

Reform and Development of College Music Teaching under the Background of Big Data

Jie Xu*

Jeonbuk National University, Jeonju 54896, the Republic of Korea

*Corresponding author: Jie Xu, xj950326xj@gmail.com

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Abstract: With the progress of the times, big data has gradually influenced the daily lives of people and is gradually changing the ways people learn. Big data plays a role in the field of college music education, changing college music education methods significantly. The use of big data technology can make teaching resources more abundant and teaching methods more diversified, which improves the efficiency and quality of college music education. The application of big data has long been the norm in the field of education. As an innovative educational means, colleges should make full use of the advantages of big data to promote college music education and to cultivate the growth of students.

Keywords: Big data; Universities and colleges; Music teaching

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1. Introduction

The application of big data technology that uses and analyzes a large amount of information has been promoted in the reform and development of education in the country. Its advantage lies in that it can quickly and efficiently manage data. With the continuous progress of network technology and the improvement of social and economic levels, domestic well-known Internet companies have launched all kinds of online audio service products, such as Tencent's QQ Music, Alibaba's Kugou Music, and short video apps such as Kuaishou video. At the same time, many similar products and service providers have emerged abroad, such as YouTube, Instagram, and Twitter, which provide the public with a rich online listening experience, but also intangibly influence people's opinions, changing traditional education cognition and living habits. Therefore, there are reasons to believe that in the future, music teaching in colleges and universities will be more efficient based on the connection of big data.

2. Characteristics analysis of big data

The development and transformation of information technology constitute big data, which is a concept describing a large amount of information in today's society. With the increasing popularity of digital life, the

era of big data has gradually become the focus of people's attention and triggered heated discussions. Big data has the following four main characteristics. First, all its content is presented and operated in numerical form. Second, the network storage system can transfer a large amount of data digitally, so that resources such as audio and video databases can be built and added, shared, or updated in the function ^[1]. Third, big data can effectively perform a full range of information analysis work, replacing the traditional sample survey method. Fourth, the use of big data can create more intelligent tools and services by uncovering many potential relationships. Similarly, education based on the idea of big data should also be seen as an innovation process that extracts useful elements from massive amounts of information and transforms them into supporting means for educational services.

3. The necessity of music teaching reform in the era of big data

3.1. To meet the requirements of the quality of talent training in the 21st century

The essence of music education is artistic and aesthetic enlightenment. At the same time, it also brings a pleasant learning experience, rather than just technical training. However, it is a pity that today's music education is still in the traditional teaching concepts and strategies. If teachers remain rigorous in teaching, the results may not be significant. Young people today are accustoming themselves to the status quo of a fast-moving consumer culture ^[2]. Therefore, facing the demand for the quality of talent cultivation in the 21st century, teachers need to start from the core and promote the reform of music teaching based on quality education. Due to the influence of college entrance examination results, physical education, art, and other subjects called "minor subjects" are often ignored for a long time, resulting in music classes in many schools being outdated. For example, the singing class always follows a fixed step: first, beat the time, then sing the notes, then read the lyrics, and finally put the lyrics and melody together. This stereotypical approach leads students to imitate others, and there is even a spoon-feeding style of teaching in which the teacher says a line, the student repeats it and eventually loses track of what he or she is singing. In addition, the students' vocal performance is often too exaggerated to accurately grasp the beautiful melody of the song, making it seem that their voices are out of tune. Students should play a central role in music learning, and they should be actively involved in the process of teaching and learning rather than just passively receiving information. Therefore, teachers must properly adjust the traditional music teaching model so that teachers are good at imparting knowledge and students enjoy the learning process, to achieve quality teaching results.

3.2. The need for in-depth education reform

With the profound reform of China's education, the way of teaching music in colleges and universities is also gradually updated and optimized. According to the requirements of the new teaching program, college music teachers have actively tried to change the education and teaching system and achieved certain results. However, they still face a series of challenges. The first issue is the lack of a clear educational purpose setting, the lack of students' emotional tendencies and social values, and the defects in the improvement of aesthetic quality ^[3]. Another is that the existing teaching strategy is too traditional and boring, as many professors still use the traditional spoon-feeding teaching method, making the audience passively receive information about the sound. As an art form, teachers should focus their research on how to guide people to perceive, experience, explore, and innovate, not just on theoretical cognitive understanding or logical analysis. In addition, the assessment criteria need to be further improved to meet the changing trend of current needs. For a long time, under the influence of the examination system, the music discipline often overemphasizes the mastery of knowledge and does not pay attention to the importance of practical skills, which leads to the loss of the fun of learning and

even wears down the enthusiasm of students to further their studies in this field. Therefore, it is important to establish a new model of music teaching in colleges and universities.

3.3. The need to solve the problems of the college music classroom

First, neither parents, educators nor campus administrators pay enough attention to the importance of music class, they think that this course is a waste of precious time and resources, and they rather the students spend their time studying other subjects such as math. This view not only penetrates deeply into the minds of students but also makes them despise this subject in their hearts. Second, due to the age differences and personal preferences between professors and learners, it is impossible to innovate and improve according to their needs, which makes the classroom atmosphere boring and difficult to stimulate students' enthusiasm ^[4]. In addition, the assessment methods for music subjects are relatively loose and not directly related to academic performance ranking, so many students do not pay attention to such subjects, and even ignore the spiritual pleasure and sense of life balance it may bring. Music education in colleges and universities is faced with many challenges such as a shortage of professional music teachers and many music professionals think that this profession has no future at all, and choose to give up. Moreover, existing music teachers have little knowledge of basic music theory and limited appreciation of music, which makes it difficult for them to provide students with a vivid musical experience. All in all, there are still many challenges in music education and teaching in colleges and universities, which will undoubtedly hinder the cultivation of excellent music students and limit their full development potential ^[5].

4. The reform path of college music teaching under the background of big data

4.1. Change the teaching concept

This era of big data has ushered in the peak of information popularization, which is an unprecedented conceptual innovation. With the changes of the times, learning methods are constantly updated. At the same time, with the diversified development trend of education, the requirements for art courses in colleges and universities are also increasing. Therefore, art educators in colleges and universities need to keep up with the changing pace of the trend, abandon the traditional educational thinking model, actively adapt to the new environment changes, and use the latest data analysis tools to optimize the teaching content and methods, to better meet the needs of contemporary college students, fill the gaps in the existing textbooks, and effectively enhance their skill level ^[6]. This new method of information technology can not only provide more sources of high-quality materials for teaching but also allow students to enjoy a more convenient learning process. Through the combination of big data and teaching, it can promote the reform of college music teaching in an all-round way and promote the overall quality of students. In this way, they can pay more attention to the latest development trends in the music industry and the new demand for talents, to enhance their competitiveness in society after graduation and cultivate excellent comprehensive talents for the music field.

4.2. Enrich the teaching content

College music courses cover various elements, such as popular, folk, classic, and other styles. Teachers need to have comprehensive professional knowledge to teach this music, which is a challenge for music teachers. In addition, music classes involve many kinds of musical instruments, such as erhu, saxophone, and piano, while schools usually only have one or a few kinds of instruments ^[7]. The use of big data technology can meet various teaching requirements in college music classes, increase the material of music education, and enhance its diversity. It can also break through geographical boundaries and implement long-distance education. For

example, when explaining Western musical instruments, overseas universities can be connected and knowledge can be imparted through online live broadcasts, to have a deeper understanding of the characteristics of Western musical instruments and enjoy the live performance of Western music. For another example, when talking about pop music class, a well-known pop musician can give the class to the students, and use video to meet the students' preferences and improve their pop music literacy. This kind of big data application method makes music teaching in colleges and universities more fulfilling. In addition, because there is a gap in the basic skills of music students, it is difficult to ensure the teaching results without classifying them. Restricted by traditional classrooms and teaching models, it is impossible to provide a personalized learning experience for each student. Because general education and specialized education deal with different groups of people, the focus of teaching will also change. All these problems need to be addressed in the process of change and innovation in teaching ^[8-10].

4.3. Pay attention to the integration with teaching practice

With the popularization of big data technology, some educators' over-reliance on online education has led them to rely too much on the Internet for music course information. They believe that in this digital age, rich teaching materials online can provide students with a more comprehensive learning experience while ignoring the importance of practical lessons ^[11-13]. However, there is a lot of theoretical content in online music learning, and teaching only in this way may weaken students' hands-on ability. Therefore, this approach alone is not enough, and it must be combined with practice to give full play to the role of big data. Teachers should encourage students to participate in various musical activities, such as music clubs or performances, to guide them into society and experience the unique appeal of music.

4.4. Accurate positioning of teaching

The core task of a teacher is to teach all students. When conducting music instruction, the teaching behavior should be organized with sound strategies. Music subjects in colleges and universities can be treated as either mandatory or optional. Therefore, music teachers need to be precisely positioned according to the actual needs of students to support their subject development more effectively. In formulating teaching plans and objectives, appropriate standards should be set and used to guide students to a deeper understanding of music ^[14].

The main task of colleges and universities is to send outstanding professionals to society to enhance their practical ability and improve their musical cultivation and skills. Therefore, in the context of the era of big data, colleges must continue to improve and optimize the way of music education, while ensuring that music teachers can effectively perform the relevant duties and clear their teaching objectives to implement music education more accurately. However, at present, music courses in colleges and universities still face many challenges, such as failure to accurately set teaching goals, some schools not fully paying attention to the value of music education, lack of comprehensive and high-quality music teacher teams, and insufficient level of music theory of individual teachers may affect the expected learning outcomes, which is unfavorable to the development of music education in colleges and universities ^[15]. Therefore, to achieve the ideal effect of music education, music teachers in colleges and universities should strive to improve their professional standards, so that they can formulate teaching strategies more accurately. With the help of big data technology, colleges can provide college students with rich music materials, to further improve and deepen the method of music teaching, expand the space of college learning, increase the content of textbooks, and organize more specific music teaching projects. In addition, teachers can also guide students to study music more comprehensively with the help of network tools, to improve the efficiency and quality of talent cultivation and lay a solid foundation for future music education.

5. Conclusion

To sum up, the development of society and technology has ushered in the era of big data. In this context, the advantages of big data can be fully utilized to improve music education and the training of artistic talents, effectively improve the shortcomings of traditional teaching methods, and better meet the current educational needs. The music curriculum of higher education should keep up with the pace of the era of big data, gradually apply its resources and technology to enhance music teaching, and continue to provide fresh impetus for it, to promote the expansion and improvement of college music curriculum.

Disclosure statement

The author declares no conflict of interest.

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