Research on Music Vocal Music Teaching Model Based on Computer Platform

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Abstract: Computer music teaching method is a new attempt of music teaching. It introduces multimedia computer technology into music teaching. Computer network is the basis of many follow-up courses of computer specialty. It is very important for students of this specialty to understand and master computer network knowledge and have corresponding application ability. Integrating computer music technology into modern music teaching mode is very helpful to stimulate students'creativity and enthusiasm for music. The combination of music teaching in colleges and universities with computer music technology and the reform of practical application and operation of auxiliary music theory are qualitative changes to the deficiencies in the traditional music teaching mode. The premise of realizing the technical reform of music teaching mode in colleges and universities is to construct a multimedia computer music system, which is applied to music classroom teaching, lesson preparation and extracurricular music activities in colleges and universities. Based on the computer platform, this paper explores the teaching methods and modes of modern music and vocal music.

1. Introduction

It is rather inefficient for colleges and universities to use traditional teaching mode to teach music courses, which has seriously stifled the interest and enthusiasm of college students in learning music courses. Especially for students majoring in music editing, it is undoubtedly an erosion of creative imagination [1]. Computer music teaching method is a new attempt in music teaching. It introduces multimedia computer technology into music teaching. Computer music is a new comprehensive discipline integrating computer technology and traditional music theory. With the rapid development of computer software and hardware technology, computer music has penetrated into all aspects of traditional music [2]. Computer network is the foundation of many follow-up courses for computer major. It is very important for students of this major to understand and master computer network knowledge and have corresponding application ability. At present, computer music technology has been applied to the music education of colleges and universities in China as a new type of teaching method. Although it has not been popularized, it has already demonstrated its magical power in music teaching as a new teaching method. Teachers should help students transform from passive acceptance learning to active exploratory learning in classroom teaching, laying the foundation for lifelong learning and lifelong development [4]. In the field of music education in higher education, the traditional education and teaching model has long been solidified. Practice has shown that under the impact of the development of computer music technology, this system has now been affected to varying degrees [5]. Although it has emerged as an independent professional course in many music colleges or is envisioned in some colleges and universities, it is obviously a long way to go [6]. The integration of computer music technology into the modern music teaching mode is very helpful to stimulate students' creativity and enthusiasm for music. The premise of realizing the technical reform of college music teaching mode is to construct a multimedia computer music system, which is applied to music classroom teaching, preparation lesson and extracurricular music activities in colleges and universities [7]. At present, there are some problems in specialized courses, such as the disjunction between teaching content and practice, the singleness of teachers' teaching methods, and poor classroom interaction, which lead to students' indifference to specialized courses [8]. Computer music teaching can handle not only numbers and characters, but also graphics, images, sounds and even 2D and 3D animations. We should establish

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a people-oriented teaching concept, take students as the main body, pay attention to students' interests, needs and growth, and be close to students' real life.

2. Exploration of Music Teaching Model Based on Computer Music Teaching System

As far as the traditional teaching methods are concerned, the harmony courses in college music teaching in China are relatively single and old. Students can only memorize notes and melody through the teacher's piano demonstration. Such teaching methods are difficult to express the integrated color atmosphere inherent in harmony. The popularization and promotion of computer music teaching methods contribute to the improvement of the use of objective resources of college music and the use of subjective resources, and has a strong influence on the traditional music teaching mode inherent in colleges and universities. The modern constructivist teaching theory holds that students are gradually constructing knowledge about the external world in the process of interacting with the surrounding environment, so that their knowledge structure can be developed [9]. People-oriented teaching must pay attention to the needs of students. Only by combining classroom teaching with their needs can they be motivated to learn.

Using computer music teaching methods to reform the traditional music teaching mode in colleges and universities can not only effectively use teaching practice, but also greatly improve students' interest in learning, so that students can more intuitively feel and experience the infinite development space of music and better master the knowledge learned. In music teaching, students' social development is mainly realized through communication and cooperation. Communication and cooperation between students and students and between students and teachers are beneficial to students' social development. The interactive relationship between students' social development is shown in Figure 1.

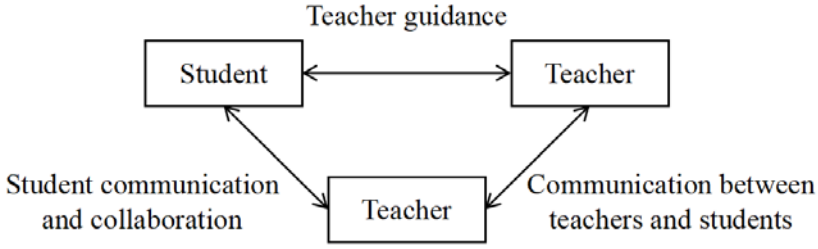

Fig.1. Student social development interaction

3. The Application of Computer Music Teaching Means

3.1. Enhancing interaction in teaching process

Only by building a harmonious new relationship between teachers and students can students'initiative and enthusiasm be fully mobilized, thus promoting the mutual development of teaching. Traditional music teaching mode and training methods have been deeply rooted. It is difficult to integrate some new teaching and training methods. Using music production software, we can make full use of the sampled sound source to explain the playing methods of different instruments into simple melodies. When students practice, we can hear the sound effects of real-time instrumentation under different attempts [10]. Individual uniqueness is exclusive in itself, but it also has internal communication, which becomes a resource that teachers can use. Under the traditional teaching mode, students can only get the feeling of the overall effect of the music, and the details are often neglected. Using computer music technology, teachers can make a comprehensive analysis of the style and characteristics of the music, and display the harmony, structure, rhythm and melody of the music in three dimensions. The main goal of quality education is to improve students' basic quality in an all-round way according to the actual needs of social development and human development, so as to purify students' hearts, cultivate their sentiments and fully develop their potential. The average fitness function of the system tends to be stable, and it has little significance to optimize the music after iteration, and the number of children at this time is

also relatively greatly reduced.

No matter whether the notes go down or up, as long as a series of notes with the same direction appear continuously, an upward or downward melody line can be generated, and we think that the evaluation value is higher. The assignment of melody weights is shown in Table 1. The relationship between melody weight and melody trend is shown in Figure 2.

Table 1 Melody weight data

The same degree of melody	Melody weight
4	0.85
6	0.75
8	0.65
10	0.55
12	0.45
＞12	0.35

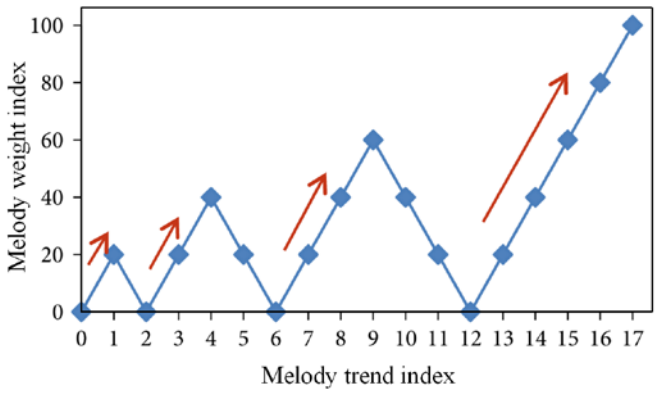

Fig.2. Relationship between melody weight and melody progression

3.2. Making full use of modern assistant teaching means

In today's classroom, interactive learning between teachers and students is still very rare, which is mainly caused by students'learning habits and teachers' teaching habits. Integrating computer music teaching means into Solfeggio and ear training teaching enriches the traditional auditory training, improves the traditional teaching mode in a single sound state, and effectively enriches the traditional auditory training. Professional audio interface is indispensable as the hardware of audio data exchange inside and outside the computer. As for sound sources, there are at least professional hardware sound sources or synthesizers. Soft sound sources can also be used to achieve a fully software-based sound source environment system. After the actual input of music score is completed, music score audio-visual can be carried out, and polyphonic harmony teaching exercises can be carried out. The basic equipment for teaching should include computers, orchestral sound sources and keyboards. Students can make use of these devices to create and make some music samples. This creative process is very helpful to improve students' creative level. Students must carefully preview the lesson and deeply understand the content of the course before they can speak it well. This will not only enable students to firmly grasp the knowledge they have learned, but also enhance the interest of the course and enliven the classroom atmosphere.

4. Conclusion

In today's era of intensive information and rapid development of knowledge economy, we should continuously improve our teaching methods and use live, new and special means to combine teaching with pleasure. As far as the application and reform of computer music technology is concerned, there are still many areas in which the music teaching mode in colleges and universities can be deeply reformed, and there is a vast room for development. With the progress of science and technology, the establishment of campus computer network system has become a piece of cake

technically. Its establishment can make the music information in the school be shared to the greatest extent. Integrating computer music teaching methods with traditional music teaching modes in colleges and universities can improve teaching efficiency and provide students with more abundant knowledge and information in a limited time. The establishment of relevant music websites can make the music information of colleges and universities spread to the greatest extent, and can master the extremely rich music resources by communicating with other music websites. It is more intuitive for students to learn music and feel music by using new technology to mobilize students'enthusiasm, achieve the unity of theory and sense organs, and exaggerate the teaching space to the greatest extent. No matter how advanced and innovative the technology is, its essence lies in deepening the concept of music teaching in Colleges and universities, improving teaching efficiency and students'initiative and creativity in music learning.

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