

Research and Practice of Blended Teaching of Aesthetic Education Course Based on Multimedia Platform

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ABSTRACT

Based on the characteristics of the post-epidemic era, this article sorts out the teaching experience during the epidemic and conducts online and offline blended teaching research and practice. It starts from the three aspects of students, teachers and classrooms, adjusts the role change of teachers by referring to students' self-learning ability, rationally uses the diversity of teaching platforms, and introduces the teaching methods of flipped classroom and MOOC to form a cyclical process where the teacher guides students to realize the transformation of class from the classroom to the virtual space and then back to the classroom summary. This teaching mode combines students' online and offline learning habits and characteristics and uses the uniqueness of the multimedia platform to achieve course teaching goals, while building a network space for students to learn and communicate offline and finally establish a continuous learning mode based on mobile learning class.

Keywords: MOOC, Official account, Traditional culture, Autonomic learning.

1. INTRODUCTION

At the beginning of 2020, in the face of the sudden outbreak, the Ministry of Education of China issued a notice on the postponement of the 2020 spring semester, and subsequently issued a notice on the use of online platforms to "suspend classes without suspending studies"[1], which was followed by the large-scale promotion and popularization of "learning more to make your country stronger". Compared with the systematization and integration of teaching and learning platforms for primary and secondary school students, the teaching and learning platforms for college students are facing unprecedented challenges. Although as early as 2013, a large-scale research on MOOC (Massive Open Online Course, generally shortened to MOOC) has emerged in China, and the MOOC platform based on Tsinghua University, Peking University, The University of Hong Kong and other universities has also begun to take shape, when carrying out specific teaching practices, each college has its own curriculum system, and it is impossible to achieve complete uniformity in syllabus and teaching plan for courses

of the same name. For most colleges and universities in China, the implementation of MOOC requires not only localization, but also to be school-based.

During the epidemic, online courses became the mainstream, and teachers' teaching methods, students' learning methods, and curriculum evaluation systems were completely different from offline physical classroom. In the post-epidemic era, students who return to the classroom need to return to a fixed learning space. Fully returning to the teaching method before the epidemic is no longer sufficient for students' learning and the establishment of a blended online and offline teaching model has become the choice of the times.

Research has found that online courses extend and expand students' learning time and space, and the rational integration of the concept of flipped classroom helps increase the interaction between teachers and students. Students are responsible for their own learning, and teachers are the mentors of students. Flipped classroom mixes direct explanation and constructivist teaching model[2]. In the flipped classroom, when students learn

knowledge, they can complete it through self-study plus teacher's guidance. This article combines the teaching process of "Aspects of Aesthetics" and draws on the above resources and teaching methods to carry out related research. Research has found that in the post-epidemic era, combining online and offline blended teaching can help achieve teaching effects, enhance student awareness, and is of popularization.

2. SIGNIFICANCE AND VALUE OF RESEARCH

The research background of this article is general Chinese undergraduate universities. When the epidemic broke out, like most undergraduate universities, there was no condition to complete the MOOC construction of all courses. In the early stage of the research, the author takes the teaching mode of the "Aspects of Aesthetics" course as an example, studying a teaching mode that adapts to the epidemic period by sorting out and comparing the learning trajectories and learning effects of students; in the later stage of the research, the author combines the effective teaching methods of offline teaching and online teaching to establish a teaching model based on multiple platforms, forming a cyclical process guided by the teacher from the beginning of the classroom to the outside of the classroom, and then back to the classroom summary. The ultimate goal is to achieve continuity inside and outside the classroom through mobile learning.

"Aspects of Aesthetics", as a quality development course for school students, is a representative course of the humanities and social sciences series, the Chinese traditional culture series and the art series. This course plays an important role in improving students' humanities and scientific literacy, emphasizing the inheritance of Chinese traditional cultural spirit and cultivating students' value analysis and judgment abilities. Students taking this course at the same time include three majors involving radio and television editing, literary editing, and new media editing, with 8 classes and a total of 245 students. As a foundation course for the subject, it also serves as a pavement for students to form an understanding and reflection on the major.

The survey found that the existing MOOCs are not entirely suitable for the learning of students in Kede College of Capital Normal University. At present, the MOOCs related to this course tend to be in two aspects. One is to focus on theoretical and

biased thinking towards aesthetics and philosophy, such as Chaoxingya's "Principles of Aesthetics" and "Modern Aesthetics" of XuetangX. These courses focus on theoretical foundations and are biased towards the curriculum provision of professional subjects, which are suitable for students with a solid foundation in literature and strong self-study ability. The second is to focus on popularization, a learning platform for the general public such as "Traditional Culture and Aesthetic Literacy" and "University Aesthetic Education" of the Chinese University MOOC. These courses focus on improving students' overall aesthetic basic cognition, without subject inclination, and they are convenient for students to accept. But because they involve large and extensive content without professional pertinence, they are not suitable for the study of students of different majors.

In view of the two kinds of existing teaching contents (the former is too theoretical and tends to study in the fields of philosophy and cognitive psychology; the latter is too simplistic and suitable for basic aesthetic education for the general population and the freshman year), they are not applicable to the basic professional study of undergraduates in regular institutions of higher learning. If the school wants to achieve a curriculum that can not only cultivate aesthetics, but also actively promote the construction of students' majors, it is necessary to combine the existing multimedia platforms to construct a teaching mode suitable for students of relevant majors in ordinary colleges and universities.

3. DESIGN OF TEACHING MODEL BASED ON MULTIMEDIA PLATFORMS DURING THE EPIDEMIC

To achieve the localization of MOOC, schools must first understand the situation of students. As an ordinary undergraduate university, students have a weak cultural foundation, but they have a high degree of professional learning and recognition and they pay attention to practical learning. During the epidemic, in view of the situation where there was not enough time to establish a complete online MOOC, and at the same time the online teaching was required, the first task was to adjust the teaching goals in time, from focusing on investigating students' knowledge mastery degree to investigating students' cognitive ability and the ability to apply theoretical concepts in combination with reality.

The most effective solution to the problems encountered in online teaching is to improve students' learning motivation, strengthen their learning planning ability, and improve their learning regulation and control ability.[3] If only the MOOC learning address is announced, the teacher will not be able to achieve the expected teaching goal as a teaching aid. In view of the current situation of online teaching, it is necessary not only to give full play to the leading role of teachers, but also to highlight the dominant position of students in the learning process.[4]

During the epidemic, the course provides three ways for teacher-student interaction: The first is Minghua Online, an online file storage and discussion platform, the second is real-time interaction in Tencent Classroom, and the third is WeChat platform, an online course content editing and feedback platform. It uses Minghua Online to assist with pre-class exercises and homework corrections, and uses Tencent Classroom as the main teaching platform and WeChat platform for official account editing for teaching. During the online teaching period, excluding factors such as going abroad, joining the army, and students who

have not taken this course this semester, the weekly attendance rate is around 95%, and mostly, the news class maintains the attendance rate at 100%.

3.1 The Teaching Plan Realizes Online and Offline Interaction

To formulate a teaching plan, it is necessary to sort out the features of the existing platforms and make rational use. After evaluating the available online course platforms, it is found that Tencent Classroom is a more suitable platform to use for online courses ("Table 1"). The simplicity of the operation interface and the function to call the roll and raise hands to speak facilitates teaching management and real-time interaction, which can basically simulate the interaction of offline teaching. The problems faced by live classes are almost the same, that is, the effect of students' learning. The degree of student participation and completion is the core element of a course. If schools want to achieve the best learning effect, they need to combine multiple platforms.

Table 1. Evaluation of commonly used online course platforms

Platform	Core tools	Live broadcast effect	Interaction	Uploading type
Rain Classroom	Course making	Live broadcast is prone to discontinuity	Support the interaction of bullet screen	Without restriction
QQ	Voice and video chat	The sound quality and image is slightly poor	The effect of connecting the microphone is slightly poor	Without restriction
WeChat	Text and voice interaction	Short-time recorded broadcast	Delayed interaction	Maximum of 25M
Tencent Classroom	High-quality live broadcast	Unhindered live broadcast	Real-time interaction	A screenshot can be sent
Tencent Meeting	300 speakers	Relatively unhindered live broadcast	Carrying out interaction	Supporting document

3.2 The Course Content Realizes the Classroom Flip

A complete online course requires the teacher to complete all the content of teasing out knowledge points, uploading materials, giving lessons, and correcting homework. Online courses are different from MOOCs. Students can earn credits by selecting courses, attending courses, reviewing, doing homework, and taking exams. Teachers also need to conduct complete teaching work. In this process, the teaching team explores the role of the WeChat official account and uses it reasonably. WeChat is currently a common social platform for more than 1.1 billion people in China. Behind the huge commercial breakthrough of the WeChat official account is the change in the reading habits

of the people[5]. WeChat cannot realize real-time interaction in the classroom, but the WeChat official account can develop some systematic teaching content. With reference to the teaching implementation strategies and application effects based on the WeChat official platform in recent years[6], combined with the current Chinese situation, the course content has been adjusted.

In terms of teaching content, two changes are made. The goal is not to cultivate students' deep understanding of aesthetics-related concepts, but to master the research methods of modern aesthetics. The curriculum combines the characteristics of ordinary undergraduate university students to carry out a lot of practical activities. Aesthetics can be explained philosophically or be combined with individual aesthetic phenomena. The latter is more

suitable for ordinary colleges and universities. Therefore, the official account "Quotations on Four- season Paintings" is established to organize students to complete the content of each issue of the official account according to the progress of the course and related content.

China has a long history and distinctive characteristics of the times. Using the book "The Path of Beauty" as the blueprint, combined with the lives of students in the current era, it is a dialogue that spans time. In the process of participation, students understand the related concepts of aesthetics as well as the history of beauty of Chinese civilization, so as to develop aesthetic habits and have an aesthetic life. The content of the official account is edited in accordance with the chapters of the book. When presenting specific content, students need to fully understand the content of the course according to the characteristics of the We-Media. Starting from the content of the course, they need to connect with reality to edit the official account in the form of text and pictures. The pictures are required to be drawn by oneself or taken from a home environment, and the text descriptions are edited in a more colloquial language.

For example, in the third issue of the official account, when introducing traditional Chinese gluttonous patterns, the main text is as follows:

"*Shanhaijing-Beishanjing* (《山海经·北山经》) says: 'Jade is abundant on the Gouwu Mountain and copper is abundant below the mountain. There is a beast in the mountain in the shape of a sheep's body and the face of a man. Its eyes grow under the armpits, with tiger-like teeth and human nails, making the sound like a baby crying. It's called Paoxiao and it can eat people'". According to ancient books, it might be like this at first:

(When student X draws, he/she must have suffered countless injuries)

Afterwards, if it keeps eating, it may be chubby — Is it like Dafu?

(What was student X really thinking when he/she drew it?)

Then there is only one face left. Miyazaki Hayao created the character No-Face and China has — a Gluttony who only has a face (It remains unclear whether student X drew the patterns on the two sides as fire patterns or as gluttonous claws when he or she drew.) In fact, the face is all-encompassing.

After eating and eating, will it be like this in the end? (Drawing by X) Well, it may look like this, and I will ask you to attach the original manuscript when copying.

In order to prove that Gluttony is also cute, the students worry about a lot. The Glutton that X found on the ancient book at home, like a mechanical cat, looking around at a loss, not fierce at all.

This Gluttony found and described by X has big eyes. Among the three types of symmetrical gluttonous patterns centered on the nose and forehead, there is an open and split gluttonous pattern — the torso and claws are attached to both sides of the head of the animal face, which seems to be cut into two from the tail forward. The two sides of the face are symmetrically formed into a frontal face shape. No matter how you look at it, it is a simple and honest little cute.

It is said that there is a Gluttony on the steps of the main building of the main gate of Yunnan University, which means that students going to the school should be like a hungry Gluttony with a ginormous appetite, taking knowledge as a feast and eating it wildly without being full. Has anyone seen it, please confirm it. (Interesting, i love it)

When everyone feels awkward, student X discovers that RMB 20 represents the bronze culture that was once glorious in China and passed through the Xia, Shang and Zhou dynasties.

The dermatoglyphic patterns behind the "People's Bank of China" on the front is exactly the gluttonous pattern commonly seen on bronzes. Isn't it a surprise? Do you feel surprised? (The picture used is provided by student X)

Networked language has shortened the distance between teachers and students and between students and students, combined with realistic image collection tasks, and enhanced students' enthusiasm for active learning. This issue has also received nearly a thousand views, which is a great encouragement for students to continue to learn independently. The teaching of knowledge points of the course content is also successfully flipped through the official account, the main learning time of students is transferred offline through the official account, and the role of online teachers has successfully transformed into a guide for teaching rather than a unilateral lecturer.

4. TEACHING IMPLEMENTATION BASED ON MULTIMEDIA PLATFORMS IN THE POST-EPIDEMIC ERA

According to students' learning situation during the epidemic, it is found that some effective teaching methods can be continued. For example, the editing of the official account clearly reveals that students have better learning performance when completing academic tasks in teams than when completing academic tasks individually[7]. To improve students' professional cognition, it is more effective to adopt a blended teaching method combining online and offline[8]. In the normal teaching model, teachers and students can improve students' learning efficiency through suitable teaching environment and real-time all-round interaction in the classroom. Teaching in the post-epidemic era requires a reasonable allocation of online and offline content.

4.1 *Realizing Data Integration on the Online Platform*

Online teaching needs to effectively guide students to study independently and complete tasks after class, and break through the limitations of time and place in the classroom, in order to reflect the advantages of mobile learning[9]. The teacher can record the lecture content of the course into a micro-video and posts it to the online platform, which can be downloaded by the students to learn about the relevant content of the course in advance. There are many platforms that can be used here and a suitable platform imposes restrictions on neither the file size nor the file type. The course adopts the MOOC platform uniformly arranged by the school, uploading course-related materials for pre-class preparation, but not uploading teaching materials. This ensures the continuity of the course, and students can focus more on the offline classroom learning. Students can download large files uploaded by teachers through the Web terminal, and teachers can use website data analysis to understand the content that students are interested in, all of which continue to offline courses.

4.2 *Establishing a Localized and School-based MOOC*

During the epidemic, the form of recorded broadcast is convenient for students to browse the teacher's teaching documents at any time. Courses in the form of recorded broadcast can only briefly

and slowly attract students to participate in the completion of classroom learning tasks; unilateral output is only suitable for students with strong learning consciousness. A real-time online platform is needed to guide students into the class.

In the post-epidemic era, online class can display the teaching process online, keep class records, and facilitate teachers to review the class process, optimize the curriculum, and meet the needs of students to review the curriculum after class. But it doesn't apply to offline courses. To achieve the continuity of the curriculum, it is necessary to make MOOC localized and school-based. The school-based MOOC can combine the regional culture and the characteristics of the students to improve students' enthusiasm for independent learning offline.

4.3 *Course Feedback Based on WeChat Official Accounts*

College students tend to be fascinated by new things like new media, their study time and energy are squeezed out, and communication among students are lacking[10]. During the epidemic, communication among students is mostly through social media. The WeChat platform facilitates students' exchanges on course learning due to its popularity and ease of operation. In the post-epidemic era, curriculum-based WeChat official account editing has expanded the functions of new media. The course expands the official account "Quotations on Four- season Paintings"("Figure 1") and establishes a new official platform "KD Depth of Field"("Figure 2"), from the perspectives of art, history, news, etc., to guide students to edit content in combination with their majors. The official account is chosen because the official account has surpassed electronic magazines and blogs, and has become a leader in mobile reading and even the entire electronic field, and to a large extent, it is also responsible for the mission of popularizing science and responding to public concerns[11].



Figure 1 The catalog and page views of the official account "Quotations on Four- season Paintings" of some issues.

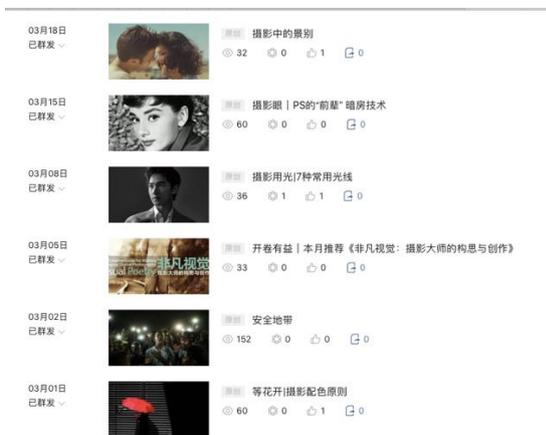


Figure 2 Partial content of the official account "KD Depth of Field".

During the epidemic, the content of the official account is based on Li Zehou's "The Path of Beauty" as a reference book, each chapter is made into one issue, and students voluntarily sign up and participate in the content editing of the official account. At the same time, the content of each issue faces the whole class to call for papers, and the text of the manuscript must be sorted out by individuals, preferably from the book "The Path of Beauty", or it can be personal thinking. The picture of the manuscript is required to be taken or drawn on one's own. According to the professional characteristics of students, it is also required to take screenshots of film and television play works, but the name of the works and the frame time of the image must be marked.

The choice of "The Path of Beauty" is based on two considerations. One is that the book is a broad

outline of Chinese aesthetics, which covers the entire history of Chinese aesthetics and is easy for students to accept and understand. The other is that the book has a large number of examples to explain the aesthetic phenomena and characteristics of different eras in China, making it convenient for students to connect with reality and participate in classroom interaction.

In 2021, when the new course is launched, it has absorbed the experience of "Quotations on Four-season Paintings", and expands the content of the course based on the class as a unit. It is not limited to the content of classroom teaching, extending to the core knowledge system of this major and this subject, encouraging students to start from their own majors to edit the content. The editor of the official account plans the students' after-class study time, mobilizing the learning atmosphere of the entire group, also directly reflecting the students' ability to learn independently. Judging from the current operation of the official account, the content updated by students is more relevant to the major and the update frequency is faster. This also represents the enhancement of students' active learning and professional reflection through courses.

5. TEACHING EFFECT

In recent years, the rapid rise of online education in the field of higher education in Europe poses a challenge to maintain the quality level of the learning process and has successively expedited new methods to adapt to this type of education[12]. Quality and innovation are two important aspects of today's higher education system.

In order to enable learners to have good independent learning ability, while the teaching content is developed in multiple levels, teachers need to realize that the innovation of teaching technology is not a burden, but rather that they themselves need to constantly adapt and strive to catch up with the technological demands of the different driving forces. In this process, teachers can form their own brand through communication and interaction[13]. For students, it becomes a possibility to choose what suits their learning progress. Blended teaching will inevitably be differentiated. The purpose of differentiation is to adapt teaching to the special needs of different groups of students[14]. In fact, it is to hierarchize the teaching methods to adapt to the hierarchicalization of students.

Table 2. Distribution of aesthetics course grades and participation in official accounts

	100-90	89-90	79-70	69-60	59 and below (including those who are disqualified from the exam)
The number of students taking the exam	47	97	51	27	16
The proportion of the total number of people	19.7%	40.7%	21.4%	11.3%	6.7%
The number of people editing the official account	21	9	5	-	-
The proportion of the score intervals	44.6%	9.27%	9.8%	-	-

Table 3. Comparison table of offline and online course grade

	Overall number of people	Average score	Pass rate	Practice coverage	Degree of participation
2017 (Online during the epidemic)	245	79.3	87.9%	100%	14.2%
2016 (Normal offline teaching)	238	80.1	92.0%	100%	100%

6. SUMMARY OF THE IMPLEMENTATION EXPERIENCE OF BLENDED TEACHING IN THE POST-EPIDEMIC ERA

With the development of modern information technology, people have conducted more and more researches on the application of information technology in teaching. In university studies, especially in public courses, the ability to learn independently is very important for improving academic performance and learning efficiency. Using the WeChat official account platform as a connection point to link online and offline courses can guide students to improve their independent learning ability, improve teachers' modern teaching methods, and maximize teaching effect. According to the survey of courses, the number of people participating in the editing of official accounts accounts for 21 out of 47 and the proportion reaches 44.6%, showing that the stronger the self-study ability, the stronger the ability to complete the coursework ("Table 2"). In offline classes, teachers can organize students to discuss topics on the spot through flipped classroom, which can mobilize every student to participate in every link of the class. A large part of the teaching effect of online courses needs to be realized by students' independent learning. ("Table 3")

In the post-epidemic era, the main activity space for teaching is within the classroom. When carrying out the teaching plan, combining the teaching experience during the epidemic period, the teaching is divided into three time points: before class, during class, and after class, respectively. "Before class" refers to the teaching activities carried out in the classroom before class. Through the

information integration of Minghua Online, pictures, videos and other related materials are released before class to encourage students to learn by themselves. Students enter the classroom with questions, and the Tencent Classroom part of the teaching activities is converted into classrooms. Teachers combine the characteristics of physical space to carry out teaching activities. For example, in the process of understanding and recognizing the development history of Chinese aesthetics, students are organized to copy and write "Preface to the Poems Collected from the Orchid Pavilion". After copying copybooks, students can better understand the aesthetic connotation of Chinese calligraphy. After class, the teacher encourages students to make reflections and summaries based on the exercises in the class, and publish the contents of the official account. Combined with the teaching situation of courses before and after the epidemic, according to the research findings:

6.1 The Offline and Online Blended Teaching Model Has Obvious Advantages

Due to the constraints of objective conditions, online teaching during the epidemic completely relies on online teaching without involving offline teaching. The advantages of online teaching are obvious. Teachers can lead students to contact new media and apply new media technologies to the entire teaching process. But at the same time, the problem is also very prominent, that is, the control of students' learning autonomy. Between the same teaching links, offline teaching can be carried out in a fixed space, ensuring that all students participate in the course link. For example, to understand the aesthetic meaning of Chinese calligraphy, offline

teaching can organize students into groups in the classroom and every student can participate in and discuss. However, online teaching can't take the above into account. For students who don't have any calligraphy foundation, there is no way to require them to complete the class exercise. Even if it is completed, there is no immediate discussion, and the effect evaluation is worse than the classroom discussion. Blended teaching solves these problems: students can practice in the classroom, or they can complete the editing of the official account through data collection and sorting, and understand the content of the course from theory to practice or from practice to theoretical summary.

6.2 Diversified Ways to Realize the Transformation of Teacher Status

Before the epidemic, teachers taught in classrooms, and the fixed place added a sense of ceremony to the teaching process, making it easier for teachers to manage students. Teachers could directly see the feedback from students and could adjust their own teaching progress and teaching process at any time. Even a teaching model such as flipped classroom can easily form a teacher-led teaching. The classroom form of online teaching has actually changed the teacher-led curriculum model in the past, and teachers have become the leaders and promoters of learning.

People are living in an era of information explosion, and teaching videos of various industries are available everywhere on the Internet. Some websites display scattered knowledge points, such as Bilibili, YouTube, etc. There are also some more mature MOOC websites, which will have systematic knowledge of the subject, such as China University MOOC, Khan Academy, etc. Faced with this situation, the role of teachers is no longer to spread knowledge and information, but to become a facilitator of student learning. Teachers can organize students to sort out the existing knowledge system and propose solutions to each student's problems. Teachers cannot become the role replaced by computers or videos, but should become an irreplaceable part of education[15]. After teaching during the epidemic, teachers have intuitively recognized the change in their status, and they become leaders and participants in the learning process of students.

7. CONCLUSION

During the epidemic, in the face of the emergency situation, teachers use flipped classroom, MOOC and other curriculum methods to choose teaching methods suitable for online development, study the strong points of multiple media, and use the most suitable methods in a comprehensive manner to conduct compound teaching, effectively guaranteeing to maintain student learning effect. Whether it is online or online teaching, guiding and cultivating students' autonomous learning ability is an important task for teachers in the new environment. Teachers need to adapt to changes in their own roles and guide students to learn courses. Teachers are an irreplaceable part of the education system. In the post-epidemic era, the online flipped classroom teaching model based on the WeChat official account is not only suitable for online teaching in the context of the epidemic, but can also be extended to offline classrooms. It is necessary to solve the problems encountered in flipped classroom and MOOC in order to improve students' learning efficiency.

AUTHORS' CONTRIBUTIONS

This paper is independently completed by Jiping Yue.

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