to determine the learning effect and overall success or failure of offline classroom[2-3]. Teachers should play an active guiding role to prevent students from being distracted. As a new teaching mode, it provides a new idea for the teaching reform of traditional vocational education. As a new learning and teaching mode, it has also been widely concerned by many vocational colleges [4]. However, there are still some difficulties in the reform and innovation of such a teaching mode, which cannot replace the traditional vocational education in the short term.

In order to better mobilize students' learning initiative, teachers can actively encourage students to form study groups for cooperative learning, express their opinions on the problems in the classroom, and let students actively explore computer-related knowledge to achieve better learning results. Through a series of training, teachers' information quality and information-based teaching

ability have been improved, thus effectively promoting the integration of network and network [5]. This model can help teachers use big data, databases and mobile devices to prepare richer teaching resources for students to carry out flexible learning planning, in-depth research and exploration, and can constantly put forward new requirements to themselves, so that they can exert their maximum potential, so as to achieve teaching according to their aptitude, implement personalized education, and promote the comprehensive development of students.

## 2. The concept of online and offline mixed teaching mode

Online learning is the starting point for students to start real classroom teaching, which is directly related to the quality of classroom teaching. Teachers should guide students to strengthen pre-class preparation, urge students to actively carry out pre-class preparation through online clocking online detection and other methods, use online learning platform to understand students' learning situation, strengthen communication with students, form a benign learning mechanism, and prepare for classroom learning[6]. The traditional classroom teaching mode is based on "teachers' classroom teaching and students' passive acceptance of learning", that is, teachers dominate and dominate the whole teaching classroom activities, and more are "centralized"; Students are objects and passively participate in teaching activities. The shortcomings of the traditional classroom teaching model are shown in Figure 1.

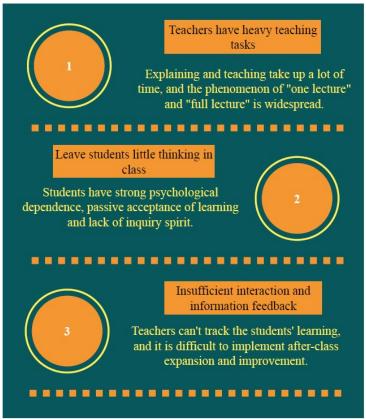


Figure 1 Traditional classroom teaching mode

Through online learning, students with strong ability can learn quickly, and students with weak ability can watch video learning repeatedly to integrate it. Lay an excellent foundation for offline classroom teaching and learning. It also solves the problem of uneven learning of students. Find an effective way to integrate we should also analyze, adjust and optimize the existing education system to adapt to the current education system, make it adapt to the current education model and improve the quality of education. The implementation of "online - offline" integrated education in computer courses in secondary vocational schools requires not only teachers' information technology, but also certain ideological awareness, continuous innovation of ideas, and keeping pace with the times[7]. We should actively and boldly reform and innovate the current computer course teaching teaching

in reality, many other advanced teaching modes can be integrated into it, and all the elements in the teaching mode can be unified and coordinated to form a mixed teaching mode [8]. Preview before class is of great value and significance to students' course study.

# 3. The specific application and implementation of online and offline mixed teaching mode

This kind of mixed teaching can be implemented from multi-dimensional and multi-stage by using the "flipped classroom" model vigorously advocated at home and abroad in recent years. The teaching implementation flow chart is shown in Figure 2.

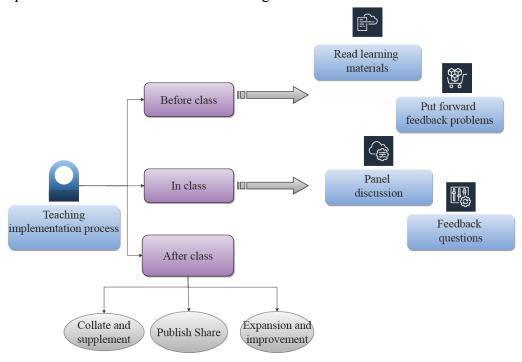


Figure 2 Teaching implementation flow chart

According to the knowledge of "network segment isolation between corporate office networks" designed in this paper, applying online and offline mixed teaching methods to computer teaching in secondary vocational schools, we should not only organically integrate the two, but also deeply analyze the current problems of computer teaching from the perspective of the top-level design of teaching, and make targeted adjustments to integrate teaching ideas, teaching methods, teaching evaluation methods, etc., and reflect the teaching concept of "student-oriented" from the perspective of students, build an "integrated" teaching system to make full preparation for the realization of online and offline mixed teaching the contents of the class, the problems existing in the students' learning at the front of the class should be explained [9]. Teachers can adopt learning transfer method, inquiry teaching and other methods to improve students' understanding ability.

## 3.1. Implementation on the front line

Traditional learning methods are relatively limited online and offline teaching is a harmonious and unified whole. In the teaching cycle, online learning is the starting point of each iteration cycle and the key link to determine the learning effect and overall success or failure of offline classroom. Teachers should play an active guiding role to prevent students from being distracted. Through online learning, students with strong ability can learn quickly, and students with weak ability can watch video learning repeatedly to integrate it. In the pre-class preview, the online education materials provided by the teacher should contain all the knowledge of the whole classroom. The main knowledge points are split by using short micro-classes, micro-videos, etc., and explained in popular language, so that students can carry out flexible preview and repeated practice. Lay an excellent foundation for offline classroom teaching and learning. However, from the current situation, the "online and offline" mixed teaching mode implemented by some secondary vocational

colleges only makes up for the shortcomings of offline teaching through online teaching and online teaching, and does not integrate from the aspects of education philosophy, education objectives, teaching system, teaching evaluation methods, etc., which makes the integration of online and offline teaching become a mere formality and cannot achieve the goal of reconstructing the teaching system and optimizing the teaching mechanism[10].

The adoption of online and offline online education mode can enable students to obtain more extensive and diversified teaching resources on this basis, thus making computer education "extensive" and enriching classroom teaching. However, in the open online education, the Internet provides a large number of teaching services for online education, but the quality of this service is not uniform. In the setting content of the courseware, the teacher should mark the key points and key points to attract students' attention, and set some questions after explaining each knowledge point. The students should explore and solve independently. When the students have problems that cannot be solved, they can communicate with the teacher in time.

### 3.2. Implementation under the middle line in class

The content of online classroom teaching covers the basic knowledge of the course, the common knowledge and ability, and the explanation is complete and comprehensive. Online and offline teaching is a harmonious and unified whole. In the teaching cycle, online learning is the starting point of each iteration cycle and the key link to determine the learning effect and overall success or failure of offline classroom. Teachers should play an active guiding role to prevent students from being distracted. Through online learning, students with strong ability can learn quickly, and students with weak ability can watch video learning repeatedly to integrate it. Lay an excellent foundation for offline classroom teaching and learning. It also solves the problem of uneven learning of students.

Online learning is the starting point for students to start real classroom teaching, which is directly related to the quality of classroom teaching. Teachers should guide students to strengthen pre-class preparation, urge students to actively carry out pre-class preparation through online clocking online detection and other methods, use online learning platform to understand students' learning situation, strengthen communication with students, form a benign learning mechanism, and prepare for classroom learning. In order to better mobilize students' learning initiative, teachers can actively encourage students to form study groups for cooperative learning, express their opinions on the problems in the classroom, and let students actively explore computer-related knowledge to achieve better learning results.

# 3.3. Online implementation after class

After the teachers pass the online and offline teaching, they can find out the deficiencies and problems in the whole teaching, and then reflect and improve the students should explore and solve independently. When the students have problems that cannot be solved, they can communicate with the teacher in time is reversed through the teaching process practice of "online-offline-online, before class-during class-after class, teaching-internalization-reininternalization" and other stages. Teachers can ask students to find test questions in the online resource database to test their learning effects, and summarize and analyze the students' practice results to understand the students' mastery of knowledge points, improve the quality of course teaching, and consolidate the students' learning effects. The mixed online and offline teaching methods promote the sharing of educational resources in schools and create more opportunities for teacher-student exchanges and cooperation. Especially in the case of unbalanced educational resources, through the combination of network and network, we can combine the advanced teaching ideas and methods of schools and schools, shorten the gap between regions, and promote the development of computer technology in secondary vocational schools.

After the end of the classroom teaching, teachers are also required to highlight and summarize the places that are prone to errors, and publish these materials and contents to the network at the same time. Through the combination of virtual online teaching and offline teaching in reality, many other advanced teaching modes can be integrated into it, and all the elements in the teaching mode

can be unified and coordinated to form a mixed teaching mode. Preview before class is of great value and significance to students' course study. Teachers can guide students to use it in multiple teaching links such as before, during and after class according to the teaching needs to improve the effectiveness of course teaching.

#### 4. Conclusions

Online-offline hybrid teaching mode is an integrated open teaching mode that has emerged in recent years. With the help of interactive monitoring hybrid online learning platform and the introduction of a directional way driven by tasks, which can not only ensure the scientificity of students' learning, but also ensure the effectiveness of students' learning. Use offline classroom to solve students' most difficult problems, break through the key and difficult points of learning, and use offline classroom to solve students' rigid needs. In the setting content of the courseware, the teacher should mark the key points and key points to attract students' attention, and set some questions after explaining each knowledge point. The students should explore and solve independently. When the students have problems that cannot be solved, they can communicate with the teacher in time is reversed through the teaching process practice of "online-offline-online, before class-during class-after class, teaching-internalization-reininternalization" and other stages. Find an effective way to integrate online and offline mixed teaching mode into curriculum construction, promote the improvement of students' comprehensive computer quality, and strive for greater development space for students' learning and development.

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