Application of Multimedia Technology in Vocal Music Digital Teaching Reform

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Abstract. With the development of Internet information technology, people’s learning methods and learning cognition have undergone tremendous changes, which have brought new challenges to college education. The university computer foundation is a compulsory course, which aims to increase students' interest in computer learning and promote students' thinking ability through computer teaching. Multimedia teaching, as a relatively new teaching mode, adopts a variety of display modes such as video, pictures and sound, which can help to enhance students' interest in learning, display teaching content vividly and improve students' learning efficiency. The combination of multimedia technology and computer teaching can better realize the reform of digital teaching of vocal music.

Keywords: Multimedia Technology, Vocal Music Digitization, Teaching Reform

1. Introduction

The form of vocal art direction originated in foreign countries and its meaning is far more than accompaniment for the singer, but it needs to form an organic whole with the singer through listening and feeling. Good vocal art guidance can fully stimulate the singer's emotions, make it play the best singing level, make the singer feel comfortable in the process of singing and complete the singing performance smoothly. Therefore, the significance of using computer multimedia technology is not only to assist the singer to complete the performance, but also to enable the singer to discover their own shortcomings and put forward some reasonable requirements for the singer, so that the vocal works can be perfect Interpret it. In order to be able to cultivate vocal performance talents in an all-round way, they can obtain the organic integration of vocal music, body, performance, emotion and multi-angle display of musical talent. Teachers need to have certain arrangements in the actual teaching process[1]. This is not limited to training students' singing skills, but to enable students to understand the true meaning of singing, so that students can organically combine singing and performance and improve the multi-angle music literacy of music students. It enables students to reach
the artistic level of "sound and emotion" in the process of performance. So to achieve this level and height, this requires the strict requirements of teachers in the daily training of students[2]. Some students think that they are talented and smart and have a good voice, so they do whatever they want in actual training. In fact, this is wrong. This is a relatively one-sided understanding of vocal performance. Every student needs scientific training and earnest vocal exercises in order to become an elite in this industry, so teachers are also responsible for helping students recognize this problem and must cultivate the artistry of students from all angles. Today, we do not discuss vocal performance from the perspective of well-known training and practice, but from some new perspectives, to discuss the true meaning of vocal performance. We will discuss this issue from the following aspects.

2. Computer multimedia technology analysis

Computer multimedia technology consists of software systems and hardware systems. Therefore, computers are the basis for the application of this technology[3]. The hardware system is composed of the computer's external equipment control interface card, external equipment and main configuration; the software system is composed of the multimedia operating system, drive system, application software, data processing software, application software and authoring tools. Therefore, computer equipment is the basis for ensuring the orderly application of computer multimedia technology. At the same time, the technology has been widely used in communications, education and digital libraries. The architecture of computer multimedia technology is shown in the figure.

![Figure 1. Architecture of computer multimedia technology.](image)

2.1. Use of communication

With the rapid development of the information age, society has formed a general trend of "cooperation and win-win". There has also been more frequent communication between people and between people and the media. The complementary cooperation model has also formed its own characteristics in the social division of labor. The application of computer multimedia technology has played an important communication role in social cooperation and at the same time, it has well integrated information such as pictures, audio and video.

2.2. Application in teaching
This technology is the most widely used in teaching and its appearance has changed the traditional teaching mode to a great extent, making classroom teaching more vivid and specific. Through the processing of computer multimedia technology, teaching video, audio, text and other courseware can be enriched in content; especially for some abstract content, multimedia courseware can replace blackboard writing, which not only improves classroom efficiency, but also reduces the work of teachers. The amount is doubled, so the teacher can spend more time and energy on teaching. At the same time, the technology is also used in the assessment of teachers' comprehensive abilities.

2.3. Application of Digital Library

With the rapid development of technology, digital libraries have also ushered in a rapid development stage. The application of computer multimedia technology makes the processing of traditional journals more high-end. It can process books into graphics, make digital books, publish electronic journals and digital newspapers and digital journals are common in life.

3. Analysis of digital teaching of vocal music

3.1. Abundant information sources and expand knowledge

Traditional classroom teaching is mainly based on textbooks and texts, which are boring and monotonous and the use of computer multimedia teaching methods can obtain teaching resources on the Internet through the Internet[4]. There are many channels and many information resources and students can expand their own The level of knowledge is currently based on teaching materials in computer teaching. Some students may lose their interest in learning because of the simplicity of some teaching materials. Therefore, students can find learning resources online and expand according to the content of the teaching materials.

3.2. Promote the reform of teaching mode

The use of multimedia teaching methods can also introduce situational teaching and case-based modern teaching methods in the classroom teaching process, which plays an important role in improving student participation and cultivating students' independent thinking ability and the introduction of autonomous teaching methods. And the application can also promote the reform of the teaching model, thereby exploring the teaching model more conducive to the development of students.

3.3. Strengthen the ability to control the teaching effect

In addition to assisting teachers to carry out teaching activities, computer multimedia technology can also use screens for monitoring and counseling demonstrations[5]. Teachers can fully observe students' performance in the learning process and timely understand students' knowledge points; at the same time, teachers also Be able to record your own teaching activities in order to summarize the deficiencies in your teaching process. Therefore, it plays an important role in strengthening the ability to control teaching effects.

4. Vocal music analysis of computer multimedia technology

4.1. Bidirectional
In addition to requiring teachers to be able to actively change roles and adjust their thinking, computer multimedia teaching also requires the organic cooperation of learners. Compared with the one-way indoctrination of knowledge in traditional classrooms, computer multimedia teaching requires both teachers and students to cooperate with each other and two-way computer multimedia. What problems are encountered in vocal learning and feedback to teachers in computer multimedia in a timely manner, teachers will flexibly adjust the next teaching rhythm based on these feedback information and finally achieve further optimization and promotion of vocal teaching. In order to achieve two-way computer multimedia of knowledge and information, teachers and students are also required to eliminate barriers[6]. For example, when appreciating vocal works, learners are encouraged to analyze the basic elements such as content and emotions and then teachers make evaluations and summaries, so that vocal learning will achieve ideal results. The multi-terminal diagram of computer multimedia is as follows.

![Figure 2. Multi-terminal diagram of computer multimedia.](image)

4.2. Dynamics

The use of computer multimedia teaching, although in principle requires to reflect the learner's subjectivity, but the role of teachers can not be ignored. Teachers should combine the previous experience and skills of vocal music teaching to make dynamic adjustments to the classroom rhythm, content and atmosphere to ensure the suitability of the learning environment. For example, when singing a certain work, the student has not mastered the essential skills. At this time, the teacher can choose a similar work to replace and the student may be able to sing correctly. In addition, you can also play some famous singers singing and performing audio, let students close their eyes, listen carefully and inspire inspiration in this way. This kind of dynamic computer multimedia teaching can often achieve unexpected teaching gains.

4.3. Differences

Before entering the art school, although the students have been exposed to vocal learning, the foundations are different and the personal perceptions are also very different. Therefore, in the teaching of vocal music, teachers should pay attention to the differences between different students.
and avoid "one size fits all", so that each learner can better find the direction of progress and the motivation for learning. How can we get a deeper and comprehensive understanding of the basic situation of students' majors? It is a test for vocal teachers. Teachers need to understand the specific situation of students and the objective differences between them through computer multimedia on both sides and then design different plans and goals, adopt different levels of teaching and teach according to their aptitudes.

5. Conclusion

Teachers should cultivate students' innovative thinking, let students put forward more innovative points of view. In the process of guiding students' learning, they should not use modeled and fixed answers to determine students' performance. They should use open eyes and thinking to make students objective evaluation of. Reflecting the change from emphasizing knowledge to emphasizing ability, students should be evaluated from the operational height of overall aesthetic ability.

References

[1] Dulce M. Morales, Mariya A. Kazakova, Stefan Dieckhöfer, Alexander G. Selyutin, Georgiy V. Golubtsov, Wolfgang Schuhmann, Justus Masa. Trimetallic Mn - Fe - Ni Oxide Nanoparticles Supported on Multi-Walled Carbon Nanotubes as High-Performance Bifunctional ORR/OER Electrocatalyst in Alkaline Media[J]. Advanced Functional Materials, 2020, 30(6).

[2] Understanding Public Attitudes Toward Researchers Using Social Media for Detecting and Monitoring Adverse Events Data: Multi Methods Study[J]. Journal of Medical Internet Research, 2019, 21(8).

[3] Zheng Xu, Yunhuai Liu. Special issue on “Multi-modal information learning and analytics of cross-media big data” [J]. Expert Systems, 2019, 36(5).

[4] Gisu Heo, Ramalingam Manivannan, Hyorim Kim, Myeong Jin Kim, Kyeong Su Min, Young-A Son. Developing an RGB-Arduino device for the multi-color recognition, detection and determination of Fe(III), Co(II), Hg(II) and Sn(II) in aqueous media by a terpyridine moiety[J]. Sensors & Actuators: B. Chemical, 2019, 297.

[5] Zhen Song, Qi You Zhou. Micro-scale granite permeability estimation based on digital image analysis[J]. Journal of Petroleum Science and Engineering, 2019, 180.

[6] Golder Su, Scantlebury Arabella, Christmas Helen. Understanding Public Attitudes Toward Researchers Using Social Media for Detecting and Monitoring Adverse Events Data: Multi Methods Study.[J]. Journal of medical Internet research, 2019, 21(8).