Research on the Reform of Vocal Music Teaching by Computer Multimedia Technology

Yunyu Yang1,*
1Zaozhuang University, China, 277100

*Corresponding author e-mail: yangyunyu@uzz.edu.cn

Abstract. The combination of Internet technology and vocal music teaching can stimulate students' systematic vocal music thinking and present the vocal music teaching process more completely. The complete teaching process is the most important part of vocal music teaching. Modern Internet technology and multimedia teaching can completely preserve the teaching process. At the end of the teaching process, teachers can revise the whole teaching process by reproducing the function to further improve the quality of teaching. At the same time, the teacher can use the computer multimedia technology to intuitively show its internal relations to the students, so that the students form a systematic vocal thinking. Since the 1990s, computer technology has been gradually applied in various fields of the society. It organically integrates text, image, sound and video together, with distinct characteristics of interactivity, openness and visualization. Therefore, rational use of computing technology in vocal music teaching can build a good learning environment, enhance students' interest in learning, and create a rich and diverse teaching environment. In addition, the hyperlink text can also be combined with the network to provide rich resources for students' vocal music learning and expand students' knowledge horizon. Encourage students to constantly improve their knowledge system. Therefore, how to rationally use computer technology has become an important issue that needs to be deeply explored in current vocal music teaching.

Keywords: Computer, Multimedia, Technology, Vocal Music Teaching, Reform Research

1. Introduction
Teachers carry out teaching activities by organically combining pictures and texts with film and animation, effectively enhancing the interaction between teaching and learning. It can be seen from the teaching practice that the application of multimedia network technology can get good results in teaching. These works have made positive and beneficial exploration, but without a unified understanding, it is still difficult to form a theoretical knowledge system.
2. The importance of Internet and network multimedia in vocal music teaching

2.1. To help adjust the relationship between teachers and students
Modern education advocates the change of teacher-student relationship from teaching relationship to friend relationship. Teachers and students not only have interaction in teaching thinking and learning thinking, but also in teaching methods and teaching models, and multimedia technology can be used as a bridge and link to achieve interaction and communication. Teachers use computer multimedia technology to assign knowledge points to students, and students use the Internet to learn the knowledge points by themselves. Through the computer multimedia technology to the specific application of vocal music knowledge to compare and analyze, make vocal music skills timely enlightenment. When preparing lessons, teachers should take "preparing students" as the lesson preparation mode of vocal music teaching. Practice has proved that computer technology teaching can provide necessary conditions for cultivating students' creative thinking. First of all, the application of computer technology can increase the amount of information in vocal music teaching. At present, the discipline of vocal music is gradually developing towards refinement, and it is more and more closely connected with other disciplines, and the knowledge involved in it also increases. In this era, traditional vocal music teaching methods have been difficult to meet the needs of vocal music teaching. Reasonable use of computer technology can be video, text, animation and image organically combined together, not only the conversion mode is simplified, flexible, and more information, to a certain extent, shorten the transmission time of knowledge, simplify the vocal music teaching procedures [1].

2.2. To promote the development of students' personality
In the process of modern teaching, teachers should focus on strengthening three links: lesson preparation, class and teaching and research. Modern teaching methods can promote students' all-round development, stimulate and promote students' personalized development. The application of computer multimedia technology can effectively realize the above three links. The traditional vocal music teaching method often consumes much time. In recent years, with the gradual increase in the number of music majors, some schools began to implement the teaching method of multiple students attending classes at the same time, which reduced the teaching content of each teacher. Through the application of multimedia teaching technology, multiple students can receive education at the same time, providing prerequisites for students to listen more, see more and practice more. Secondly, the application of computer technology can also enhance the interaction and vitality of vocal music teaching. Involve many singing vocal music teaching theory, if just rely on the oral interpretation, makes the teaching content boring, and the use of computer technology, can through the video and image elements such as vivid, these knowledge, bring students' visual and auditory stimuli, and stimulate students enthusiasm in vocal music teaching. In addition, the use of computer technology can also set up a variety of interactive links, strengthen the communication between teachers and students. Finally, the application of computer technology is conducive to the realization of resource sharing. With the combination of computer technology and the Internet, cross-regional resource sharing can be realized through a number of network platforms, which breaks the previous restrictions of class teaching mode and time and space, and can encourage vocal music learners from different regions to explore and cooperate together. Teachers can also record the teaching contents into teaching videos and upload them to the network through computer technology for more vocal music learners to watch and learn [2].

The importance of Internet and network multimedia in vocal music teaching is shown in Figure 1.
3. The concrete application of Internet and multimedia technology in vocal music teaching

3.1. Modification of singing status.
Traditional vocal music teaching is not intuitive, so we should make vocal music teaching intuitive when using digital teaching methods. Its approach is: targeted to the students singing paragraph recorded, to help students repeatedly mobilize their singing state. Before entering the teaching of song singing formally, the teacher teaches the students to grasp the correct tone. At this point, we can selectively record the waveform after comparative analysis. Through the analysis of these two visual waveforms, students can find a good sound position, so that students are not easy to lose the correct singing state after comparing the recording. Correction of articulation and articulation. The word "I" in the sentence "My home is on the Songhua River in northeast China" in song "Songhua River" is easy to waste the time of notes and affect the expression of the music. At this time the teacher can be used in the singing often worry about pitch, emotion and other factors, the emphasis on the "dad" word rhyme formation is slow, the effect is not obvious. If the teacher faces the screen and marks the time points with a pencil tool for the students' reference, it will be twice as effective with half the effort. Therefore, they have always been regarded as the key and difficult points in vocal music teaching. Reasonable pragmatic computer technology can help students master the sound principle of singing accurately. First of all, the intuitive and vivid characteristics of computer technology can be used to show the state and influence of each organ in the process of vocal music singing. By using multimedia technology, teachers can scan the anatomical pictures of singing organs and display them on the big screen, which can help students more intuitively understand the physiological responses of singing organs and experience the corresponding changes caused by the differences in the pronunciation of organs in vocal singing. Second, the teacher can also through the computer technology demonstration singing voices, using the method of demonstration show vocal technique, can improve the students' observing ability, thinking ability and attention concentration, teachers use computer technology to make Flash animations can be vivid display of voices, compared with the traditional teaching mode, the teaching method is more simple, clear, easily understood voice principle, the interpretation of the learning needs of different levels, and enhance the efficiency of vocal music teaching [3].

3.2. Cultivation of musical vision
The cultivation of musical vision. In traditional teaching, teachers often explain the work first, then sing it in sections and then compose it. This approach is often unsatisfactory. When adopting digital teaching methods, teachers can first explain the background, creation techniques and emotional expression of the works to students, use courseware to stimulate students' singing emotions, and then ask students to choose a better singing guidance, point out the correction waveform, and help students improve. For example, in Songhua River, "My home is on the Northeast Songhua River", there are two sentences respectively at the beginning of the two phrases. In terms of singing treatment, the second sentence should be slightly more excited than the first sentence, so as to help students grasp the
processing of the music quickly. Using multimedia technology helps to make abstract things concrete. In the process of vocal music teaching, some students' singing is not standard enough, and teachers have repeatedly corrected and failed to improve. By using computer technology properly, students can record the process of their performance through a camera device. At the same time, it can also prompt students to recognize their own problems in the performance process, and then correct them. It should be emphasized that teachers should not only participate in the recording process, but also watch and analyze the recorded content together with students, evaluate and guide students' vocal performance temperament, guide students to recognize their shortcomings in vocal performance temperament in a timely manner, and make reasonable improvement plans [4].

3.3. Rich teaching resources
In addition, the multi-functional music classroom brings a very favorable after-class learning environment, which further expands students' horizons. Students can also ask questions from the world's most authoritative experts and borrow audio materials from foreign libraries or Cambridge University Library. Because students have different professional levels, students with better professional levels conduct deeper practice through the Internet. On the contrary, students with lower professional levels hope to practice what they have just learned in class again. Multimedia technology is only a kind of technical support, but cannot exist as the subject of teaching. The characteristic of multimedia teaching is "auxiliary teaching", that is, auxiliary teaching for teachers, which cannot replace the teaching function of teachers. This principle must be adhered to. In modern educational thought, the promotion of humanistic spirit and excessive reliance on media tools will inevitably hinder the communication between teachers and students and affect students physically and mentally, thus failing to achieve the purpose of education. Therefore, in multimedia teaching, we should stick to the way that teachers take the lead, students take the subject and multimedia take the tool [5].

3.4. For vocal music appreciation feedback teaching
Teachers can make use of the existing software facilities such as audio tape, video tape and VCD to analyze and appreciate students' musical works, so as to better master their singing skills. In short, Internet technology must really promote the application of multimedia technology in vocal music teaching, give full play to the advantages of computer multimedia technology, to achieve the purpose of changing the teaching mode of vocal music. The application of multimedia technology should be clarified at the level of consciousness and concept. The present multimedia technology is not a mature technical means, we should objectively not exaggerate its role or even attempt to replace the original teaching system with it. We should actively explore the effective way of combining multimedia information technology with vocal music teaching to promote the rapid development of modern vocal music teaching. From the teacher aspect, the university teacher team young teacher is few. From learning to fully mastering multimedia teaching, middle-aged teachers inevitably have a lot of problems. The production of audio and video files, computer operation, software learning and other processes require a lot of time and energy. Therefore, in the stage of multimedia teaching, many links may be missing due to the different level of personal mastery. Multimedia teaching can even be simply interpreted as a "report" teaching method of PPT, video and audio, which cannot achieve the ideal classroom effect and delays the class time and course progress [6].

What's more, in a questionnaire about teachers' views on "what role can network and multimedia technology play in vocal music teaching", we get a lot of data, as shown in Table 1 below.
Table 1. Teachers' views on "what role can network and multimedia technology play in vocal music teaching.

| teachers' views on "what role can network and multimedia technology play in vocal music teaching | Reasonable grasp of singing skills | 67.1% |
|                                                                                                  | To enrich teaching resources      | 44.6% |
|                                                                                                  | Guide students to study at a deeper level | 38.5% |
|                                                                                                  | For vocal music appreciation feedback teaching | 29.4% |

4. Conclusion

With the progress of The Times, the continuous development and reform of science and technology, China's economic conditions and material level is constantly improving, multimedia technology has been popular in all fields of the people. In the teaching of vocal music, multimedia technology has been greatly applied and developed, and has gradually replaced the use of traditional vocal music teaching media. In recent years, many scholars in the field of vocal music teaching in China have paid attention to the research on the application of multimedia technology in traditional vocal music teaching and produced some relevant research works and papers. In short, it is very necessary to reform vocal music teaching by using computer multimedia technology, which can help vocal music teaching quickly adapt to the requirements of the new era.

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