Research on Network Teaching of Music Major Based on Artificial Intelligence Technology

Du Lei\textsuperscript{1,*}

\textsuperscript{1}Vocal Music Department, Xi'an Conservatory of Music Department, 710061

*Corresponding author e-mail: 860582380@qq.com

Abstract. With the penetration of artificial intelligence technology in the field of music, the demand and training of music professionals have changed. The mode of network teaching also occupies an important position in the training of music major. Based on the background of artificial intelligence technology, this paper explores the teaching mode of music major, and puts forward the reform and innovation strategy of music professional network teaching mode under the background of artificial intelligence technology. This paper starts with the introduction of artificial intelligence and its application in the field of music teaching, analyzes the influence of network teaching mode of Music Major under the background of artificial intelligence, and puts forward the Talent Cultivation Countermeasures of Music Major under the network teaching mode. This paper studies the status quo of music teaching in conservatory of music, characteristics of network teaching mode and platform construction. With the continuous enrichment of music professional network teaching resources, this new teaching mode can reflect its advantages and efficiency advantages. Starting from the influence of artificial intelligence technology on Music Majors at present, this paper analyzes that the best teaching effect can be obtained by using multimedia network teaching in teaching, and puts forward the practical application method of artificial intelligence technology in music professional network teaching under modern network conditions. The experimental results show that we should constantly improve the function research of the network teaching platform of Music Major Based on artificial intelligence technology, and carry out more optimized settings combined with music professional courses, so that teachers and students can obtain the best use effect, and ensure the smooth progress of music professional network teaching mode.

Keywords: Artificial Intelligence Technology, Music Major, Online Teaching, Online New Media
1. Introduction

In recent years, artificial intelligence (AI) has developed rapidly and has been widely used in various fields. Under the influence of this year's epidemic situation, colleges and universities all over the country have promulgated the policy of delaying the start of school. Under the call of the Ministry of education of the People’s Republic of China, students' learning progress can be smoothly carried out. Colleges and universities all over the country use artificial intelligence to carry out network distance education and teach students online. Artificial intelligence brings convenience to people, but also means that artificial intelligence has a certain degree of influence on the teaching mode of music major in Colleges and universities [1]. First of all, the positive impact, artificial intelligence technology can replace low skilled work, save labor costs, make people have more energy to invest in complex work, and bring greater economic benefits to the society [2]. Just as in this epidemic situation, college students are distributed all over the country. Network teaching through artificial intelligence not only overcomes the problem of distance, but also some public courses can be timely educated on the Internet according to the 1:1 reducibility, so that students can experience the famous teachers' lecture hall at home. Nowadays, the development of China's higher education has gradually changed from the mode of scale expansion to the mode of quality improvement. Under the influence of artificial intelligence technology, advanced computer technology is more closely integrated with the music industry, especially in the education, creation, performance, appreciation and musical instrument production of music majors [3]. With the rapid development of artificial intelligence technology in the field of music, we have to re-establish the talent training mode of music major, strengthen the quality of talent training, improve the employment rate and employability of music graduates, and provide new ideas and directions for the training mode of music professionals [4].

On the network teaching platform, the platform can provide many teaching videos to choose from. As far as music is concerned, it basically covers most of the course contents from theoretical discipline to skill discipline [5]. For example: music theory, listening, singing and ear training, piano foundation, music history, music appreciation, etc. In these teaching videos, most of them are explained by music teachers with rich experience, good language expression and strong professional skills. Through the vivid introduction of these teachers, students can be guided to actively participate in learning [6]. In the network teaching of music course, we can use these excellent teaching videos to teach, so that the teaching effect can be better improved. For some schools with insufficient teaching staff, they can also carry out teaching through the network teaching platform with the help of excellent music teaching video resources, so as to ensure the balanced development of music courses and improve students' music literacy better [7]. But the music specialty itself has certain particularity, such as vocal music, musical instruments and other majors need teachers to carry out demonstration teaching. Although online education can see and hear students' actions and voices through remote video, there are occasional action delays and voice distortion. Compared with online teaching, online courses lack some intuitive feelings.

Based on the rapid development of artificial intelligence technology in the current new era, building an artificial intelligence music professional online teaching APP in colleges and universities will greatly increase students' interest and enthusiasm in learning music, and realize the teaching ideas of new era, new concepts and new technologies Provide some exploration, research and thinking [8]. With the continuous development of artificial intelligence technology, electronic musical instruments
are becoming more and more intelligent. Electronic keyboard instruments can not only store more timbres but also have a huge improvement in the quality of timbres. Students can arrange different timbres and melodies according to their needs. Make it appear in a fixed order and frequency, students can create and share more flexibly in the classroom, it improves students' learning enthusiasm and participation, stimulates students' interest in learning, and cultivates students' music creation ability[9]. Educational artificial intelligence is a new research field formed by the intersection of artificial intelligence technology and learning science. Through artificial intelligence technology, the network teaching environment of music majors is flexible and personalized[10].

2. Method

2.1. Based on artificial intelligence technology, the introduction of network teaching mode

In order to enable the network teaching model to better enter the teaching model of college music majors, a complete teaching system is needed to ensure the smooth development of teaching. The current teaching mode of music majors in colleges and universities lacks a complete network teaching system. Some classrooms do use network teaching, but the implementation effect is relatively poor. The reason is not the network teaching itself, but the lack of a systematic teaching system in the school, which makes teachers lack the direction of teaching, so the performance in the process of implementation is also inadequate.

In the current development of artificial intelligence technology, the introduction of network teaching mode is a new attempt for music majors in colleges and universities, and colleges and universities need to improve hardware support and improve teaching ability. The network teaching model supported by artificial intelligence technology can enrich the teaching expression of the music major, and introduce network teaching into the teaching model of the music major. Colleges and universities can strengthen the communication with music teaching websites through national policy support to improve the school's hardware support, Through the training investment to improve the teacher's ability, so as to effectively implement the music professional teaching mode network teaching.

2.2. The construction of music professional online teaching courses that expand artificial intelligence technology

Expanding the construction method of music professional online teaching courses with artificial intelligence technology. At present, most of the online courses of universities and educational institutions are based on the combination of Web pages and corresponding APPs. Although they have been accepted by most teachers and students, However, for some teachers who are not familiar with the operation of mobile phones and computer software, they choose to download various clients in the early stage, and how to construct lessons, how to broadcast live, and how to conduct online examinations in the teaching process are all faced with numerous problems. Moreover, the art courses are taught in various forms, which increase their difficulty in class. And based on the construction of an intelligent network teaching system under artificial intelligence technology, and network courses can take advantage of the convenient dissemination of the intelligent network teaching system itself, it can be anytime, anywhere, instant feedback, personalized push, integrate the Internet and education,
and promote student development, Promote school information teaching reform, all of which are of great significance.

3. Experiment

3.1. Experiment object

In order to have a deeper understanding of the innovative research on the network teaching mode of Music Major under the background of artificial intelligence technology oriented, the experimental subjects selected 70 Music Major Students of conservatory of music as the research objects, which were divided into experimental class and control class. There were 35 students in the experimental class and 35 students in the control class. Through the form of questionnaire to students, to understand the learning situation of students, and lay the foundation for the application of network teaching mode in the teaching of music major courses in conservatory of music. One of the students who received online education wrote in the questionnaire that "at the beginning of online teaching, I assisted teachers to find a suitable teaching platform by trying different teaching platforms; in addition, I edited various versions of vocal music videos, opera excerpts, photos and texts by using the information technology knowledge I learned at ordinary times. In this process, I feel that the knowledge I have learned has a place to use. Through online education, I have increased my knowledge reserve and watched many related vocal music videos. It is no longer limited to face-to-face teaching of words and legends, which has increased my motivation to continue learning."

3.2. Research design

This research first analyzes the relevant literature of music professional online teaching practices based on artificial intelligence technology at home and abroad, collects theoretical and applied research materials of music professional online teaching models at home and abroad, clarifies the research ideas, and clarifies the research content, Lay the foundation for the development of this research and the writing of the thesis. The questionnaire method is also called the form-filling method, that is, the questionnaire is prepared and then distributed to the subjects of the research survey by paper. In this study, a total of 70 questionnaires were distributed, and 70 valid questionnaires were recovered, and then the recovered questionnaires Collect data and then use statistical and comparative research methods. Finally, in a natural and realistic educational environment, educators should use various research methods and techniques according to specific operating procedures to solve the main goals of online teaching reform. The investigation and analysis of this ability, that is, with the help of questionnaires and interviews, analyze and explain the status quo of the development of this ability, and draw the development problems it currently encounters.

4. Results

4.1. Experimental research findings
According to the data shown in Figure 1, we can understand from the data shown in the figure that, in the current background of rapid development of artificial intelligence technology, most colleges and universities use online teaching to teach, because the most favorite way of teaching is online teaching. Mode, because the network teaching mode is for students, they believe that the network teaching mode can greatly improve their learning efficiency and learn more about music professional knowledge. As the data in the figure shows, the proportion of satisfied students is as high as 78.23%. Dissatisfied music majors accounted for 7.1%. Through face-to-face surveys, they said that the online teaching model is very harmful to students because they believe that the online teaching model has a low degree of acquisition of professional knowledge for students.

4.2. Application of artificial intelligence technology in online teaching of music majors

With the continuous development of modern science and technology, artificial intelligence technology has also made considerable progress. Various intelligent and humanized music network teaching applications have appeared in people's vision. This kind of electronic musical instrument that integrates modern science and technology can store the timbre of various musical instruments in the software. At the same time, it can realize the classified teaching of each musical instrument, so that it can carry out selective online learning according to pre-designed. This kind of advanced network teaching method is not comparable to other forms at present. These intelligent software have powerful functions and easy to use characteristics. It can not only realize the original work completed by the music synthesizer, but also replace the original work task of the music editor. Greatly enhance the music processing ability, effectively expand the storage capacity of music information. In addition, smart music software can also cut, edit, record and play music works, and realize customized editing of music works.

4.3. Experimental investigation report statistics

Table 1. Statistics of your satisfaction with using the intelligent online network teaching system

|                | Very satisfied | Quite satisfied | General | Less satisfied | Very dissatisfied |
|----------------|----------------|-----------------|---------|----------------|------------------|
| Course information | 63             | 2               | 3       | 1              | 1                |
| Percentage | 90% | 2.8% | 4.2% | 1.5% | 1.5% |
|------------|-----|------|------|------|------|
| Working zone | 65  | 4    | 0    | 1    | 0    |
| Percentage  | 92.8% | 5.7% | 0% | 1.5% | 0% |

As shown in the survey data in Table 1, this article conducts a user satisfaction survey on the intelligent online network teaching system used by the students surveyed. Selected "course information" and "work area" for data comparison and analysis. From the data in the table, it can be learned that the students are very satisfied overall, accounting for about 92% of the total number, while students who are more satisfied or below account for about 8% of the total number. Since then, the data shown in the survey results fully show that the online network teaching system based on artificial intelligence is very effective.

4.4. Analysis of Network Teaching Strategies for College Music Majors in the Artificial Intelligence Era

All schools should fully realize the importance of college education and teaching in the era of artificial intelligence, enhance the use of online teaching in music teaching in colleges and universities in the era of artificial intelligence, increase hardware equipment teaching, and provide students with better learning resources. Specifically, teachers are looking for more teaching resources, these resources need to be put on the equipment to be disseminated to students. Schools should ensure adequate media hardware equipment so that teachers can make full use of it in online classrooms. For music teaching, it is necessary to intensify efforts, establish a professional music intelligent network teaching platform, and fully integrate artificial intelligence technology into music teaching, so that music teaching can be used in more aspects. To change the traditional way of education, the first is the reform of educational concepts. Traditional teaching prevents students from getting specific practice on the knowledge they have learned, so it cannot produce a certain effect on the research results of college music teaching reform strategies in the field of artificial intelligence. But we should also pay attention to the development of practical ability. Many students have poor practical ability in music. Therefore, schools need to pay attention to the cultivation of music literacy, and in the era of artificial intelligence, make full use of the advantages of artificial intelligence to enhance the appeal of students' music.

5. Conclusion

Although artificial intelligence has great potential and room for development in music professional education, we should not be confused by intelligent technology. The essence of artificial intelligence in music education is education. Both teachers and students must establish correct artificial intelligence thinking. Reasonable and appropriate use of artificial intelligence technology to assist teaching and learning. Artificial intelligence is inevitably a double-edged sword. We must scientifically, correctly and rationally apply this technology to online teaching and online learning of music majors to cultivate music talents in the era of artificial intelligence. Strengthen the application of artificial intelligence technology in music professional online teaching, and continue to promote the reform process of music professional online teaching. In daily teaching activities, network teaching
has greatly improved the information interaction between teachers and students, and also strengthened the communication between students and students. The introduction of network teaching has enabled the communication between students and teachers, and between students and students. More convenient. Improving the effect of music classroom teaching and enhancing artificial intelligence technology is the trend of future social development. It will play an increasingly important role in music teaching reform, artificial intelligence electronic instruments, artificial intelligence music software and music teaching networks. Make greater breakthroughs in learning, improve the teaching effect of music classrooms, and increase students' interest in music learning. However, with the continuous improvement of computer computing power under the background of big data and the development and research of robot deep learning, new music of music artificial intelligence + database + music teaching and application + social interaction will become an inevitable development trend in today's world.

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