

Research on the Interaction between Singing Technique and Singing Emotion in Vocal Music Teaching Based on Digital Technology

Jie Ding¹, Fuqiang Yuan^{2,*}

¹ Jiangxi Science and Technology Normal University, Nanchang, Jiangxi, 330038, China

² Jiangxi University of Traditional Chinese Medicine, Nanchang, Jiangxi, 330004, China

*Corresponding Author

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Abstract: In vocal music teaching, teachers should start from the differences in students' physiological conditions and different perceptions of music, and develop different teaching strategies. With the advent of the information age, digital technology has expanded the popularity of music teaching, and has been loved by the majority of the people and music professionals. Only by adhering to the interactive unity of singing skills and singing emotions can we truly experience the beauty of music. Starting from the digital technology, this paper explains the auxiliary function of vocal music teaching, aiming at improving the singer's technology and exploring a new interactive teaching mode.

1. Introduction

In China's digital multimedia technology-assisted music teaching, it has also made great progress in recent years. All kinds of primary and secondary schools in China have also started to use multimedia technology to assist music classroom teaching. Music appreciation class, music theory class, music composition class and music production class are the most common places to use multimedia teaching. After using multimedia assisted teaching, these courses have achieved good teaching effects [1]. When digital technology is introduced into music teaching, there are also many problems. The most important problem is that we only pay attention to the use of multimedia technology and ignore the use of other advantages of digital technology. Singing emotion has two meanings: one is the singer's own thoughts and feelings, the other is the thoughts and feelings that the work requires to express. It is not easy to achieve the perfect combination of the two. Vocal singing is the second creation of works. In order to achieve a perfect artistic realm and really sing a good work, technology and emotion are indispensable [3].

Interactive teaching is a relatively advanced teaching method at present, which is in line with modern teaching concepts. Teachers adopting interactive teaching in the process of vocal music teaching can greatly improve the efficiency of vocal classroom teaching. Interactive teaching has a good role in promoting students' individual differences and teachers' teaching according to their aptitude. It can give full play to the role of students in vocational vocal music teaching, activate the classroom atmosphere, and improve the enthusiasm of students for singing. How to make our vocal music education level and our social economic and cultural coordinated development, we need a comprehensive combination with today's digital technology, using the advantages of digital technology to assist in various fields of vocal music education [5]. In order to better promote the development of our vocal education level, enhance our vocal level and enhance its international competitiveness. These are what our vocal music education and learners are going to study [6]. Based on this, this paper studies the emotion and technology of singers in the interactive teaching of digital college vocal music.

2. Digital Technology and Vocal Music Teaching

2.1 Digital Technology

Digital technology is a kind of modern technology that integrates multimedia such as sound, text, image, animation, recording and video. It has the advantages of large amount of information, flexible conversion, original reproduction and convenient comparative analysis. Many industries in our country have also begun to use audio to identify human voices. This technology is accomplished by digital processing using digital technology [7]. Theoretical research on vocal art and digital technology can well help to understand vocal art and digital technology, from which many links in vocal learning can be found, and digital technology can be a good help to help learners and educators better Local recognition, the process of vocal art learning. With the continuous deepening of China's reform and opening up in these years, the use of digital technology in vocal music teaching needs to be increased, and the role of technology in assisting vocal music teaching needs to be profoundly changed, and it needs to be initiated and inspired. Give full play to the advantages of digital technology to provide vocal learners with new vocal learning effects, especially through the study of student learning effects, colors, and sound quality, etc., and the study of this highly subjective art learning method, making vocal music The teaching process shows a more intuitive, more scientific, and more interactive and feedback singing effect [8].

2.2 Digital Technology Assists Vocal Learning

The traditional solfeggio in vocal music teaching is mainly divided into three important parts: "hearing training, dictation and solfeggio [9]. Digital technology assisted solfeggio training in vocal music can significantly reduce the learning cost of learners, also can improve the learning interest of learners, and can increase interactivity, so that learners can intuitively find out their problems, accurately correct their problems, and cultivate their hearing and discrimination ability. The use of this technology can comprehensively improve the quality of our country's music, and can be popularized to remote mountain areas and rural areas, with low requirements on the quality of music teachers. Using digital technology to assist teaching can make up for the lack of interest, intuition and interaction in traditional teaching. The most important thing is that it can reduce the error rate of intonation and teaching to the lowest point, which is also a kind of protection for students engaged in music major. If digital technology is introduced into the teaching of solfeggio, this series of problems can be changed immediately, and large errors can be avoided in its training, as well as the visibility and interaction can be enhanced, the interest in its learning process can be enhanced, and problems such as weariness and boring learning can be avoided. The introduction of word technology can ease the limitations of the spread of music art in China and promote the popularity of vocal music art in China. Digital technology can be used in dictation training, and it can be trained through the intuition and interactivity of digital technology. It can not only visually see whether the content written by itself is consistent with the content heard, but also write and sing at the same time, and at the same time, train the familiarity and accuracy of its own roll call. This training mode not only improves the efficiency of teaching; But also can improve the interest of the classroom; Through the dissemination of digital technology, students' self-study ability and self-study means can be effectively improved. Can help save a lot of training costs; Can be targeted for repeated training. These advantages can be fully reflected in dictation training. Through the video recording function of digital technology, the singing learners can record all the postures and states in the course, and then broadcast them to the students themselves through multimedia broadcasting so that they can find out the problems existing in their singing. Moreover, the use of digital technology does not require the purchase of expensive music equipment, nor does it require daily maintenance. It only requires an educator to master basic computer operation skills and basic music knowledge to complete the most basic teaching tasks. As shown in Figure 1.

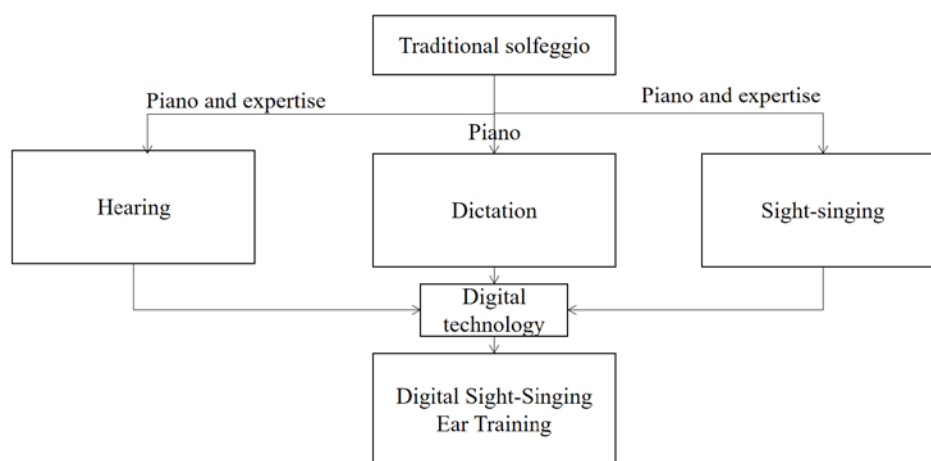


Fig.1 Flow Chart of Solfeggio

3. Singing Technology and Emotional Interaction

3.1 Insist on the Interactive Unity of Singing Technique and Singing Emotion

Vocal music courses have flexible forms and rich contents, and have higher requirements for the cooperation between teachers and students, and pay more attention to the joint participation of teachers and students than other disciplines. From this aspect, interactive teaching plays a prominent and important role in vocal music teaching. The foundation of realizing vocal music interactive teaching is good familiarity between teachers and students. Teachers should first understand students' performance, acceptance, voice condition and singing ability, and also have a deep understanding of students' temperament, hobbies and personality, so as to provide reference for the development of individualized teaching plans. Only through understanding and acceptance can teachers and students form good trust, can they quickly understand each other's meaning in teaching practice and improve teaching efficiency through smooth bilateral interaction. Vocal singing should not only be full of emotion, but also should not be a combination of breathing, vocalization and enunciation. It should also have original and profound understanding and expression of the melody and lyrics of the song. The organic combination of these elements is the interaction between technology and emotion and the unity of knowledge and emotion. The study of vocal music is a step-by-step and solid progress. Adhere to the interactive unity and mutual promotion of singing technology and singing emotion, inspire the enthusiasm of technology learning with emotion mobilization, and make technology better serve the expression of emotion. To grasp the law of learning and use the law of virtuous circle, we can improve ourselves faster and better, and truly realize the beauty of music. Interest is the best teacher to learn. Therefore, vocal teachers can cultivate and exercise their psychological qualities through their hobbies, and then improve their qualities. For example, in the process of vocal music teaching, vocal teachers should give full play to their various teaching methods and means, use their own movements, demeanor, and language to convey emotional information, infect students with emotions, and when students like teachers, this kind of teaching method Naturally, there will be enthusiasm for learning vocal music, and then form a positive learning mood. The cultivation of interactive mental state emphasizes the need for students to experience the actual environment, which is mainly because singers have different mental states when singing in different environments. For example, on the ring stage, the audience is around; in the indoor concert hall, there is a live band accompaniment; on the large stage, the spotlight is around, the audience is numerous; in the quiet and dark environment, etc., the singer's psychological state is different. Vocal music teachers first let students sing in different environments, experience this psychological change, and then carry out targeted interactive training according to different psychological experience of students, only in this way can we correctly guide and cultivate students' psychological quality. Some students can't distinguish the quality of the voice correctly. One sidedly, they think that as long as the voice is loud, as long as

they can sing the high notes, there is resonance, that is, they have mastered the singing skills, so that this part of students can sing the voice in an incorrect way such as squeezing, bumping and rushing. Based on such learning psychology, it is easy for students to form bad singing habits, which is not conducive to long-term development. Therefore, vocal music teachers should introduce this process in time and use scientific vocal music theories to make students realize that only through the organic coordination of breathing, vocalization, articulation, articulation, resonance and other links can vocal music singing be completed correctly. In order to investigate the psychological state of the students of vocal music performance in Colleges and universities in China, the interview method and field investigation method are used to investigate and interview the 50 students of vocal music performance in Colleges and universities. The survey results are shown in Table 1.

Table 1 Questionnaire Survey Of Vocal Performance Students in Universities

Problem	Select		
Have you heard of singing psychology	Yes(14%)	NO(57%)	Unclear(30%)
How to deal with negative emotions while singing	Self-regulation(11%)	Help from others(35%)	I don't know how to adjust(28%)
Do you often feel stressed before singing?	Yes(55%)	No(6%)	A little(21%)

3.2 The Effect of Digital Technology on Vocal Music Interactive Teaching

Interactive teaching can effectively improve the initiative and enthusiasm of students' learning, help teachers grasp the ideas and doubts of students, help to create a good and warm classroom atmosphere, so as to cultivate students' subject consciousness, promote the development of students' ability and establish a good relationship between teachers and students. It takes a long time for a singer with good performance ability to exercise. It takes years or even decades for traditional vocal performance learning to be able to exercise. Digital technology to assist vocal performance learning, can quickly improve the efficiency of learning, make up for the lack of vocal performance learning: intuitive, scientific, interactive and a series of problems. The introduction of digital technology can help to overcome the lack of contagion and interactivity, and can make learners have an immersive feeling. In this, recording technology will be used to record the singer's voice and compare it with musicians, because each musician has his own processing method and his own emotional expression. Digitalization can enhance learners' self-confidence, overcome the fear of the stage, and help learners adapt to the stage faster. It quickly improved the quality and efficiency of teaching, made the stage training in vocal music more entertaining and intuitive, saved learning costs and the potential for self-study, and it could well address the phenomena in Table 1 above.

4. Conclusion

Vocal music course is a course of performing arts. Students constantly improve their singing performance ability, improve singing skills and master theoretical knowledge in teaching activities, which is also the common goal of teachers and students. Vocal music teaching has strong pertinence. Under the same teaching conditions, students' individual differences will get different teaching effects, which requires teachers to strengthen the interaction in vocal music teaching. Digital technology-assisted vocal music teaching is a brand-new development path following China's scientific progress. Its technological advantages can provide vocal music learners with a brand-new learning method of vocal music art, which has a relatively broad use space and application prospect in the field of vocal music education in China. Make full use of the results of modern scientific and technological means, give full play to the leading role of its teaching methods, make students' learning more concrete, scientific, diversified, and convenient, thereby greatly improving the self-learning of vocal learners in China. Abilities and learning interests.

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