

## **Research Article**

### **The application research on the flipped classroom in the course of public art education curriculum based on the micro class**

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**Abstract:** The flipped classroom is a new teaching method which has been widely praised in recent years, but it was rarely used in the public art education curriculum. The current situation, the nature, the function and the defects of the development of public art education curriculum, were described in the article, a application mode of the flipped classroom in the public art education curriculum based on the micro class was put forward combining with the development of the flipped classroom and the micro class characteristics, and a new idea would be provided to China's current art education curriculum reform of non art major.

**Keywords:** the public art education curriculum; micro class; flipped classroom.

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#### **Introduction**

The public art education curriculum as an important part of general education courses, its target is to cultivate students' ability of feeling, appreciating and creating, and the students' cognitive resolution capability, to improve the students' comprehensive quality and innovation ability through studying the cultivation of, to help students experience the significance, goals and values of the life, to enhance students' Humanistic temperament, but in the process of implementation the public art education curriculum was carried as the traditional curriculum, the teaching form is the conventional cramming education, after class students did have any homework or tasks, and lack of the creative process. However the creation is the important part of the art education and improving the students innovation ability. Through the traditional public art curriculum learning, students only in art appreciation and the ability to feel made some improvement, but the creation ability, artistic accomplishment and comprehensive innovation ability didn't get the promotion, the goal of raising the comprehensive quality of college students were not reached. In recent years, with the development of the "flipped classroom" and "micro class", the traditional teaching was reformed, a new idea was provided by the flipped classroom and micro class for the defects of public art education curriculum which lack of practice.

#### **The birth and development of the flipped classroom**

Flipped classroom, known as reversed classroom and the inverted classroom, was a new teaching forms of classroom organization, the flipped classroom

although began in 2007, and was put forward by the two chemical teacher Jon Bergmann and Aaron Sam in the High School of Colorado Rocky Mountain Forest Park, they uploaded the videos with ppt presentation and the real-time teaching to the network and aroused public concern. In 2011, as the function of Sahlman Khan and his Khan Academy, flipped classroom began to be familiar to many teachers, and became the teaching mode concerned by world's educational community. After 2011, great changes have taken place in with the rise of the MOOCs, another major event in the field of education, the teaching content and teaching methods of the flipped classroom changed in the implementation of the houses.

Foreign flipped classroom study focused on the flipped classroom used in teaching practice, comparing with the traditional teaching mode, and the application effect of combining the flipped classroom with other teaching method and the technology. Foreign research focused on the application research, some focused on the development of studying videos and the implementation research.

In some parts of the country, the experiment had been carried out over a few years, and it was relatively mature and had formed some fixed models. Some experiences of research and practice were accumulated, but scattered and lack of the systematic summary of the contents, features, components and the advantages and disadvantages of the flipped classroom. The research and practice of the flipped classroom had just started in China, was still in the introduction stage, only the

individual school carried out the teaching experiment of flipped classroom, such as Jukui middle school in Chongqing and No. 5 middle school in Guangzhou Haizhu District. At the same time, there were some researchers who had carried out the preliminary exploration of the flipped classroom and the research on the teaching design under the flipped classroom idea in the information environment. Overall, in the flipped classroom literatures, introduction was more than research, theoretical analysis was more than practical application and researches were mostly concentrated in the discussion on classroom teaching in primary and secondary schools, research and application of teaching in colleges and universities were less and most of the researches were theoretical, some experiment results of flipping classroom carried out in the colleges and universities proved that the effect of flipped classroom was much better than traditional effect. And the colleges and universities in which the flipped classroom was carried out in public art education were less than two in China.

Although the flipped classroom was widely used, its teaching mode also put forward higher requirements for the teachers' video making. The video teaching resources, which were mainly the whole process of teaching or one interception, or downloaded from the Internet, the time of resources was too long or too short, the content of resources was redundancy or shortage, the quality can not be in full compliance with the teaching requirements, the resource completely made for flipped classroom were fewer.

### **The meaning and characteristics of the micro class**

With the development of information and technology, the micro class has gradually become the focus of educational technology. Micro class has been known as micro course, and is being more and more accounted of by researchers and teachers as an important carrier of class preparation in flipped classroom with the popularity of the flipped classroom and Khan Academy since 2012.

#### **1. The meaning of the micro class**

In foreign countries, the micro class was defined as: Micro class is a sixty seconds course by audio or video recorded in which constructivism was the guiding ideology, and its purpose was to study online or mobile, based on a brief clear theme or key concepts as teaching content, micro class was not only for online teaching, blended learning, distance education, also has provided the autonomous learning resources for students, to make the students consolidate the knowledge learned at anytime

At present, the definition of micro class has not yet formed a consensus in China, literally, micro class was composed by micro and class, micro means small, slight, class is the planned piecewise teaching or the

time unit of teaching. From above micro class should be the whole process of teaching limited by the time, Zhang Yichun gave the micro class definition that was the careful information instructional design to make the learners' autonomous learning obtain the best effect, a brief, complete teaching implementation activity which was carried out around a knowledge point or the teaching link and displayed by streaming media form. Hu Tiesheng, who created the concept of micro class first in China, thought that micro class was a brief, complete teaching implementation activity which refers to the video as the main carrier to record a teacher's teaching around a knowledge point or teaching link.

Micro class is often referred to as micro course, about that micro class is a class or course, Jin Ling proposed that that the micro class need to be combined with the learning form and learning process is a complete micro courses. Its essence is a video record of the classroom teaching record, is a learning material of a micro curriculum system, so the micro class is an organic part of the micro curriculum system.

#### **2. The characteristics of micro class**

Because the micro class is mainly composed of the micro video, and the time length is from 10 to 20 minutes, which makes the micro video of the micro class has the following outstanding features:

The first one was small, versatile, easy to spread. The micro video of the micro class is short, its capacity is small, its general size was tens of megabytes, even a few megabytes, and its content is selected from the subjects that students find difficult to understand or with education values usually made and designed by teachers full of teaching experience and experts in the fields, its content was exciting, that could meet students' personalized learning need. The micro class not only can be used as an auxiliary explanation that teachers in the classroom teach about a subject or knowledge point, also can be used as a preview learning material by students before class, its access is also very quick and convenient.

The second one is that its theme is outstanding, its pertinence is strong, its use is convenient. The topic of the micro class was generally determined and subdivided after selecting a knowledge point or learning topics, and this makes micro courses highlight the theme, focus problems and practical problems be solved, so when the user is in the use of micro video of the micro class, they can learn a micro course according to the keywords of the knowledge points that are needed to master, this can save the learning time, the learning efficiency was improved, is also very easy to use.

### **The application mode design of the flipped class in the public art education curriculum based on the micro class**

The application of the flipped classroom idea is suitable for the art education curriculum. At present, most of the art education courses in colleges and universities were still the traditional teaching mode, the teaching form was single, the students as the main body were in the passive state, there was no real participation of the students in the classroom teaching activities. In the course of the teaching of the classroom knowledge internalization of the flipped class, the students become the real teaching subjects. The reform to the traditional education is carried on by the flipped classroom, the new teaching pattern for the public art education curriculum is provided.

Through the research most of the students thought that science and engineering courses such as mathematics was difficult, the effect of learning video independently was poor, the details were not thoroughly understood, so the flipped classroom did not apply to many mathematical courses. And the college students' learning was autonomy and exploratory, not suitable for the way of the cramming education. On the contrary, students should learn by themselves, so that students could get the better development in the seminar teaching and extra-curricular learning. Flipped classroom just conforms to the characteristics of art education curriculum in colleges or universities, compared with the science and engineering courses, knowledge points of art education curriculum are more scattered, difficulty coefficient is smaller, suitable for making micro video form, through a short period of watching videos students could learn the knowledge. The key point in public art education curriculum is to guide the students to carry out the works, students will mainly put in operation and the creative work or group discussion in class, and teachers provide individualized instruction for students 'creation, to promote the development of creative thinking in art.

The flipped class focuses on the learning process, pay more attention to the students' autonomous learning habits, training collaborative spirit. And it could provide more time for students to communicate with teachers and peer, to solving problems collaboratively, to complete the learning task, the students' creative thinking will be stimulated, and the innovation ability will be improved in the process of collaboration.

The flipped class teaching process was designed and constructed based on the micro class for the public art education curriculum in the article, based on the general teaching mode of the flipped class in which the student looks ahead of the material, do works, teachers make the guidance, sum up and promote, combined with the characteristics of micro class and the principle that the student was the subject, that the interaction in

class was effective and the characters of the public art education courses, its content mainly includes three parts, the knowledge acquisition before class, the knowledge internalization in class and the design link after class. Instructional design is divided into five steps:

The first step was the design of guiding cases; literature study and questionnaire survey method is used to determine the objectives of teaching and learning situation analysis, and the suitable learning activity guidelines of the public art education curriculum formed;

The second step was the production and design of micro class; each knowledge point was made into micro class, combined with the content, under the guidance of "Mastery Learning Theory" and "the taxonomy of teaching objectives", due to the low difficulty of public art education curriculum relatively compared with professional art courses, it was suitable for making into micro class.

The production and design of the micro class of the public art education should follow:

#### **① Reasonably using the image, the text, the animation and the color at the visual aspect**

In the micro class, the image and the text is the presentation way of the knowledge points. Facing a lot of image resources and lengthy texts, producers should streamline, although there were a variety of art works on the network, in the micro class design the images should be carefully selected, quantity should not be taken as the evaluation standard, but quality. Appropriate domestic and foreign outstanding works both illustrated the problems in teaching, and could attract students' attention. The text is to illustrate and describe the image and theory, illustrated in the form of the image with text was more intuitive to understand, for the outstanding works, the survey should be streamlined, the key should be highlighted; for the theoretical knowledge, some appropriate images should be selected to describe, such as arrows, lines and so on, this could help students understand and strengthen the knowledge better. Too much and long text was boring, it could make people tired of emotions, appropriate and reasonable animation can change it into vivid pictures, was concise and easy to understand, fascinating, so as to improve the students' learning effect and enhance memory. Different colors conveyed different information, when choosing images and text, producers should reasonably coordinate colors according to the performance need and the students' color psychological features. In the page design of micro course, the solid background color could be chosen to highlight the images and text, such as the black background with white words, white background with black words, yellow background with black words, blue background with white words and so on, to highlight and emphasize

some information, the text should be set in red or orange to obtain students' notice immediately.

### ②Selecting the matching music and audio in the hearing

In the overall design of micro class, the music and audio was essential, the music and audio could give more hyper chromic to micro class, the strength change of music and the tone change of the sound could make the student pay attention from involuntary to voluntary, seize the key points and difficulties, watch and study the micro class step by step. There were different types of music, which were with lyrics or not, rock or roll, or light music; the music should be selected according to the content of the micro class and presentation forms, not their favorite music or the current popular music. In the quality of the recorded sound, the sound should be clear, the speed of the sound should be moderate and standard, and not too dull and boring. And the volume of the sound should be paid attention, too high or too low voice could not show the effect; audio and video should be synchronous, the audio appears early or late, it will affect the whole micro class

The micro class was brief, vivide and easy to understand, was very suitable for students of the non art major. At the same time, the micro class resources of different curriculum resources were uploaded to the network platform, which can be downloaded and applied for college students, to realize sharing resources;

The third step was autonomous learning design after class; After class students studied independently, while watching the micro class they could complete guiding case; teachers could set a theme according to the content of the micro class, and give advices on learning methods and learning content under the theme, thus learning before class students, students could avoid the blindness in the choice of knowledge, and could comb. Later in the course of learning before class, through the network platform the students could learn micro class and access to information related to the theme, the structure of the students' knowledge was formed in advance unconsciously, and they could experience the art through their own way.

The fourth step was that the knowledge internalization link in class was divided into four sections: inquiry and cooperation; independent creation; expand the doubts; practice consolidation and self correction; reflection and summary. The practical teaching link was the knowledge internalization process to teachers and students, teachers could lead students to explore the artistic style, the students discussed, exchanged and analyzed the creation concept, style, characteristics, and differences of every art work with each other, and cooperated in group form, they could try to complete create works of art the under the guidance

of teachers, teachers provided some creative ideas, guidance and error correction to the students.

The fifth step was the link design after class. Testing and feedback after class was a consolidation of the learning process, at the tips of the teachers, the knowledge learned was fed back, the teachers tried to design problem according to the difficulties in the course, students had the consciousness of exploring problems that where they appeared. The block memory of the art curriculum formed through discussions and reflections at last, the questions recorded will be solved in the link through the teachers and students together, and the advices to the subjects about how to practice will be given. The teaching mode could not only make the knowledge learned applied, but also allow students to have a certain ability to think and analyze. Network and other social resources will be used, forming a effective learning environment before and after class, students could also upload their works created by themselves to the network platform, after class the interaction, discussion and teaching activities between teachers and students in the network platform were carried on, this could make the students of non art major in public art education curriculum harvest more.

### Conclusion

In China, most of the public art education curriculum was still the traditional teaching methods, the micro class were presented in audio-visual and the flipped classroom was the student-centered teaching mode, they will provide not only a new direction, a new teaching mode and a new idea to the reform of the public art education in colleges and universities under the new situation, but also became a new teaching mode in recent years widely in world, and the dawn was brought to the present public art education curriculum.

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