Study on the influence of art micro-lecture education on the aesthetic psychological development in the primary and middle school students in China

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Abstract. In recent years, due to the rapid development of science and technology in China, technology has continuously advanced the process of informatization in education. Among them, the emergence of micro-lectures has made learning more convenient and efficient. In Chinese compulsory education system, art education has always been hindered by the drawbacks of exam-oriented education, and the neglect of art classes is often observed in classrooms. Teachers always consider that art classes is less important than the major courses and lose sight of it. However, with the advent of the internet information era, micro-lectures have proposed new solutions and motivation for the difficulties and challenges faced by art education in China. Micro-lectures, due to their various advantages and characteristics, are a teaching method with great potential development in art education. This article mainly explores the capacity enhancement of primary and middle school students through micro-course teaching, and it has strong practical and application significance.

1 Introduction

1.1 Basic meaning

Simply put, micro-lectures are a teaching model that relies mainly on information technology to present fragmented videos related to course-specific knowledge. The content of micro-lectures primarily consists of classroom teaching-related videos, as well as auxiliary teaching resources for teacher’s learning, such as course design process presentations and videos on teaching reflections. Micro-lectures are a type of teaching resource that emerged in the Internet era.

1.2 Classification of micro-lectures

Since micro-lectures are short, fragmented videos, they can encompass a wide range of types. They also have a diverse range of target audiences and course categories. Based on Professor Li BingDe’s classification of commonly used teaching methods in primary and middle schools in China, micro-lectures can be categorized according to the way information is conveyed. This classification is practical for frontline teachers’ understanding and their practical development. Researchers have initially divided micro-lectures into 11 categories: lectures, Q&A sessions, inspirational sessions, discussions, demonstrations, exercises, experiments, performances, autonomous learning, cooperative learning, and inquiry-based learning. Micro-lectures can involve language-based delivery methods, such as lectures; direct sensory perception, such as teachers demonstrating experiments for students to observe; and practical training, for example as teachers guiding students in deducing course content.

1.3 Characteristics of micro-lectures

1.3.1 Short duration

Previous scholars have shown that human attention span is relatively short, typically lasting around 5-10 minutes. If the duration is prolonged, individuals’ attention and focus tend to decline, which negatively affects the absorption of new knowledge. However, micro-lectures are characterized by their short video length, typically around 10 minutes [1,2]. Due to their brevity, micro-lectures present highly concentrated and condensed knowledge, making them suitable for learners to study within a highly focused timeframe or during fragmented learning periods [1]. In contrast, in traditional teaching, a 40-minute class already exceeds students’ attention span, making it impossible to learn 100% of the knowledge during one class, necessitating additional time for revision at home. Additionally, traditional teaching often involves a large amount of content, making it difficult to distinguish key and challenging points, which can lead to difficulties in memorization [2].

1.3.2 Wide variety of types

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As mentioned earlier, micro-lectures encompass a wide variety of types. Therefore, students have relatively more freedom to choose and explore the content they want to learn [1]. Compared to traditional teaching, micro-lectures offer higher flexibility in terms of choice. In addition, the various content in micro-lectures is independent of one another, allowing students to selectively watch and focus on areas they find challenging, thus saving a significant amount of time [1].

1.3.3 Possibility of repeated learning

Since micro-lectures are independent teaching videos, learners can watch and review them repeatedly. In contrast to traditional teaching, where students may need to ask teachers in class or after class if they do not understand, and teachers' availability may be limited. The use of micro-lectures in teaching allows students to explore and ponder on their own, significantly reducing the burden on teachers, making learning more efficient, and stimulating students' autonomy and inquiry awareness, thereby encouraging students to actively engage in learning new knowledge [1].

2 The application strategy of micro-lecture in art education

2.1 Expand the teaching content

In the traditional teaching process, due to the time limit of each lesson, the knowledge acquired in one lesson is limited. The micro class has the advantage of short time and wide types, and the theme played is targeted. Teachers can use the fragmented content of micro-lecture to carry out targeted teaching according to the teaching topic or the bullet points of teaching [3]. In this way, teachers can make full use of class time to expand the teaching content. However, it should be noted that micro-lecture can only be used as auxiliary teaching, not as the main part of the course [3]. If students see too much visual scenes, they will feel fatigue. The main purpose of the course is to encourage students to explore their own learning process. Therefore, micro-class needs to grasp the suitable time and act as a polishing role in teaching. For example, the best effect is to place 1-2 micro-lecture in a class. Micro-lecture can be placed in the introduction of the course to play examples in student’s daily life or interesting stories related to the course to attract students' attention. Or when the teacher explains abstract key points or crux, add micro-lecture can help students to understand [3]. What's more, at the end of the course, adding extended micro-lecture content can also help students divergent thinking and enrich their knowledges [3].

2.2 Create an interesting teaching environment

Compared with the traditional oral teaching method in art teaching, micro-lecture can give students detailed presentations, it can bring more profound and intuitive visual influences to students and impress them deeply, so they can feel the spirit and connotation of art work [4]. This can help the classroom to create an interesting teaching environment. For example, in the course of the introduction process, the interactive method involving in micro-lecture is used instead of the teacher's oral Q&A, which can better attract students and stimulate their interest in the class [5]. In addition, compare to the traditional teaching process, the visual presentation can make the memory of the problem and the content clearer in the student's brain. After watching the visual contents and the lead-in link, students will enter the class with questions, which will improve the efficiency of the subsequent class explanation.

2.3 Develop the creativity of the students

As an important part of quality education, teachers should fully study and improve teaching methods, so as to stimulate students' interest and enthusiasm to a great extent, which can raise students' ability of independent [2]. For example, in the European Medieval Art appreciation course, teachers can use micro-lecture to display various fine art works, such as Van Gogh's Sunflower, Leonardo Da Vinci's Mona Lisa, and so on. After watching the micro-lecture, the teacher asked questions in order to encourage students to express their own views, such as exploring the composition of the work, color tone, and more importantly, feeling the emotion that the artist wants to express. Students can learn the emotions and the influence of the aesthetic appreciation [3,4]. When the appreciation ability is improved, students' innovative thinking will be further developed and enhanced [2].

3 The application process of micro-lectures in art education

3.1 Suitable topic selection

Micro-lectures as a suitable teaching method, cover a wide range of content types. However, not all art lectures are suitable for micro-lecture instruction. Teachers need to carefully select topics for micro-lectures and choose the appropriate knowledge points to explain [3]. Additionally, teachers should survey students to determine if they enjoy the micro-lecture teaching method. If students respond positively, relevant micro-lecture content can be added in the classroom.

3.2 Designing micro-lectures

As an important way to enhance classroom teaching, micro-lectures require a complete course plan and teaching materials to ensure smooth implementation. Teachers must maintain high standards for selected micro-lesson content, ensuring clear and concise explanation of basic knowledge points [3]. When selecting visual elements for micro-lectures, teachers
should fully consider the theme and characteristics of art, emphasizing the visual influence and it is unique appeal to micro-lectures, creating a suitable atmosphere and environment that fully engages students. The beginning and ending of micro-lectures should serve as a transition, ensuring smooth playback and facilitating subsequent explanations by teachers.

Furthermore, teachers need to select appropriate micro-lectures based on students’ developmental characteristics. For example, students in the first and second grade of primary school have a strong enthusiasm for art and they prefer visually works, as well as flat artwork, and possess a considerable imagination [6]. In this case, micro-lectures can be designed with a cartoon style, featuring more images and less text to capture the interests and exploratory awareness of younger students. For middle and middle school art education, where students have relatively mature psychological development, the curriculum focuses on appreciating both ancient and modern Chinese artworks and to enhancing cultural confidence [7]. Micro-lectures can showcase classic Chinese artworks and their origins.

3.3 Keep it simple

Micro-lectures are called "micro" because they are short and concise, typically lasting no more than ten minutes. Therefore, when searching or creating micro-lectures, teachers should ensure the duration does not exceed ten minutes, which can helping students maintain high attention and concentration levels, thus increasing their learning efficiency [3]. Additionally, the layout of micro-lectures should be simple and clear, with minimal unnecessary decorations and a clear focus, to avoid distracting students’ attention [3].

3.4 Adding appropriate elements of interest

Compared to traditional teaching methods, although micro-lectures capture student attention, the content can become monotonous if presented in a singular manner. Therefore, it is recommended to add interesting elements to highlight the educational parts and provide entertaining aspects of micro-lectures [3]. For example, adding amusing sound effects during image display or connecting the learning content with things students enjoy [3]. Incorporating familiar elements, such as relating the technique of drawing a football to the football skin in the game "Eggy Party," which can enhance student’s interest. In addition, the choice of music is crucial [3]. Teachers should select music suitable for different student age groups, ensuring it is not too noisy, to avoid diverting attention from the main content.

3.5 Improve post-lesson evaluation based on student preferences

Post-lesson feedback is an essential part of teaching as it helps teachers reflect on their classroom performance, curriculum planning, and reduce flaws [3]. Teachers can start by self-evaluating the effectiveness of the course or involve students in the evaluation process. To assess the effectiveness of micro-lectures, teachers can use questionnaires to inquire about students’ level of satisfaction, shortcomings, and suggestions for constructive improvements [3]. This way, micro-lecture content can be continuously adjusted based on students’ feedback.

According to a survey conducted by Ma Lan, more than half of elementary school students highly enjoy micro-lectures as a teaching method, a quarter expressed their preference for micro-lectures. Only 4% did not enjoy micro-lectures [1]. This proves that micro-lectures are a teaching method highly valued and favored by students in art education [1]. Therefore, studying the use of micro-lectures in education aligns with the development trend of contemporary digital society. Moreover, students’ level of satisfaction towards micro-lectures can provide valuable insights into their aesthetic psychology and appreciation skills.

4. The influence of micro-lectures on the aesthetic psychological development of primary and middle school students

During the period of quality education implementation in China, schools attach great importance to the development of students’ moral, intellectual, physical, aesthetic, labour abilities, and pay great attention to their comprehensive development [6]. Among them, "aesthetic education" is the cultivation of students' views to the aesthetic psychology, the development of their ability to appreciate beauty and create beauty works, and the cultivation of their noble sentiments and high qualities. Therefore, in compulsory art education, the cultivation of students’ aesthetic psychology is an important aspect of their development [6]. The influence of micro-lectures on the aesthetic psychology development of students should also be discussed according to the classification of students in different stages [6].

4.1 Cultivating the aesthetic psychology of primary school students

In the primary school stage, according to research, the aesthetic psychological development of primary school students has unique characteristics. Teachers need to guide students to develop good aesthetic psychology based on a full understanding of their psychological development.

The aesthetic psychology of primary school students has the following characteristics:

Strong curiosity: Compared to adults, primary school students have a stronger curiosity about nature and objective things [8]. They are also very interested in artworks with irregular and exaggerated shapes [8].
Subjectivity in artwork expression: According to surveys, primary school students' views on things depend on their own feelings [8]. In painting practice, when drawing objects, primary school students tend to emphasize and highlight certain unique parts, such as using bright colours and unique graphics [8].

To this end, through micro-lectures and the aesthetic psychology of primary school students, teachers can use some strategies to enhance their aesthetic awareness and aesthetic perception.

4.1.1 Playing micro-lectures related to objective matters

Some scholars have found through investigations that a major way for primary school students to enhance their aesthetic psychology is by observing nature and things around them and expressing their own aesthetic perceptions [9]. Therefore, teachers need to emphasize letting primary school students appreciate the objective world. Micro-lectures can play an important role in this process. Since a standard art class is only 40 minutes, with the help of micro-lectures related to the appreciation of nature, students can observe objects in just 10 minutes. Play videos of buildings from other countries, such as the Eiffel Tower in France and the Statue of Liberty in the United States. This not only allows them to appreciate the beauty of sculptures but also brings them a sense of novelty.

4.1.2 Respect students' thoughts and motivate their enthusiasm

During the process of watching micro-lectures and at the end of the play, teachers can raise some questions to students. For example, in the study of "Discovering Beauty Around Us," the teacher can play a wonderful video of a sunset scene with willow trees swaying. After watching, the teacher can ask, "Why is this video make you feel beautiful?" and let the students express their opinions. After the students answer, they should be encouraged, even if their answers are unrelated or deviate from the topic. This can motivate students' enthusiasm through micro-lectures and questioning, and guide them to pay attention to beautiful things around them in daily life, making them more interested in experiencing the beauty of life [9,10]. Similarly, students should also be encouraged during their creative process [8].

4.2 Cultivating the aesthetic psychology of middle school students

Middle school students are at a critical stage of transitioning into adulthood, and their aesthetic psychology has the following characteristics:

Gradually maturing: According to human growth cycles, middle school students experience rapid physical and psychological development during this stage, and they have formed their own set of aesthetic psychology concepts [7]. At times, students may have rebellious thoughts and be less receptive to teachers' teachings and reliance on them. When conducting art appreciation activities, they will rely on their own thinking to experience the meaning conveyed in artworks [7].

Active exploration of aesthetics: Due to the rapid psychological development and independent thinking of middle school students, they are eager to showcase their aesthetic psychology and skills [9,11]. They explore the inner value of artworks passionately from their own experiences [11]. Therefore, in middle school, regularly conducting micro-lectures related to art appreciation can greatly enhance students' aesthetic abilities.

To this end, based on micro-lectures and the physical and mental development of middle school students, teachers can use some strategies to enhance their aesthetic development and aesthetic perception.

4.2.1 Conduct frequent art appreciation-based micro-lectures in the curriculum

The purpose of art appreciation is to evaluate and appreciate objective things from students' spirits, and it is also about understanding artworks from a personal perspective. Through middle school art appreciation teaching, students pay long-term attention to high-quality artworks, obtain high-quality aesthetic experiences, accumulate high-level aesthetic knowledge, broaden their aesthetic horizons. This not only enhances students' basic knowledge of appreciation but also helps form relatively stable their aesthetic psychology [7]. Compared to picture-based Powerpoints, appreciation-oriented micro-lectures have a stronger sensory influence on students, and the video format can create a better context for artworks, allowing students to empathize with the author's emotions.

4.2.2 Further enhance students' artistic aesthetic foundation

To better enhance aesthetic appreciation ability, it is important to combine theoretical knowledge and personal life experiences to comprehensively evaluate artworks. Therefore, it is crucial to understand the steps and key points of art appreciation. To conduct effective aesthetic appreciation, basic theoretical knowledge is essential [11]. For example, basic knowledge of art includes form, colour, composition, etc., which are related to the intuition of the artwork. For example, cold and warm colours express coldness, sadness, or enthusiasm and passion respectively. Additionally, middle school students need to have a deep understanding of historical and cultural knowledge because almost all artworks need to be appreciated by combining the background and timeline of the era they belong to in order to understand the author's emotions. Artistic foundation knowledge tends to be abstract, and historical and cultural knowledge presented solely through narratives can be dull and boring.

Micro-lectures are also helpful in improving the aesthetic foundation of middle school students [10].
Artistic foundation teaching can include playing painting demonstrations to satisfy visual effects and save teachers a lot of time. Historical and cultural knowledge can be presented through short history stories, allowing students to have a more vivid understanding of the artist’s background, timeline, and the artists themselves. The influence of oral, visual, and auditory elements will leave a profound memory of historical facts on students.

5 Deficiencies of micro-lectures at present

As a new teaching method, micro-lectures have the potential to be an innovative way of the instruction system. However, at this stage, there are still some shortcomings in this teaching approach.

5.1 Immaturity in the production of micro-lectures

As a widely used teaching method in schools, the production of micro-lectures is not complicated. On contrary, it is relatively simple for teachers to pre-record the content they want to present and then edit it by video editing software. However, various problems can arise during this process, such as blurry or shaky video footage, background noises caused by using unprofessional filming equipment, issues with subtitles alignment, misplaced or lost video fragments during video editing [2]. These technical limitations in producing micro-lectures are the reason why some teachers are unwilling to use them in classrooms.

5.2 Most micro-lectures lacking colour and describing dully

Although some teachers incorporate micro-lectures in their teaching, the content often lacks excitement and is presented in a manner similar to traditional lecture-style teaching, tirelessly imparting abstract knowledge to students while neglecting the true potential of the usage of micro-lectures [1,2]. Micro-lectures should have a greater influence compared to oral teaching methods, by effectively capturing students' attention and providing clear and understandable explanations of abstract concepts.

6 Conclusion

Based on the findings of the following literature review, it is concluded that properly incorporating micro-lectures in classrooms during students’ compulsory education stage not only expands the teaching content, enriches students’ knowledge but also creates a sense of fun, it catches students’ attention, and stimulates innovative thinking and aesthetic psychology among students from different stages of learning process, encouraging their self-exploration abilities. Furthermore, teachers need to pay attention to highlighting the main themes, have the proper design, simplicity in production, and mind students' feedback when searching and creating micro-lectures. When delivering lectures to students from different stages of learning, teachers should select appropriate micro-lectures based on their current aesthetic psychology, physical and mental development. Notably, the aesthetic psychology of primary and middle school students differs significantly. Additionally, in order to meet the requirement of comprehensive development of students' qualities, teachers should apply their teaching principles and instructional designs appropriately, maximizing the efficiency of students' art classes. Finally, micro-lectures also have their deficiencies and drawbacks. It is hoped that teachers will gradually improve the quality of micro-lectures through post-lesson feedback, thereby benefiting art micro-education and promoting progress in the art education.

References