

The Use of Multimedia Technology to Optimize Classroom Teaching Methods of Music Culture

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Abstract: The use of multimedia teaching technology not only enriches the content of the classroom, but also improves students' learning interest and learning efficiency to a large extent. In the music appreciation class, the use of multimedia teaching can greatly solve the problems in traditional music teaching the deficiencies in the model and method can stimulate students' interest in learning to a large extent and optimize the teaching structure. The purpose of this paper is to use multimedia technology to study and optimize the teaching methods of music culture in the classroom. The significance of using multimedia teaching is introduced, and the feasibility of multimedia teaching in high school music culture teaching is demonstrated by analyzing the advantages of this teaching system. By exploring the current situation of application in school music culture courses, and using questionnaires to understand the penetration of multimedia technology in music culture teaching, the experimental results show that most students believe that multimedia teaching methods have many benefits and involve a wide range of knowledge, only 5% of students think it is relatively simple.

1. Introduction

The features and functions of multimedia technology are well suited to the needs of music education. Using multimedia, teachers can add beautiful songs, powerful visuals, and strong emotions. Due to the composition method, the charm of music can be heard more, which has a positive effect on improving students' aesthetic ability [1-2]. Based on this benefit, the educational design based on multimedia technology should improve and enhance the learning content according to students' understanding laws, various characteristics of multimedia technology and the characteristics of music, so that students are interested in learning music. And encourage students to think creatively, so that students can better understand music, feel the emotion of music, find themselves in the situation, and cultivate students' ability [3-4].

Multimedia technology is an important and practical aspect of modern teaching technology [5]. Some students take college music education as a research topic, analyze the methods and teaching methods of multimedia technology in college music education, and combine with the special

teaching environment to continuously train students in the new life of science and technology [6]. Some scholars have carried out the practice and research of digital multimedia audio stream. In-depth study of the characteristics of digital technology and music education, and according to the actual needs of music education, combined with the advantages of digital technology, to analyze the use of digital assisted education. It is believed that the use of technology can directly reflect the learning content, improve the learning effect, and reduce the loss of personnel [7]. Therefore, it is very important to study the application of multimedia learning technology in music classrooms [8-9].

This paper systematically analyzes the necessity and importance of multimedia technology in the application of music culture teaching, analyzes the advantages of multimedia teaching, and expounds the application of multimedia technology in each music teaching link in music teaching. As an auxiliary means of music classroom teaching, multimedia application technology provides an effective means for the reform of music education and expand the horizons of students and teachers.

2. Research on Optimizing Classroom Teaching Methods of Music Culture

2.1 The Importance of Multimedia in Music Teaching

(1) Multimedia teaching is an effective means to develop and improve quality education

In this era of rapid changes in science and technology, the development of the Internet has made the amount of human knowledge grow rapidly, and the way to obtain new knowledge is more convenient [10-11]. For education, students can not only acquire knowledge in school, but also receive various information from society and family. Today's education is also changing from "examination-oriented education" to "quality education", attaching importance to the development of each student's personality, paying attention to students' practical activities, and guiding students to create bravely and use their imagination. These require us music educators to innovate us. It uses modern teaching methods and means to improve the level of music education, and implements the innovation of educational ideas and concepts, educational models and methods in an all-round way [12-13].

(2) Multimedia technology enriches teaching resources

With the improvement of human life, music has already spread to all corners of society, and appreciating music has long been a necessary basic need of human life. Therefore, strengthening the guidance of students and cultivating students' good appreciation habits has become a must for music educators. In one aspect, the cultivation of personality for all-round development has become an urgent task for teachers [14]. The use of multimedia technology in teaching can fully mobilize the subjective initiative of students' learning and guide students to appreciate music correctly [15]. The characteristics of high integration and high variability of multimedia can comprehensively broaden the horizons of music learners, and the rich and colorful multimedia music information resources overcome the problem of the lack of limited music resources in the classroom. At the same time, it also provides new teaching needs for many music teachers and other educators. Because multimedia is the most effective means to help music teachers and learners to better achieve the goals of music teaching, it is necessary to use multimedia teaching resources fully and reasonably for teaching., pay attention to and use the advantages of multimedia in music classroom teaching. Under the background of deepening education reform, improve the comprehensive quality of teachers, and strive to achieve the perfect development of my country's basic education [16].

2.2 Multimedia Technology Optimizes the Method of Music Culture Classroom

(1) Self-directed learning

In the classroom teaching of music culture class, multimedia is not only a simple courseware display, but also shows the teaching content to students through a combination of video, graphics, sound and other forms. The students' learning mode has changed from listening to the teacher's explanation to the self-inquiry learning mode through observation and thinking. In this learning mode, students' enthusiasm for inquiry is stimulated and students' autonomous learning ability is cultivated. Under the aid of multimedia teaching, students' self-inquiry learning is no longer a student's personal learning behavior, but a group inquiry study that can cooperate with other students [17-18].

(2) Record emotions

Multimedia technology can use recording input devices to record voice, students can casually express their feelings about music works, and express their views on music, as well as the emotions and emotions that music works want to express, when students express their emotions. Technology has collected students' voices and can instantly record students' emotions. The process of recording emotion is shown in Figure 1.

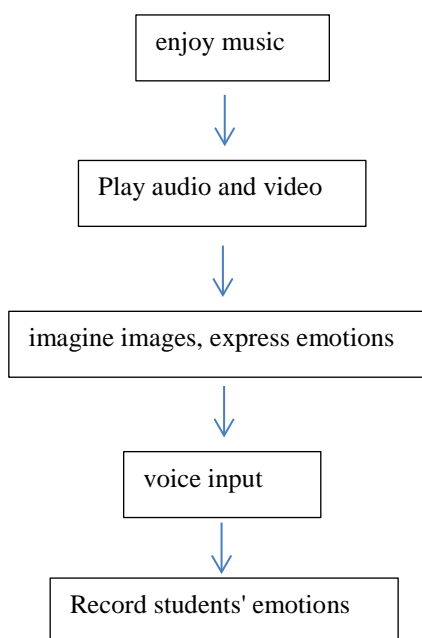


Figure 1: Recording emotion map

(3) Feedback statistics

Feedback statistics is a function extended under the support of multimedia technology. Through the relevant voice data collected by the recording input device, comprehensive statistics are carried out, and the students' learning situation can be grasped more intuitively, which is of great help to the teaching of singing, playing and reading music. . The sound base 100 software can provide music knowledge questions suitable for learning, including music theory, reading music, listening and identifying, reading pictures and instruments, etc., which are presented to students in the form of game competitions, and master the lessons while playing the game. With the knowledge and music knowledge learned, the sound base 100 can be used to collect the audio and practice data of the students' practice, and judge the learner's learning style and learning effect through data analysis. Students provide individual practice topics, and through various forms of multimedia technology, the complex and boring music knowledge will be embodied, and the intuitive representations such as graphics and animations will be formed.

3. Investigation and Research on Using Multimedia Technology to Optimize Music Culture Classroom Teaching Methods

3.1 Content of the Survey

In order to comprehensively understand the current students' learning of music culture and the use of multimedia in our school, this paper conducts a questionnaire survey on a total of 150 students in the first-grade class, and the questionnaire is divided into 10 multiple-choice questions. The content of the questionnaire includes the interest and feeling of using multimedia to teach music culture class; the degree of support for using multimedia to teach music culture class; the pros and cons of using multimedia to teach music culture class. The questionnaire is mainly for the use of multimedia, using anonymous questionnaires.

3.2 Sample of the Survey

This survey selected some freshmen students and divided them into two types of classes, including music majors and other majors. Some students were selected from each type of class. A total of 150 questionnaires were distributed and 150 were returned, of which 100 were valid questionnaires. Questionnaires are in the form of multiple choice questions.

3.3 Data Processing and Analysis

This paper uses SPSS 22.0 software to count. The t-test formula used in this paper is as follows:

$$t = \frac{\bar{X} - \mu}{\frac{\sigma X}{\sqrt{n}}} \quad (1)$$

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2} \left(\frac{1}{n_1} + \frac{1}{n_2}\right)}} \quad (2)$$

Among them, s is the sample standard deviation, and n is the number of samples.

4. An Analysis of Students' Attitudes towards Using Multimedia Technology to Optimize Music Culture Classroom Teaching

Through the survey, it was found that 77% of the students liked the attitude of using multimedia in music culture class, which means that most of the students still recognized multimedia and had great interest in multimedia music culture class. In this way, this part Students are more active in music culture class. 18% of the students liked multimedia, and the remaining 5% of the students were ok, with or without multimedia. Table 1 shows the students' attitude and interest in using multimedia to teach music culture.

Table 1: Student Attitude and Interest Analysis Data

Attitude options	proportion	number of people
like it very much	42	63
like	38	57
generally	16	24
do not like	4	6

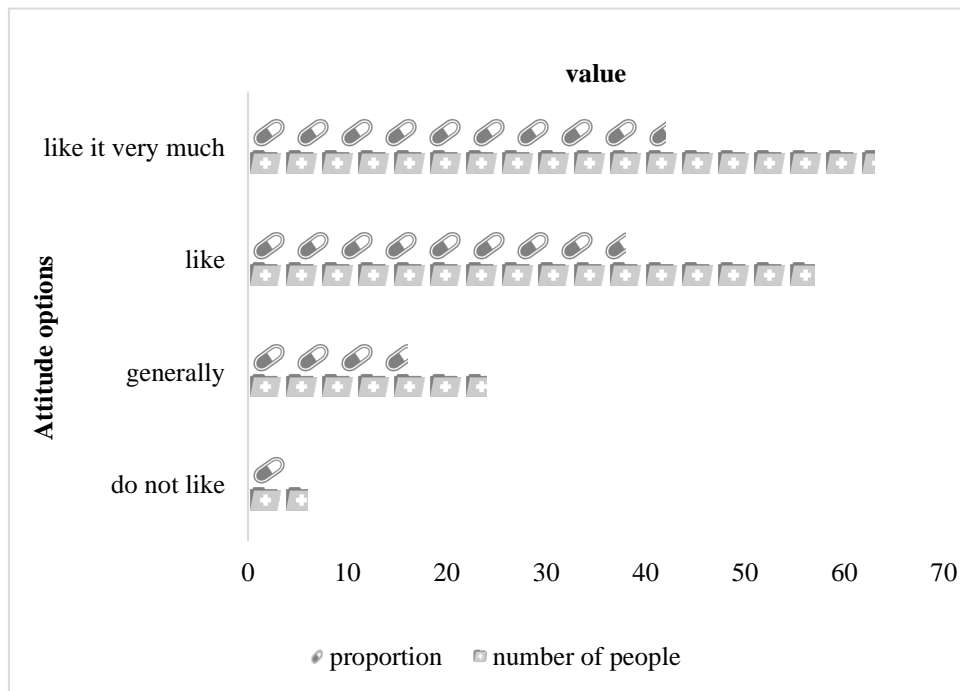


Figure 2: Survey results

Most of the students are willing to use multimedia for music culture class, as shown in Figure 2.

The advantages of the multimedia teaching method over the traditional teaching method are that most of the students think that the multimedia teaching method has many advantages, including images, good sound effects, a wide range of knowledge, more materials and richer content, only 5% of the students think it is relatively simple and has no flexibility. After investigation, it is shown that the advantages of multimedia still outweigh the disadvantages.

As for the method of teaching music culture, because 50% of the students in our school are from rural areas, and half of these students have not been exposed to multimedia, there are many students who continue to optimize the multimedia teaching method for the method of music culture 85%, and the other 15% of students have the same results.

5. Conclusions

After the use of digital music technology, the teaching purpose of music culture class is still to improve students' basic musical literacy such as pitch, rhythm, and notation. As a modern teaching method with strong practicability, multimedia technology has a very broad prospect in music culture education and application. This paper studies the teaching method of using technology in music culture course, which greatly broadens the learner's musical vision and greatly improves the efficiency of music learning. Due to the limitations of the author's research ability and the time to write the thesis, the views put forward in this article are still relatively rough, and some writing areas are not mature, but in the future, I will continuously improve my learning ability, so as to help us. The cause of basic education has contributed to the power of Weibo.

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