

Innovative Cultivation of Choral Talents in Primary and Secondary Schools

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Abstract: This article analyzed the main problems and challenges faced by choral education in the current education system by studying the existing methods for cultivating choral talents in primary and secondary schools. By applying innovative teaching strategies and methods, the aim was to propose a more effective model for cultivating choral talents. The research results indicated that the application of comprehensive art education concepts and technical means can significantly improve students' music literacy and choral performance. In the skill enhancement experiment, after receiving innovative teaching, the average score of students increased from 60 points to 75 points. The team collaboration ability assessment showed that the student's team collaboration ability score increased from an average of 5.5 points before the activity to 7.5 points after the activity. Then the student engagement survey also showed that after changing the teaching methods, the average score of student engagement increased from 3 points to 4 points. The final cultural diversity acceptance test revealed that students had the highest average liking rating for five different cultural music genres, but overall showed an open attitude towards multiculturalism. In these data surveys, innovative teaching methods can effectively improve students' music skills, teamwork ability, participation, and acceptance of cultural diversity.

1. Introduction

In the existing education system, especially music education, it plays a crucial role. For example, choral education can not only improve students' musical literacy, but also help them learn teamwork and enhance their understanding of different cultures. However, traditional teaching methods face many challenges, such as monotonous textbook content, insufficient student participation, and a lack of in-depth introduction to cultural diversity. Therefore, the research purpose of this article is to improve the teaching effectiveness of the primary and secondary school choir through some innovative teaching methods, thereby enhancing students' professional skills, teamwork, active participation, and acceptance of various cultures.

This study systematically explores some innovative teaching strategies with the aim of addressing the problems encountered in traditional choral education. During the experimental phase,

the effectiveness of these new teaching methods in improving students' music skills, teamwork, participation, and acceptance of cultural diversity through experiments is evaluated. The research results show that students have significantly improved their skills, teamwork, and cultural acceptance after adopting these innovative teaching methods. These findings provide valuable references for the practical application of choral education and bring some innovative impetus to the field of education.

At the beginning of this article, the background and significance of choir education are introduced. Then, the origin and connotation of choir, multicultural integration, and project-based learning practices are introduced. In the experimental stage, there are four experimental design and implementation processes, and the experimental results are analyzed to explore the positive impact of innovative teaching methods on various aspects of student abilities. The final conclusion summarizes the research findings and proposes future research directions.

2. Related Works

Numerous scholars have conducted in-depth research on choral education in primary and secondary schools. For example, Jun Su explored the impact of college choral education on college students' self harmony and its cultivation mechanism, and then proposed strategies such as the role and responsibility of educators, optimization of curriculum system, integration and sharing of school and social resources, and diversified choral activity design [1]. Peng Caihong proposed corresponding reform measures to address the problems in the teaching of the "Chorus and Conduction" course at Zunyi Normal University, aiming to cultivate students who can meet the basic needs of current society for choir and conductor talents [2]. Bennett C summarized a practical report on building communities, collaborative learning, and horizontal leadership, which helped to cultivate awareness in choirs [3]. Zhou Z explored the characteristics of innovative learning environments in choir conducting teaching, evaluated the importance and performance level of the Independent Learning Environment (ILE) principle, and identified the advantages of innovative learning environments over traditional learning [4]. Siljamäki E studied the educational potential and value of free collaborative vocal improvisation, and proposed a theory that this process can enable people to obtain music equally without being limited by musical skills [5]. Jansson D conducted a survey on the career narratives of six choir conductors, analyzing important moments in their career trajectory and their impact on current practice [6]. Although these studies provide valuable perspectives and methods for the development of choral education, there is a widespread disconnect between theory and practice, and a lack of innovative teaching methods.

To address the aforementioned issues, some educators and researchers have attempted to introduce new educational technologies and methodologies. For example, Zhao Huamin analyzed the primary school music curriculum and pointed out that information technology plays an important role in primary school music teaching [7]. With the continuous development of information technology, advanced computer technology and information technology were promoted and applied in the field of music. By analyzing the advantages of artificial intelligence in music education, Yu X systematically summarized the application of artificial intelligence in education and explored the development prospects of artificial intelligence technology in the field of music education [8]. Ng D T K's research adopted a flipped online classroom approach, involving students in course preparation through pre assigned recorded videos and collaborative activities during face-to-face online courses [9]. Jiyenbaevich M I explored the issue of improving competency based methods in the preparation process of music university students and proposed innovative teaching techniques for implementing competency oriented learning in higher music and professional education [10]. These methods have been tested in some schools and have achieved

initial results, but they have also exposed new problems such as excessive equipment dependence and insufficient professional training for teachers.

3. Methods

3.1 Technology Integration

Some scholars believed that choir originated with the gradual development of human social life. It first appeared in hunting in primitive tribes, as well as in later agricultural and sacrificial activities, all of which have the characteristics of choir as a form of mass singing. This is related to the fact that in ancient times, humans, out of fear of unknown things such as nature and gods, carried out songs and dances to please and bless them with flattery. By the time of ancient Greece and Rome, the performance of "song pairs" had already begun to appear, but it was called "singing in unison" at that time, which was not yet understood today as polyphonic music. Around the first century AD, with the rise and development of Christianity, the Christian Church compiled a set of "Songs of the Scriptures", which included about 1600 "hymns". These hymns are known as the source and foundation of Western art and music, and a seed of the development of Western choral art in the field of Western music history. Although the Canon of Songs by the Christian Church only had a monophonic choir back then, it is still considered a choir in today's understanding [11].

Chorus is a type of musical art that refers to a form of art in which two (or more) voices complement and contrast each other. As for the vocal parts of a choir, there are mainly four parts, namely the tenor section, soprano section, bass section, and bass section. In terms of the types of choir, there are mainly several forms such as children's choir, boys' choir, girls' choir, and mixed choir.

3.2 Multicultural Integration

In this study, multiple cultures are integrated through choir teaching to deepen students' understanding and acceptance of global cultural diversity. A series of representative choir works are also selected, covering traditional and modern music styles from Asia, Africa, Europe, and the Americas. This cultural breadth not only enhances students' musical aesthetic experience, but also provides them with a new perspective to explore and appreciate global culture [12].

In this choir course, starting from the cultural background of each song, combined with specific historical events and cultural traditions, students are introduced to the roles and meanings of these songs in their original culture. In order to enable students to experience and understand these cultures more deeply, traditional performance videos of relevant ethnic groups and regions are arranged for viewing, and students are guided to discuss the themes and emotions behind these performances. In addition, students also learn how to capture emotions and styles from different cultures by analyzing the language and expressions in the lyrics. This teaching arrangement aims to broaden students' horizons, enhance their understanding and respect for various cultures around the world.

The cultivation of students' innovative abilities is emphasized. For example, in the classroom, students are encouraged to try to integrate their cultural elements into choir, or create new forms of performance based on understanding traditional songs. This teaching method effectively stimulates students' creative thinking and artistic expression skills. By participating in these diverse artistic activities, students not only improve their musical abilities, but also enhance their understanding and communication of different cultural backgrounds. These teaching activities demonstrate that choir can serve as a powerful educational tool, helping students enhance respect and understanding of global cultural diversity while enjoying music [13].

3.3 Project-based Learning Practice

A good project theme has a significant impact on the development trend of the entire project, students' views on the project, and even the development of their core competencies during the project exploration process. Therefore, selecting the appropriate project theme is the key to project success [14]. Teachers should start with the end from the beginning of the project, comprehensively planning and designing each stage of the project to ensure comprehensive control of the project. Principles for determining project themes:

Based on curriculum standards: When applying project-based learning in folk music club teaching, the requirements in the curriculum standards should be used as the benchmark for implementing the project. This can greatly enhance the rationality of the project and the completeness of the evaluation mechanism.

Student centered: The project theme should be determined based on the interests and hobbies of students, as interest is the best teacher. When planning project themes, teachers should communicate with students to understand what they want to learn in folk music clubs and what aspects of folk music they are interested in. After understanding the needs of students, teachers should integrate their feedback, find themes that meet the curriculum standards, and better integrate their needs with the curriculum standards, establishing project directions aimed at developing students' core competencies and adapting to social development trends.

Increasing interactivity: Choir activities are considered to be applied to allow students to showcase the unique charm of folk music through choir, increasing the interactivity of the course, and enabling students to experience teamwork and coordination in music collaboration.

Obtaining inspiration from the Internet: When selecting project themes, teachers can find inspiration from the Internet, analyze successful project cases in different regions, countries and disciplines, learn the reasons and significance of their theme selection, and select appropriate themes for their projects.

4. Results and Discussion

4.1 Skill Enhancement Experiment

In the skill enhancement experiment, the main objective is to evaluate the skill improvement of students after receiving innovative teaching methods. The experiment adopts a pre - and post test design, and students are tested for music theory knowledge, vocal skills, and sight singing and ear training before and after the teaching cycle. The experiment involves 30 students, and their skill improvement scores after receiving innovative teaching methods are plotted as a box plot.

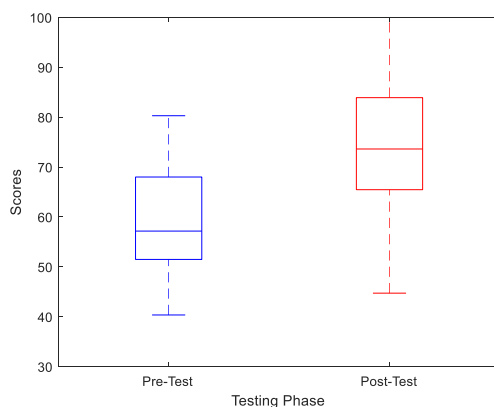


Figure 1: Skill enhancement assessment

In Figure 1, the average score for the initial test is 60 points, with a standard deviation of 10 points. At the end, the average score increases to 75 points, and the standard deviation increases to 15 points. In the experiment, the aim is to verify the effectiveness of teaching methods and their impact on student skill improvement by comparing the changes in scores, as shown in Figure 1:

4.2 Team Collaboration Ability Evaluation Experiment

The purpose of the team collaboration ability assessment experiment is to evaluate the impact of a series of choir team building activities on the team collaboration ability of primary and secondary school students. In the experiment, students are grouped for targeted team collaboration activities, and their team collaboration abilities are rated using teacher and peer evaluation forms before and after the activities. The scoring range is from 1 to 10. In order to quantitatively analyze the improvement of team collaboration ability, Formula (1) is applied to evaluate the effectiveness of team collaboration:

$$T_{eff} = \frac{1}{n} \sum_{i=1}^n C_i \quad (1)$$

In Formula (1), T_{eff} represents team efficiency; C_i represents the contribution of the i -th team member; n is the total number of team members. Figure 2 is the evaluation of collaborative ability:

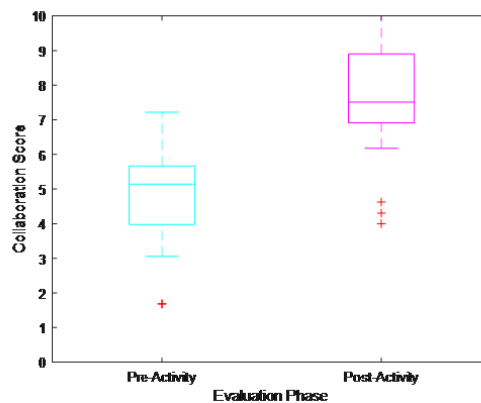


Figure 2: Team collaboration capability assessment

In Figure 2, before the activity, the average score for student team collaboration was 5.5 points, with a standard deviation of 1.5 points. After the event, the average score increases to 7.5 points, while the standard deviation remains at 1.5 points. From the changes in data, it can be seen that educational activities have effectively enhanced the spirit of cooperation and team interaction among students.

4.3 Student Participation Survey Experiment

In the student participation survey experiment, the changes in student participation in choir team activities in primary and secondary schools are evaluated. In the experiment, a survey is conducted on 30 students before and after the change in teaching methods, and their feedback on their interest and willingness to participate in choral activities is collected. Participation is evaluated using a rating system ranging from 1 to 5, where 1 indicates a strong unwillingness to participate and 5 indicates a strong willingness to participate.

From Figure 3, it can be seen that in the survey involving 30 students, the average score of student participation before changing teaching methods is 3 points. After changing the teaching methods, the average score of participation increases to 4 points. From the data conclusion, it can be

seen that innovative teaching methods can effectively improve student participation and satisfaction.

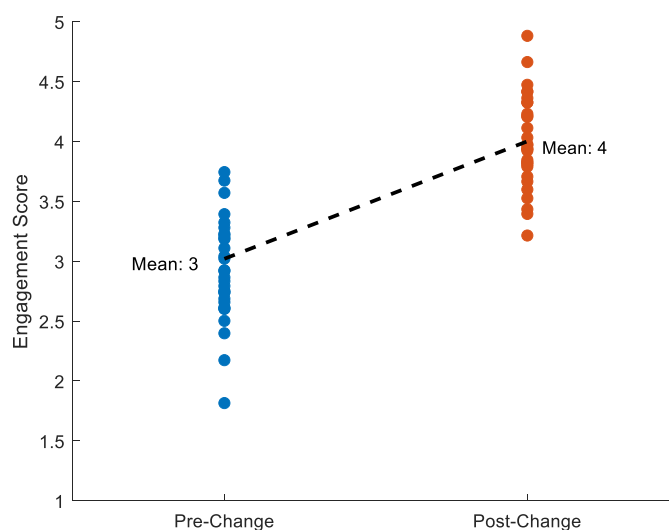


Figure 3: False alarm rate evaluation

4.4 Cultural Diversity Acceptance Test Experiment

The cultural diversity acceptance test experiment evaluates the reactions of primary and secondary school students to five different cultural background choral music works, exploring their cultural diversity acceptance. Students rate each work based on their level of liking, understanding, and willingness to appreciate it again, with a rating scale of 1-5 points. Then, data is collected and the average value is calculated. A data table is created. Table 1 shows the acceptance level:

Table 1: Assessment of cultural diversity acceptance

Metric	Culture 1	Culture 2	Culture 3	Culture 4	Culture 5
Like	3.10	3.03	3.20	3.10	3.13
Understand	3.13	2.93	3.06	2.63	3.06
Willingness to Re-listen	3.01	2.91	2.56	3.10	2.93

In Table 1, primary and secondary school students show a general acceptance of global multicultural music works. According to the average score values, students generally hold an open attitude towards music works from different cultures, especially in terms of liking, with higher ratings, while understanding and willingness to appreciate again are slightly lower. This data indicates the need to further strengthen cultural education in choral teaching.

5. Conclusion

This article improves the teaching effectiveness of primary and secondary school choirs by applying innovative teaching methods, especially in enhancing students' music skills, teamwork ability, participation, and understanding of cultural diversity, achieving good results. These data strongly demonstrate the effectiveness of the innovative teaching strategies and methods adopted. However, this study also has its limitations, such as the sample being limited to a few schools in a specific area, which may not represent the situation of all primary and secondary school students. In the future, research needs to be extended to more regions and types of schools, so as to

comprehensively evaluate the universal applicability and long-term effectiveness of these teaching methods.

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