

## Research on online and offline "mixed" teaching mode in colleges and universities

Ping Liu

Liaoning Jianzhu Vocational College, Liaoyang 111000, China

**Keywords:** Online and offline, Hybrid teaching, Flipping classroom, Network teaching platform

**Abstract:** Under the background of the new era, the rapid development and progress of Internet technology, information technology and multimedia technology provide a good opportunity for China's major universities to continue to promote education and teaching reform. The article discusses the basic concepts and characteristics of online and offline hybrid teaching mode, expounds the overall design strategy of online and offline hybrid teaching mode in colleges and universities, and further proposes measures to strengthen the application of online and offline hybrid teaching mode in colleges and universities. Related personnel reference.

### 1. Research background

The traditional education teaching mode of colleges and universities places too much emphasis on the dominant position of teachers in teaching activities, and it cannot fundamentally mobilize the enthusiasm of college students to learn, thus reducing the quality of course teaching to a certain extent. With the application of modern information technology in college education and teaching, teachers can send teaching resources to the network teaching platform, while students can use relevant network equipment to learn at any time and place, greatly improving the learning efficiency of students. The hybrid teaching mode formed by combining online network teaching with offline classroom teaching has a great role in promoting the reform of education and teaching in colleges and universities.

### 2. Overview of online and offline hybrid teaching mode

In essence, online and offline hybrid teaching combines advanced technologies such as Internet technology and information technology with traditional teaching. College teachers fully integrate curriculum knowledge points with modern information technology in teaching activities to achieve classroom teaching. Effectively combined with online teaching to form an online and offline hybrid teaching mode. This kind of teaching mode is mainly implemented from the aspects of college students' learning ability and time, and can promote the continuous improvement of college students' independent learning ability. At this stage, domestic mixed teaching mainly includes micro-classes, MOOCs and flipping classes. And a variety of teaching modes.

The first point is that the teaching of micro-teaching is mainly for teachers to make full use of information technology and design the knowledge of difficult teaching into short video or courseware. The micro-courses are shorter in teaching time and more refined in content, which can effectively improve teaching efficiency.

The second point is that the MOOC teaching is a new teaching mode of online classroom development, which is essentially a large-scale open teaching mode. The MOOC effectively combines the learning management system with the open system resources, further speeds up the knowledge dissemination, makes the knowledge more shareable and disseminative, and can publish open courses through the Internet platform.

Thirdly, the traditional teaching mode is based on classroom teaching. The teaching process generally includes teaching knowledge, questioning, assignment, etc. The flipping classroom teaching mode requires students to use their spare time to learn new knowledge, and then the

teacher is in the classroom teaching. To answer the students' problems in self-learning, and to encourage students to grasp the application of course knowledge in the solution of questions, and then enhance the teaching effect [1].



Figure 1. Balance online and offline teaching

### 3. Characteristics of online and offline mixed teaching mode

Firstly, the online and offline hybrid teaching mode effectively combines traditional teaching with network information technology, which not only helps teachers supervise and guide the whole teaching process, but also helps students fully grasp their main position in teaching and learning activities. Inspire your own learning enthusiasm.

Secondly, in the hybrid teaching mode, MOB teaching effectively enhances the timeliness of classroom teaching through network big data technology, and makes full use of the characteristics of online and offline learning to effectively promote the improvement of teaching efficiency. At this stage, many colleges and universities in China have applied the MOOC teaching mode to daily teaching.

Thirdly, the flipping classroom teaching mode is realized through a series of teaching concepts. The main teaching concept of the teaching mode is to guide students to self-study before class, and then use the classroom time to solve problems for students, and give full play to the main body of students in classroom teaching activities. Role, highly concerned about the individualized development of students. In a certain sense, MOOC teaching is one of the important means of flipping the classroom teaching mode. In the flipping classroom, multimedia teaching and task-based teaching methods are also adopted. Therefore, the real flip-style classroom is a learning structure based on a whole set of theoretical modules.

Fourthly, hybrid teaching does not have a more standard definition. Whether it is through the big data analysis technology of the MOOC, or the teacher guides the students to exchange learning through the online platform, as long as it is a model to enhance students' learning ability through the Internet, it can be included. Mixed teaching mode [2].

### 4. The overall design strategy of online and offline hybrid teaching mode in colleges and universities

#### 4.1 Basic structural design

The online and offline hybrid teaching mode of colleges and universities is divided into two parts, namely online learning and offline course learning, which continuously improves teaching efficiency in the process of continuous interaction implementation and evaluation. Colleges and universities should effectively carry out online and offline mixing. For teaching activities, some basic conditions are indispensable. The first point is that teachers must have spiritual professional knowledge and strong ability to apply information technology. Second, universities should build corresponding online teaching for the implementation of mixed teaching. Platforms, teachers can

use this platform to upload teaching resources, while students can exchange learning experiences in real time through the platform.

#### 4.2 Online module design

Firstly, college teachers can reasonably formulate teaching tasks based on the actual ability, teaching content and teaching objectives of college students. Then, the teacher designs and publishes the teaching resources based on the teaching tasks. The teaching resources mainly include PPT and micro-course videos. These resources can be produced and recorded by teachers, and other high-quality teaching resources can be effectively borrowed [3]. College education should attach great importance to the cultivation of college students' innovative creativity. Therefore, teachers will effectively demonstrate the content of innovation and practice creation to students through micro-courses and videos, and PPT should focus on curriculum knowledge.

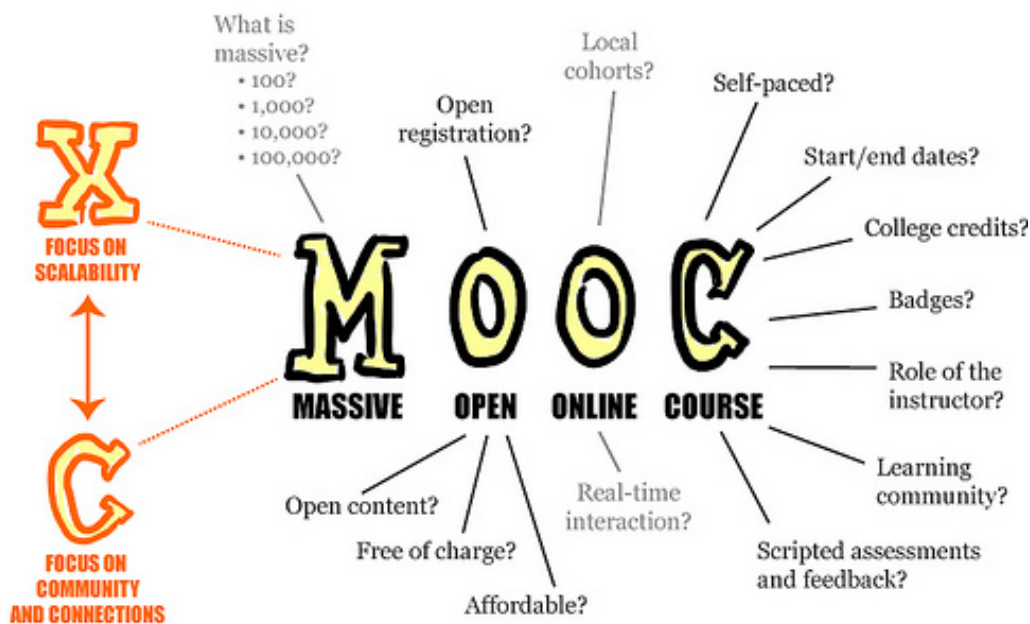


Figure 2. Online Teaching - MOOC

Secondly, college students make full use of the pre-class time to watch the teaching videos and materials. Through learning and analyzing the specific teaching content, the goal of understanding the teaching content is realized. In the actual learning process, students should promptly record the problems encountered, so that they can be submitted to the teacher for analysis and explanation in the online classroom teaching.

Thirdly, the college students sort out and return to the total pre-class study situation, and submit the preview report to the teacher through the online platform.

Fourthly, the teacher examines and analyzes the reports submitted by the students on the online teaching platform, and effectively grasps the students' specific grasp of the teaching contents through the report, and accordingly makes reasonable adjustments to the teaching plan, and timely carries out the students with problems. Communication and communication. Finally, teachers should reflect on the content of the teaching according to the summary report submitted by the students.

#### 4.3 Offline module design

The offline module is mainly based on classroom teaching activities. Compared with the traditional classroom teaching mode, the students in the offline classroom teaching become the main body of learning, and the teachers are only the assistants to provide guidance and solution services for the students. Most of the offline classroom teaching is mainly for students to display the teaching content, the application of knowledge, and to raise relevant difficult questions. The teacher

is responsible for listening to the students' reports, answering questions for students, organizing classroom discussion and communication activities, and further strengthening key knowledge explanations. Finally, through the offline classroom time, students are organized to carry out classroom exercises in order to comprehensively control the students' learning.

## **5. Measures to strengthen the application of online and offline hybrid teaching mode in colleges and universities**

### **5.1 Vigorously promote the construction of curriculum resources**

Firstly, colleges and universities should always adhere to the basic principles of "build to use" and vigorously promote the construction of mixed teaching curriculum resources. Specifically, universities should actively develop and build a curriculum learning resource pool to provide a hybrid teaching model. More abundant teaching resources, these resources mainly include teaching video resources based on knowledge units, micro-curriculum resources for online learning, fragmented learning, and related curriculum resources in the MOOC platform, etc. [4].

Secondly, to expand the content of teaching resources, not only should the curriculum materials and courseware be included in the resource library, but also the extension materials that are closely related to the course content, such as case analysis, extended reading, and professional discourse, should be absorbed into the resource system.

Thirdly, college teachers should base on the curriculum content module, strive to realize the co-construction and sharing of learning resources, and further improve the teaching resource base on this basis. At the same time, college teachers can actively explore new media such as WeChat public account and course APP. The specific application and practice of technology in hybrid teaching continues to expand student learning and teacher-student interaction, and fully realize the advantages of online learning.

### **5.2 Increase the construction of network teaching platform**

Firstly, the construction of the network teaching platform is the basis for the smooth development of the online and offline hybrid teaching mode. Therefore, universities should increase the construction of online teaching platforms.

Secondly, in the process of constructing the network teaching platform, it should ensure that its structural framework and section design effectively meet the characteristics of the teaching curriculum and teaching requirements, so as to reasonably support the development of teaching activities. At the same time, the functions of each teaching module are further optimized to enhance the simplicity of each module and the convenience of its operation, and provide effective technical support for teachers' teaching and student learning.

Thirdly, universities should increase investment in network construction, continuously improve network hardware facilities, and promote the comprehensive coverage of campus wireless networks to create a good network learning environment for students.

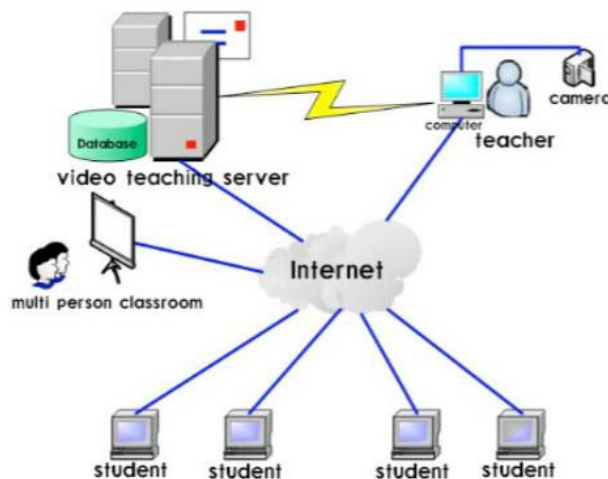


Figure 3. Network teaching platform design pattern

### 5.3 Attaches great importance to teacher training

Firstly, colleges and universities should attach great importance to teacher training and establish a sound long-term mechanism for teacher training. Teacher training should focus on mixed teaching theory and design, online teaching platform, and application of social media.

Secondly, we should establish a sound mechanism for collective lesson preparation, pre-class lectures and after-school experience sharing in order to comprehensively enhance teachers' educational technology ability and enhance teachers' educational information literacy. It is based on learning and training. In the above, more teachers are continually improving their overall quality and actively participating in mixed teaching attempts.

Thirdly, in the teaching design with the hybrid teaching mode, teachers should fully consider the learning needs, learning characteristics and learning ability of college students based on the characteristics of the course, from online teaching, face-to-face teaching and practical activities. With the teaching goal as the core, we will give full play to the advantages of online and offline teaching, effectively grasp the reasonable cooperation between online and offline, and promote the mutual integration of online and offline teaching.

Fourthly, college teachers should attach great importance to practical teaching, ensure the pertinence and innovation of teaching content, and effectively meet the needs of knowledge application, and closely link students' learning and life. In terms of teaching form, it should have strong evaluability and feasibility, and aim to enhance the innovative thinking of college students and the ability to discover and solve problems, so as to achieve the purpose of learning.

### 5.4 Establish and improve the teaching management and implementation mechanism

Firstly, colleges and universities should establish a hybrid teaching implementation leading group in the construction of a mixed teaching information system. The leading group of the mixed teaching implementation team should be led by the department head or the principal, and the mixed teaching work should be effectively implemented under the organization of the teaching supervisor.

Secondly, it is to build a hybrid teaching management system to enhance the standardization and rationality of hybrid teaching. The management system should include curriculum construction and teaching standards, curriculum teaching evaluation programs and teaching management systems to ensure the smooth implementation of mixed teaching.

Thirdly, it is to establish and improve the incentive mechanism for mixed teaching reform, starting from the aspects of funds, policies and systems, encouraging and guiding teachers to actively carry out mixed teaching reform, strengthening the practical research work of mixed teaching, and promoting the continuous innovation of college teachers. Teaching mode.

Fourthly, it is to put the mixed teaching into the daily work scope of colleges and universities, determine the special fund quota, and provide financial support for teacher training, network

teaching platform and teaching resource construction, so as to promote the smooth development of mixed teaching.

### **5.5 Create a comprehensive teaching service team**

Firstly, it is to actively improve the teaching management method and create a team that conforms to the mixed teaching mode. The team consists of the following types of personnel: First, the lecturer is used to build curriculum teaching resources and carry out practical teaching activities. Secondly, teaching and teaching counselors are used to guide students to learn online, assist the lecturers in the review of homework and test papers, and participate in the research and development of teaching and learning resources. Once again, the teaching information resource development and maintenance personnel are used to assist the lecturer in designing and producing course teaching resources, and maintaining the teaching platform.

Secondly, college teachers should reasonably formulate "learning packages" with personalized characteristics according to the learning situation recorded by the learning platform, and design and provide "menu-style" learning recommendation services to provide students with comprehensive and efficient learning. Support to further meet the specific needs of students' individualized development.

## **6. Conclusion**

In short, the application of online and offline hybrid teaching mode in college education and teaching is not only conducive to improving the quality of curriculum teaching, but also has important practical significance for enhancing students' self-learning ability. Therefore, college teachers should fully understand the characteristics of online and offline hybrid teaching mode, profoundly grasp the advantages of online and offline hybrid teaching mode, based on the overall, rational design of the basic structure of online and offline hybrid teaching mode, and increase the network teaching platform Construction, vigorously promote the construction of curriculum resources, attach great importance to teacher training, build a comprehensive teaching service team, establish a sound teaching management and implementation mechanism, and thus comprehensively enhance the application effect of online and offline hybrid teaching mode.

## **References**

- [1] Lin Xueyan, Pan Jusu. Design and Implementation of Mixed Teaching Mode Based on Flipping Classroom. Vocational and Technical Education in China, Vol. 2 (2016) No.28, p. 15 - 20.
- [2] Li Huan. Exploration and Practice of Teaching Reform Based on Hybrid Teaching Mode. Journal of Higher Education, Vol. 4 (2016) No.15, p. 133 - 134.
- [3] Xiong Sujuan. Construction and Implementation of a New Mixed Teaching Model Based on "Flipping Classroom". Vocational Education Communication, Vol. 6 (2016) No.25, p. 61 - 66.
- [4] Nie Aiguo. Research on Mixed Teaching Mode in Teaching Reform of Colleges and Universities. Education and Teaching Forum, Vol. 19 (2016) No.38, p. 101 - 102.