# The Application of Multimedia Technology in Vocal Music Teaching

Bing Xia<sup>1, a</sup>

<sup>1</sup> Music School, Jiangxi Science & Technology Normal University, Nanchang, China <sup>a</sup>xiab8899@163.com

Keywords: vocal music teaching, multimedia technology, application

**Abstract.** Vocal music teaching is an important part of music teaching, but a lot of abstract and subjective exist in the process of teaching, which is not conducive to the students' curriculum learning. However, the multimedia technology can solve the problem better. Combining the multimedia technology and the vocal music teaching can provide illustrated teaching contents and accurate data comparison analysis, which will make the teaching and learning more smoothly and raise the students' level of vocal music.

#### Introduction

Vocal music teaching is an important part of the music teaching. It mainly cultivates the students' singing skills, expressive ability and creative ability, and then improves their musical literacy and artistic sentiment. However, in traditional vocal music teaching, it is difficult for the teachers to accurately express the manner of articulation, breathing, singing emotion and so on through the language, which may cause the students not to understand the relevant theory.

In recent year, with rapid development of computer science and technology, more and more computer aided teaching technology enters into the field of education. The multimedia technology, setting the images, video, audio, text and other forms in one, can display the teaching contents the teachers want to vividly, simply and clearly. The combination of multimedia technology and the vocal music teaching can improve the teachers' teaching ability effectively, let dull vocal music theory become vivid, and enhance the students' understanding ability and learning interest. In addition, the comparative analysis on different singing styles through the multimedia technology is also beneficial for the students to master various methods. The teaching contents can also be arranged and modified according to the actual needs of teaching to achieve the purpose of teaching students in accordance with their aptitude.

## The importance of multimedia technology in vocal music teaching

It is beneficial to the visualization of vocal music teaching. Cultivating students' artistic voice is an important part of vocal music teaching. When learning and cultivating singing voice, if only depending on vocal music theory and text, students can hardly make rapid progress. They should not only understand the principle of sound and voice state, but also grasp the function of singing organs. The traditional vocal music teaching always use charts and verbal description to explain the physiological structure, vocal function, and all kinds of singing states of vocal organ, and students are still unclear on the details and the internal activities of the body. However, the use of multimedia teaching method can solve the above problems smoothly. Teachers can make the physiological anatomy diagram and voice process diagram of singings organs into visual image of the animation through the computer, for example, use three-dimensional computer animation to let see the singing breath confrontation and muscle movement direction, together with the specific explanation and demonstration, the abstract thing will become concrete and intuitive.

It is beneficial to enhance the students' sense of rhythm and intonation. Accurate intonation and rhythm each student should have is indispensable to better express the connotation of vocal music work. The traditional vocal music class, mainly with piano accompaniment, can adapt to students' subjective treatment at anytime. The deficiency is that students' accurate intonation and rhythm is

easy to be affected by the level of teachers. But the use of multimedia technology can make the band accompaniment of the songs in advance, in this way, the audio accompaniment of accurate intonation and rhythm can let students have better understanding on the mood and taste of music; for teachers, they also can get rid of the piano accompaniment to ensure the more energy to guide students.

It is beneficial to improve students' ability of dealing with vocal music work. In order to describe the connotation of the vocal works more completely, students must fully grasp Chinese and foreign music history, basic music theory, the background of different works, different version of the same work and different style schools of interpretation. In the traditional vocal music teaching, it is far insufficient for teachers to explain by the language and the pictures, and students only obtain the fuzzy and non-system impression. The use of multimedia technology can demonstrate the ancient and modern sound, images, text and other information in a more vivid form to create a real and natural situation for students. By watching the singers' lip movements, facial expressions, acoustic techniques, and emotional processing methods, students' vocal music skills and music performance ability will increase. In addition, when watching and enjoying the music works, they will enrich the vocal music knowledge and improve the appreciation and understanding of vocal music taste, so as to strengthen their ability in music expression.

## The specific application of multimedia technology in vocal music teaching

Use the MP3 and walkman the students carry with them before class. Install the songs in their MP3 players or mobile phones before class, and then they can listen repeatedly before class or after means and other spare time. In this way, the songs are illuminated with Cipu, which will great enhance the efficiency and improve the accuracy of the melody and lyrics phonetically. In class, teachers can concentrate on the problems of students' sound, singing, emotional expression while don't need to entangle in remembering words like the past, which can improve the teaching efficiency by 30% above.

Use animation to demonstrate the action process in vocal exercises. Learning sound is the basic content of vocal music teaching, and is also the most headaches of students. The students can not see how teachers' vocal cords act when sound, so they often spend a long time and still miss the point. Through the use of multimedia animation to demonstrate the action, students can see oral structure, and different change of different parts when singing high pitched and low pitched; they can also see different simulated movements of the abdomen and thorax. With this kind of intuitive feeling, the ability of students to master the essentials will be greatly improved.

Record and analyze the students' singing process. It is easy to find out what's wrong with people's singing, but it is difficult to hear the shortcomings in their own singing. The shortcomings of the students often manifest as intonation, rhythm, inaccurate articulation, muscle stiffness, no emotion, etc. they always can not feel it in the process of singing. Record the students' aria with multimedia sound monitor software, and then put it to him and let him pick fault, which will make students have more profound understanding on teachers' teaching and the shortcomings corrected more accurate. The record and analysis can be carried out sentence by sentence, or also be full; it can also be performed repeatedly for emphasis and difficulty. Through the audio level and the size of the volume showed by software, teachers can make quantitative analysis of the students' best condition, and the students can grasp the best feeling of the moment in time. Whether it is for teaching or learning, the application will be very helpful.

Use slides in vocal music literature class. The aim of the vocal music literature class is to let the students understand more vocal works. In the past teaching, opera was often played by DVD machine, stopped in key place, and then continue to be explained by teachers. The drawback is: first, there is no textbook and students can not see the Puli, so it is difficult to write notes. Second, the key is not outstanding and the efficiency is low. Third, it is not easy to operate and the repeatability is poor. Therefore, we can solve the problem by using the multimedia slides. The contents of slides include author brief introduction, opera introduction, voice over explanation, segments of the song works, etc.

## **Existing problems and solutions**

Reform the concept of music education and construct a new music teaching mode. Attaching great importance to and strengthening the music education in the school is an important development direction of our country's education reform. The teaching mode, taking the teacher as the center and for the purpose of test, must be reformed. The basic points of changing teaching mode are: teaching contents change from single and narrow music skills to world music culture teaching of multi subject, and the main body of teaching activity changes from teacher-center to student-center. In this way, teachers change from knowledge disseminator to the guider and helper of students, and students change form passive learning receiver to active participator in exploration and innovation. Computer music teaching system and other modern teaching media resources also become new tools for students to learn and innovate from the main demonstration tools of teachers. In addition, teaching process also become that students cultivate their own quality by problem research, knowledge innovation and meaning construction. Anyway, modern information technology not only provides advanced means for education innovation, but also prompts us understand the meaning of music education deeply, which is conducive to construct a new teaching mode to cultivate students' innovative ability.

Improve the teachers' computer level. The development and use of multimedia technology requires the teachers be able to use a variety of software skillfully, including the input document management, audio and video editing and play, animation making, slide design, etc. the requirement is difficult for most of teachers. We can let the competent teachers in charge of specific contents and then promote it after comprehensive consolidation. Other teachers only need to learn to use it. The advantages of the approach are: first, improve the work efficiency; second, high level and good effect; third, the standard is unified.

Reform the traditional teaching method with multimedia technology. Multimedia technology is a kind of modern science and technology with strong totalization. It has widely integrated image processing technology, voice processing technology, video processing and 3D animation technology into the computer. It can be said as comprehensive technical means integrating the voice, image, text, animation and other modern media in one. Its application in the field of vocal music teaching is a major reform and breakthrough of vocal music teaching mode. It provides great convenience for the vocal music teaching, and overcomes the defects existing in traditional teaching and improves the teaching efficiency. At the same time, it also puts forwards a new topic and higher requirements for the workers engaged in vocal music teaching.

## **Summary**

The application of multimedia technology has provided strong impetus to the contemporary vocal music teaching. The vocal music teachers should change their ideas actively and use the multimedia technology to improve the teaching quality. At the same time, teachers should also pay attention to the special nature of the vocal music teaching, use the multimedia technology appropriately, so as to explore a new teaching mode of vocal music teaching.

## References

[1]Shasha Liu. Discussion on the application of multimedia technology in vocal music teaching[J]. Film Review, 2013,22(16):96.

[2]Min Zhou. On the use of multimedia technology to assist the teaching of vocal music[J]. Art criticism, 2012,15,(2): 71-72.

[3]Xiao Sang. The importance of multimedia technology in vocal music teaching[J]. Voice of The Yellow River, 2009(9).

[4]Chunxia Qiao. On the role of multimedia in vocial music teaching[J]. Journal of Hebei North University, 2007(6).

[5]Liya Guo. The use of multimedia technology in the teaching of vocal music[J]. Chinese Music, 2005(2).