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RETRACTED: Research on the innovation of college music teaching mode based on Artificial Intelligence

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Retraction

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This article has been retracted by IOP Publishing following an allegation that raises concerns this article may have been created, manipulated, and/or sold by a commercial entity. In addition, IOP Publishing has seen no evidence that reliable peer review was conducted on this article, despite the clear standards expected of and communicated to conference organisers.

The authors of the article have been given opportunity to present evidence that they were the original and genuine creators of the work, however at the time of publication of this notice, IOP Publishing has not received any response. IOP Publishing has analysed the article and agrees there are enough indicators to cause serious doubts over the legitimacy of the work and agree this article should be retracted. The authors are encouraged to contact IOP Publishing Limited if they have any comments on this retraction.

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Research on the innovation of college music teaching mode based on Artificial Intelligence

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Abstract. Nowadays, many college students like all kinds of music. Students even form their own bands. Unfortunately, music education is not valued in many schools. Some famous music schools are trying to change the current situation of music education mode. The integration of artificial intelligence technology and education has led to the change of modern music teaching concept. However, the probability of challenge and opportunity brought by AI technology is the same. This paper analyzes the current situation of traditional music education. On this basis, this paper explains the innovation strategy of college music teaching mode led by artificial intelligence. I hope this article can give you some inspiration.

Keywords: Artificial Intelligence, Music Teaching, Innovation

1. Introduction

With the emergence of the music of other nations in the world, a lot of popular music has also undergone great changes. Some old songs have changed their original singing style. This situation has led to a lot of songs tend to the theme of youth [1]. There are many kinds of songs that contemporary students like. Many forms of traditional music have become electronic music. Many singers have changed the tone of old songs. This has led to the diversification of modern music. Great changes have taken place in the means of music teaching in Colleges and universities. Many famous colleges and universities of music major have created advanced music teaching mode.

Music teaching is a regular course in many schools. However, many schools do not pay attention to students' music courses. They believe that modern music standards can help students learn music knowledge by themselves. In fact, this view is one-sided. Music is a complex subject. It includes knowledge of literature, art and history [2]. With the emergence of today's artificial intelligence technology, many music schools began to explore new ways of teaching (see Figure 1). This paper

explains the current situation of traditional music teaching. This paper simply explains the challenges that artificial intelligence brings to modern music teaching. Finally, this paper puts forward the corresponding innovative music teaching mode.

2. The current situation of traditional music teaching in China

2.1. China's backward traditional music from the perspective of foreign scholars

The knowledge of music teaching in China is the derivative of foreign knowledge. In fact, the level of music teaching in China is relatively poor. Therefore, some experts believe that foreign music theory is authentic. Chinese traditional music has become very backward from the perspective of foreign scholars. Under the guidance of western music art, some national music in our country has become dilapidated works of art.

2.2. Many teachers don't know much about music

Many teachers learn western music culture knowledge. They think that the connotation of Chinese traditional music is incomplete. Therefore, these teachers teach students a lot of western music knowledge. They even discriminate against our traditional music. These teachers don't know much about music. They don't even understand the history of music. In fact, the history of Chinese music theory includes many kinds of knowledge.

Figure 1. The students are playing the program on their own

2.3. The difference of teaching courses is very big

The basic music knowledge of students of different majors is roughly the same. However, students of different majors will form different cognitive concepts of traditional music. The level of their music learning is different. Unfortunately, the progress of traditional music teaching course is very fast. Many students can't keep up with the teacher's speed. Therefore, each student's teaching curriculum is very different.

2.4. The teaching order of many music courses is repeated

Courses without innovative thinking are boring. The basic content of all music courses is the same. Teachers need to use different teaching methods to guide students to absorb music knowledge [3]. However, the teaching methods of music courses in many schools today are similar. Many teachers even use the same electronic courseware. This kind of teaching method lacks novelty. Students are easily bored.

3. Opportunities and challenges of college music teaching under the background of artificial intelligence

3.1. Great changes in the teaching concept of modern music

The traditional method of music teaching is single. The emergence of artificial intelligence technology increases the quality of traditional music teaching. However, their integration time is short. The emergence of electronic synthesizer has developed electronic musical instruments with rich musical characteristics. After the emergence of data music platform, the concept of music teaching in many schools has changed greatly. Many teachers no longer use traditional teaching materials to complete teaching.

3.2. Students' deep learning of music

With the emergence of computer data technology, people put forward the concept of deep learning. What the computer learns from experience can explain problems according to the concept system. In recent years, deep learning has been used in music teaching. There is no doubt that this way of learning is efficient. The combination of artificial intelligence technology and music teaching can attract students' interest. Students can concentrate on the purpose of deep learning.

3.3. Reconstruction of teacher-student relationship

Artificial intelligence technology aims to reflect the obvious human-computer interaction. Artificial intelligence technology leads people into the jurisdiction of the Internet. On this basis, teachers may no longer be the only source of knowledge [4]. They can't be authoritative representatives of knowledge. The teacher relieved the pressure of work. However, the emotional communication between teachers and students will also be reduced. Artificial intelligence technology has opened up the distance between teachers and students.

3.4. Reduction of teachers' academic professionalism

The emergence of artificial intelligence technology simplifies the process of music teaching. This way of learning can help students improve their self-learning ability. Many teachers can use artificial intelligence technology to make music courseware. Teachers have become controllers of artificial intelligence systems. As a result, the academic professionalism of many teachers will be reduced. Teachers' music teaching level will also be affected.

4. The exploration of the innovative mode of college music teaching based on artificial intelligence

4.1. Implement the cooperative learning mode of group

Teachers can use AI devices to group students. The number of members of each group is five or six students. After grouping, the intelligent system provides different learning tasks for each group. Students in the music classroom carefully looking for learning goals [5]. After each group completes the task, the intelligent system will arbitrarily switch the tasks of different groups. This way of learning can stimulate students' interest in music courses.

4.2. Change the virtual state of music works

The sensory object of music is the ear. Music can let students experience the expression of emotion. However, many virtual music works are boring. Teachers can use artificial intelligence technology to materialize music works. Teachers can make the corresponding animation character singing music works. This can stimulate students' imagination. It can also stimulate students' ability to appreciate music. It can even increase the expressiveness of music.

Table 1. The main characteristics of the innovative mode of college music teaching supported by artificial intelligence

Innovation mode	Main content	Notes
Cooperative learning	Grouping	Team members
The change of work state	Artificial intelligence technology	Available 3D software
Self-expression	Virtual stage	Singing software
Extracurricular practice	Live music	Concert Hall

4.3. Encourage the cultivation of students' self-expression ability

Music can open students' heart. It can help students find the source of their soul. Teachers can encourage students to experience the beauty of music independently. The integration of students and music is the ultimate goal of music teaching. Artificial intelligence technology can build a virtual stage [6]. Teachers should encourage students to show the music effect they want to express on stage. This way can make it easier for students to reflect the unique music.

4.4. Combination of classroom teaching and extracurricular practice

The music in the class is some simple songs. It can not fully meet the aesthetic standards of all students. The content of classroom teaching can not fully meet the learning standards of all students. Teachers can use the combination of classroom teaching and extracurricular practice to guide students to find music in life. The teacher can lead the students to listen to some modern music in the concert hall. Let students get close to music.

5. Innovative mode of college music assessment based on artificial intelligence

5.1. Update of assessment proposition

The final examination questions of music major in many colleges and universities are similar. It's hard to measure the real strength of each student. Many students can even buy the original paper. The author suggests that the final examination questions of colleges and universities should be constantly changed. If the examination of colleges and universities is in the form of closed book, the author suggests that colleges and universities can adopt the way of open proposition. This kind of examination can increase students' sense of participation. It can measure the real strength of students.

5.2. Final assessment based on stage effect

According to the above description, we know that artificial intelligence technology can build a virtual stage. It can provide various forms of background music [7]. It can provide a variety of lighting designs. Schools can set up a temporary stage. This stage is used for the final examination of students' music examination. Students can perform music they understand on stage. Schools can set up temporary judges to evaluate each student's score.

5.3. Music theory assessment using network platform

Teachers spend a lot of time explaining a lot of music knowledge to students. However, the traditional theory examination paper is a paper version [8]. Students can easily guess the content of the test. Students can even cheat in the examination room without being found out. Artificial intelligence technology can set different content of the test paper. The teacher can arrange the students to test in the computer room. The electronic examination in the network platform is relatively safe.

5.4. The emergence of team assessment methods

Teachers can divide students into many groups. Each group can choose a leader spontaneously. Teachers can provide different topics for each group. The content of topic selection is open. The assessment form of topic selection is also open [9]. During the assessment period, each group needs to perform in their unique way according to the topic. There are no restrictions on the form of the program. This kind of assessment method tests team spirit even more.

6. Analysis of the specific value of artificial intelligence technology in college music teaching

6.1. Virtual music scene layout

The environment of music teaching is very necessary. The appearance of music scene is helpful for students to understand the connotation of music more easily. Artificial intelligence technology can stack a large amount of data to create a virtual music scene. They include three-dimensional sound effects, live sound effects and some virtual three-dimensional scenes. This way can effectively improve students' learning efficiency. Music teaching in class is similar to virtual music scene.

6.2. Reform of traditional music teaching methods

Many teachers guide students to learn all kinds of musical instruments and individual singing methods. The application of single tone, multi tone and chord tuning methods has been able to cover a lot of traditional music teaching content. However, the emergence of artificial intelligence technology enriches the content of music teaching. On the other hand, it also reduces the difficulty of music

teaching. Some people don't understand this kind of teaching mode. Others think that this kind of teaching mode is normal.

6.3. The field of original music has been greatly expanded

The content of traditional music teaching is stable. The emergence of artificial intelligence technology breaks this rule. It combines many forms of music perfectly [10]. The field of primitive music has been expanded. Moreover, this situation makes college students more open to the understanding of music. The emergence of rap music, rock music and ancient music has shown that there is no limit to the scope of modern music.

7. Conclusion

We can not deny the value of traditional music teaching mode. However, in today's computer age, we must change the traditional way of music teaching. Artificial intelligence technology can help us achieve our goals faster. Therefore, the reform of music teaching in Colleges and universities supported by artificial intelligence technology is necessary.

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