

Research and Practice on a Results Based Integrated Online and Offline Teaching Model

Xiaoming Bi¹ and Yuan Bi^{2,*}

¹ Wenzhou Vocational College of Science and Technology, Zhejiang, China

² Zhejiang Dongfang Polytechnic, Wenzhou, China

Email: wzkybxm@126.com (X.B.); 407659068@qq.com (Y.B.)

*Corresponding author

Abstract—In recent years, the Chinese higher education sector has actively promoted teaching innovation to achieve greater breakthroughs in education quality. The use of modern information technology to achieve integration between inside and outside of class, and the implementation of blended online and offline teaching, has become an emerging higher education model in recent years. Applying this method to higher education can greatly improve the time utilization of teachers and students, break the limitations of the classroom, and improve the quality of education. The article elaborates on the connotation of result oriented blended learning, proposes ideas on how to carry out result oriented blended learning in digital media technology majors, and constructs a result oriented online and offline integrated teaching model. Practice has proven that this teaching model can effectively improve teaching effectiveness and enhance the learning level of students, which is worthy of reference and reference by sister universities.

Keywords—achievement oriented, blended learning, introduction to digital media technology, MOOC online and offline integration

I. INTRODUCTION

With the rapid development of network information technology, China has entered an information age in an all-round way. Internet technology has brought great changes to people's production, life, learning, and other aspects. In this context, the teaching method of "internet plus education" is increasingly valued in university education. For example, online and offline hybrid teaching based on MOOC is a common teaching innovation method [1]. The results oriented teaching model that combines online and offline refers to setting a teaching goal in advance, which is the expected outcome. Based on this outcome, modern information technology is used to design integrated online and offline teaching activities. The following focuses on exploring how to use this teaching approach to reconstruct the teaching work of Introduction to Digital Media Technology, as follows.

II. THE CONNOTATION OF RESULTS ORIENTED BLENDED LEARNING

Achievement oriented is a teaching activity that is guided by teaching outcomes and revolves around established teaching objectives. According to the current educational needs, society needs application-oriented talents. The teaching model of rote learning is obviously unable to adapt to the current teaching objectives. It is necessary to improve the teaching model and enhance students' practical abilities. However, classroom time is limited, and teachers have already occupied most of the classroom time teaching theoretical knowledge from textbooks, leaving no extra time to cultivate students' practical abilities. In order to improve this problem, results oriented hybrid teaching emerged at the historic moment. Hybrid teaching is to integrate offline and online offline teaching, and give theoretical and conceptual knowledge to students to learn independently before class through Internet information technology. This can save a lot of time, and the saved time can be used to develop teaching expansion of practical ability [2]. After class, we can also use the Internet to extend and create opportunities for students to practice what they have learned in class. At present, many colleges and universities have introduced educational Internet platforms, such as MOOC and Superstar Learning Connect, which have been introduced by many domestic colleges and universities and used to build a hybrid teaching model.

The blended education of online and offline is a comprehensive integration of various educational factors such as students, teachers, environment, media, etc., complementing the advantages of both forms of education. In recent years, China's Internet information technology has developed very rapidly, which has also brought far-reaching impact to the education field. All industries have actively introduced information technology to improve work efficiency. The educational world has also realized the advantages of Internet information technology, and actively promoted its in-depth integration with education. Hybrid teaching is a new teaching model formed with the help of Internet information technology [3]. Through the development of

relevant technologies in recent years, the application of online and offline hybrid teaching methods to college teaching has been popularized for a period of time in China, and has also achieved considerable gains. In this context, the digital media art specialty should also adapt to the development of the times, actively introduce Internet information technology, and achieve effective integration of online and offline teaching methods. The educational goal of digital media art professionals is not only to make students remember relevant theories, but also to have the ability to solve practical problems through theoretical knowledge [4]. By using this mixed online and offline education method, various digital resources can be effectively integrated, and teaching innovation tailored to local conditions can be carried out in combination with teaching objectives, meeting the teaching needs of digital media art majors in the new era, and achieving effective teaching results in cultivating students' theoretical knowledge and practical abilities.

III. THE IDEA OF BLENDED TEACHING FOR DIGITAL MEDIA ART MAJORS

A. *Innovative Curriculum and New Thinking, Activating Blended Online and Offline Teaching*

The mixed education of online and offline can be used to solve the problems caused by limited classroom time, but it is not simply a combination of the two, nor is it a different way of teaching procrastination. Instead, it breaks through the limitations of time and space, and organically combines classroom and offline activities. Therefore, blended learning needs to reconstruct the traditional teaching framework, expand the content of teaching, enrich the ways for students to participate in learning, and provide more practical opportunities for students. Online education does not belong to the traditional education process, nor is it suitable to adopt the model of reading from the book. It will never become a single knowledge infusion through the Internet. Online teaching should be seen as a separate educational space, rather than simply an extension of the classroom. This requires teachers to correctly understand the connotation of blended learning and innovate teaching thinking. How to set up an online teaching space and integrate other offline teaching, also known as classroom teaching, depends on the teaching objectives and basic tasks of the digital media art major. Extracurricular online teaching should have the same goals and results orientation as offline teaching in the classroom, which is a prerequisite for achieving organic integration of the two. At the same time, there should be certain differences with the teaching mode in the classroom, so as to achieve a $1 + 1 > 2$ effect.

B. *Utilize Teaching Information Platforms to Revitalize Digital Resources*

Compared with other traditional humanities and science majors, the digital media major itself emphasizes the need to enhance students' digital media technology application skills, so the introduction of modern

information technology is also in line with the teaching tasks of this major. Currently, many domestic universities have established their own online and offline hybrid intelligent education platforms and formed corresponding course resource libraries. For example, Zhejiang University has utilized digital information technology to build a "smart cloud classroom" system that can be connected to over 500 smart classrooms. By utilizing intelligent media technology, Zhejiang University's teaching resources have been effectively utilized. For example, Peking University has established a complete intelligent education resource platform and can link over 300 recorded classes to this platform. Students can watch courses online on demand and support various educational software. In addition to comprehensive universities across all disciplines, various local art colleges have also established online teaching platforms that meet their own teaching needs. Due to the strong professionalism of the schools, they can create more targeted online teaching resources. For the course of Introduction to Digital Media Technology, both comprehensive universities and local professional colleges have successively launched relevant MOOC teaching resources and shared them through Internet technology. When designing a blended learning model, teachers can select network resources that are consistent with their teaching content and objectives to design online teaching plans. This not only enriches the content of online education, but also captures the attention of students in offline classrooms and enhances their learning interest. In addition, with the help of Internet technology, the problem of teachers as the absolute theme can be broken. In the Internet environment, teachers' online education and students' communication are interrelated. Students can also have autonomy in this learning process, and can collect online education resources themselves, so that their learning content can be further improved. Teachers can also enhance communication with students through the internet to promote their learning. At the same time, big data evaluation and competition task modeling can also be used to statistically analyze and provide feedback on students' learning situations, understand their learning outcomes, help teachers understand where students need improvement, and provide direction for teaching improvement. Various presentation methods can also be used to showcase the learning focus and practical process of digital media majors to students. Based on the requirements of the media profession and in combination with the requirements of sustainable development, the online leisure teaching content of the media profession can be determined, with a results oriented approach. The core of the teaching revolves around the knowledge, skills, and quality requirements of the media profession, cultivating awareness and ability to solve practical problems with the knowledge learned, and mastering basic technical and practical abilities in digital media [5].

C. *Introduce a Multi-dimensional Teaching Platform and Build an all Media Teaching Scenario*

Internet based education platform is an important medium to connect online and offline teaching processes. During the teaching process, teachers can utilize MOOC platforms, various online teaching software, and social networking software, not limited to a single platform, to maximize the advantages of full media integration and fully achieve the organic integration of online and offline teaching [6]. At present, many information technology teaching platforms in Chinese universities mainly focus on online teaching and resource sharing. Further exploration is needed for the integration of online and offline teaching. In terms of the connection between online and offline teaching, specialized online teaching platforms such as Rain Classroom, MOOC, Chaoxing Learning Pass, Tencent Classroom, and DingTalk can be utilized, and combined with platforms such as WeChat, Tencent Meeting, QQ, etc., to achieve a combination of online and offline. Integrating the above-mentioned multi-dimensional platforms with the education of digital media art majors, taking into account the nature of the curriculum and the convenience of teachers and students, selecting appropriate teaching platforms and auxiliary teaching tools can broaden the boundaries of the curriculum and establish a comprehensive media education environment that breaks through space and time.

Integrating online classroom with online classroom organically is also beneficial for improving students' ability to learn independently and reducing the time occupied by explaining basic knowledge such as theory and concepts. Compared to traditional offline classroom education, online education has higher flexibility and personalized learning time, which can greatly facilitate students' pre-class expectations and post-class communication. However, we should also note that due to the virtual environment of the Internet, the emotional connection between students and teachers may be cut off, and the distance from the classroom environment is getting farther and farther, leading to teachers being unable to participate in the real teaching monitoring, and some lazy students may lack self-control ability and not actively participate in hybrid teaching. Therefore, online education cannot be carried out without traditional education, and the content and tasks of online education should be coordinated with traditional offline classroom education. In blended learning, it is important to highlight the consistency between online and offline learning for students. Task driven and problem oriented approaches can be adopted to guide students to actively participate in online learning, and then bring the content they have learned online to the classroom. The specific methods do not need to be rigid, but can use behavior guidance, project oriented, case analysis, heuristic discussion, on-site demonstration, and other methods. With the help of various media platforms, the full integration of online and offline can be achieved, which can effectively improve the effectiveness of blended learning and achieve the expected teaching results [7].

IV. CONSTRUCTION OF A TEACHING MODEL THAT COMBINES ONLINE AND OFFLINE BASED ON RESULTS ORIENTATION

A. *Determine Expected Teaching Outcomes*

Taking MOOC online courses as an example, adopting a results oriented blended learning approach based on MOOC requires first determining the expected teaching outcomes. Teachers need to select teaching resources and auxiliary materials based on the teaching content and expected outcomes, and scientifically design teaching activities. The teaching results that need to be achieved in the course "Introduction to Digital Media Technology" are mainly to enable students to have a comprehensive understanding and comprehension of the basic principles, main content, and basic operating methods of digital media, laying a solid theoretical and practical foundation for subsequent learning. On this basis, students will master the basic production methods of digital media technology and be able to use commonly used digital media editing software to collect and edit multimedia information.

B. *Establish a Teaching Resource Library*

After determining the expected teaching outcomes, teachers need to establish a learning framework for students' knowledge structure. The "resources + teaching activities" on the MOOC platform are exactly the theme framework for students in blended learning. MOOC, as an information-based teaching platform, has a massive amount of digital teaching resources, and teachers need to help students organize them. Based on the expected teaching outcomes of "Introduction to Digital Media Technology", the teacher first divides the teaching content into several units, including different modules such as knowledge introduction, teaching videos, audio, images, animations, etc., and selects relevant teaching resources for students in each module to help them establish a teaching resource library. On this basis, exercise banks, case banks, lesson plan banks, and test question banks can also be constructed. Assist students in fully understanding digital media related knowledge, ultimately achieving the construction of teaching resource system under the MOOC platform, providing students with a dynamic, shared, and interactive resource collection based on traditional paper textbooks, helping students broaden their knowledge acquisition channels and enrich their knowledge reserves [8].

C. *Design Teaching Activities*

In each teaching unit of "Introduction to Digital Media Technology", task driven, problem oriented, situational teaching, group discussion, and other methods can be used to guide students to participate in MOOC teaching, and the organic integration of online and offline can be achieved through "resource self-directed learning + in class case discussion and expansion + testing". Taking situational teaching activities as an example, teachers create a real event closely related to the learning content to guide students to participate. For example, when learning the knowledge of "Digital Video and Editing", a

teaching scenario can be designed: “Due to students’ enrollment promotion, they need to make a campus promotional video that does not exceed one minute, showcasing the characteristics and creativity of our school”. They can write, plan, culture, and record promotional videos in groups, upload their works to the MOOC platform, and showcase and evaluate them in class.

When carrying out this teaching scenario activity, teachers should break away from their previous absolute subjectivity and delegate the power of curriculum learning to students, but act as guides and inspirations for the activity. To prevent similarity in creative content, school promotional videos can be divided into multiple themes such as campus environmental protection, dormitory civilization, restaurant civilization, library, teacher-student friendship, caring for public property, and campus public health. These themes are provided to students for each group to choose from. With this guidance and inspiration method, each group can effectively avoid the problem of similar works. Due to the fact that each group’s choices are based on discussions within the group, they are all made independently rather than passively assigned, which allows students to develop interest and enhance their enthusiasm. Students can use the materials in the MOOC platform, or self draw materials, and use Internet technology to break through space restrictions, and carry out group discussions or teacher-student discussions.

After the work is completed, it will be published on the MOOC platform, and teachers can organize it and set up a voting area for students to rate the work of other groups according to their own preferences. In the classroom, each group can send representatives to explain their work, and they can also discuss and comment on each other. Afterward, the teacher will provide feedback and suggestions for improvement on each group’s work, but do not just make mistakes and criticize. Instead, identify the “highlights” in the student’s work and affirm them to avoid dampening their enthusiasm.

V. CONCLUSION

To sum up, in the information age with the rapid development of Internet technology, online and offline hybrid teaching methods are bound to play a big role in the education sector. This teaching model, which organically integrates new technologies, new educational ideas, in class and out of class, is a great innovation in college teaching, helping students improve the depth and breadth of learning. In the achievement oriented online and offline hybrid teaching mode for Introduction to Digital Media Technology, first of all, we should clarify the expected results of teaching, and then design online and offline teaching activities based on the teaching results, using Internet information technology to guide students to actively participate in online and offline learning activities, and design a diversified teaching feedback and evaluation mechanism to increase students’

enthusiasm for participation, get rid of the shackles of the passive teaching mode that teachers used to teach according to the book, so that students can participate in teaching activities independently and achieve more ideal teaching results.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS

Xiaoming Bi and Yuan Bi have designed the teaching mode proposed in the article and written the paper; both authors have approved the final version.

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