

Piano Teaching Strategies from a Cross-Cultural Perspective: An Innovative Practice of Integrating Multicultural Elements

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Abstract: In this day and age, music is being studied by more and more people as a way of spreading and carrying the arts, and the piano, in particular, has become the primary choice of extracurricular learning for most students. This paper analyzes the current situation of piano education as well as its characteristics, so as to draw the limitations of piano teaching. Secondly, it analyzes the diversified music to obtain the development process of diversified music. Finally, piano teaching strategies are improved based on cross-cultural perspectives so that students can learn about music from different cultures and regions. The analysis of the improved piano teaching strategy concludes that the improved approach enhances the students' academic performance, increasing the original average score from around 75 to 88, with a percentage increase of around 17.3%, and that the students have a high level of satisfaction with the teaching approach, in which 800 students are satisfied with the style of the teaching repertoire, whereas 750 students believe that the teaching strategy's techniques and theories are in line with the course progress, which It can reach about 7 points, which is relevant and can meet the students' needs.

Keywords: Piano Teaching; Diverse Music; Intercultural Perspective; Teaching Strategies; Repertoire Style

1. INTRODUCTION

In today's era, due to the rapid development of information, the fusion and exchange of cultures gradually penetrate into people's lives and get widespread attention. And music, as a carrier of cultural integration, is known and loved by more and more people, especially in the field of piano, which attracts a large number of students to study (Ding & Huang, 2022; W. Li, 2022). However, traditional piano teaching focuses more on western classical music, which limits students' music aesthetic ability, makes it difficult to enrich their artistic vision, and has limitations on students' development, all of which need to introduce multicultural elements, and integrate works from different countries and regions into piano teaching, so as to enrich students' experience and aesthetic standards (Cui, 2023; Huang & Ding, 2022). Diversified piano teaching strategies can enable students to experience the repertoire styles of different countries and regions, learn the characteristics of different regional pianos, enrich the

experience and vision of students, improve their performance, cultivate their cross-cultural communication skills, and integrate different cultures, which has a high research value and practical value (L. Li, 2022; Wang & Li, 2022). This paper first analyzes the current situation of piano education as well as its characteristics, and determines the goals and contents of piano education, so as to draw the limitations of piano teaching and facilitate the subsequent development of strategies for piano teaching. Secondly, it analyzes the diversified music, and concludes the development process and characteristics of diversified music, as well as the significance of developing diversified music. Finally, the idea of diversified music is integrated into piano teaching, and the piano teaching strategy is improved by incorporating different styles and regional piano music or styles into the classroom teaching, so as to enhance the students' horizons. So that students have the ability to appreciate different styles and regions of music, increase the interactivity of the classroom, mobilize the students' independent learning ability and learning enthusiasm, expand the students' music aesthetics and music literacy, improve the students' own development ability, and cultivate the students' interest in the piano and enthusiasm. At the same time, diversified piano teaching strategies can provide students with targeted training, timely point out the deficiencies and problems in training, so that students can make progress and improve.

2. RELATED WORKS

When analyzing cross-cultural piano teaching strategies, some studies have incorporated diverse music into piano classrooms and created apps to enhance classroom interactivity and increase student motivation and mastery. In order to monitor the effectiveness of the diverse piano teaching strategy and the degree of students' adaptation to the strategy, a test was conducted. The students were divided into experimental group and control group, and the final result was that the average score of the experimental group was 60.88, which was 14.55 points higher than that of the control group, which can show that the improved piano strategy is more effective, and it can enhance the students' motivation to learn (Liu et al., 2020). And the use of multimedia technology to control the rhythm of the teacher's teaching, the use of multimedia technology to integrate a variety of cultural elements together, as a way to enhance the interactivity of the classroom, to stimulate students' learning enthusiasm, to meet the needs of teaching and expanding students' horizons. In order to test the effect of improving the piano teaching strategy, the use of questionnaires to understand the

students' adaptation to the teaching mode, according to the results of the students are more satisfied with the method, can improve students' performance and mobilize learning interest (Millard-Ball, Desai, & Fahrney, 2024). Some scholars use deep learning algorithms to integrate multiple elements to establish a new teaching mode and strategy. The teaching strategy is mainly divided into three categories: teaching objectives, curriculum objectives and teaching training objectives, which improves the traditional teaching method and quality, and makes the way of teaching innovative. According to tests and surveys, it can be concluded that the improved teaching mode is in line with the progress of students, has a certain degree of relevance, meets the needs of teaching students according to their aptitude, and promotes the students' own development (Yin, 2023). There are also researchers who analyze the current piano teaching mode and environment, and come up with the shortcomings in the teaching environment, so as to propose the piano teaching strategy of convolutional neural network. This approach integrates different cultural elements, increases the interactivity with each other, and enables students to receive timely feedback during training. As a result, it enhances students' learning ability and develops their independent thinking and learning skills. According to the questionnaire survey, students' feedback on this approach is positive, indicating that the approach meets students' needs (Langton et al., 2020). There have also been studies that have utilized the beginner piano approach to piano instruction and have investigated students' subjective attitudes toward their learning experiences and personal progress in mastering piano skills to derive students' progress while learning as a means of targeting training and instruction. A survey of the improved piano strategies yielded that 89% of the students made significant progress in mastering music terminology literacy, and 83% of the students demonstrated skills in reading music scores and independently working with musical material. It can be shown that the approach is more effective and can improve students' performance (Jacobs, 2022). There is also a study to design a neural network-based intelligent piano playing teaching system to analyze the implementation method of the piano teaching system. For the difficulties in computerized piano teaching, the strategy of learning is formulated, and a variety of cultures are combined into classroom training and learning, so as to improve the efficiency and quality of learning (Lu, 2022). Some scholars combine image and video methods, integrating a variety of different cultural elements to show the surface of the piano performance, so that students can feel the atmosphere and characteristics of the piano in an immersive environment. At the same time,

a convolutional neural network is utilized to extract the features of the video to reduce the errors and distortions that occur in the video. According to the results, it can be shown that the improved piano teaching strategy can mobilize students' enthusiasm, reduce errors, and improve students' performance (Niu, 2021). Comprehensively, the existing research shows that the piano teaching strategy integrating multicultural elements is very feasible, and the research is of great significance under the cross-cultural perspective.

3. STATUS OF PIANO EDUCATION

3.1 Status and characteristics of piano education

Piano education is very important in the current field of music education and has been paid attention to by many people, but the mode of piano teaching is still in an unstandardized state, limited by the traditional music mode, with insufficient innovation and novelty, not adapting to the development of the times, which has a more serious impact on the sustainable development of the field of music education in the future. According to the planning of art education, it is concluded that art education is an important means to make students' aesthetic and moral education develop in an all-round way, which can strengthen the construction of spiritual civilization and socialist values, and promote students' all-round development, and it occupies an important position in schools and students' extracurricular learning, and has become a necessity for talent cultivation. In music education, aesthetic quality is a necessary ability for students, mainly including aesthetic interest, aesthetic norms and aesthetic consciousness, which can not only enhance the students' personal quality but also have a certain impact on the subsequent personal development, improve the quality and ability of learning, which is the focus of music education, and is also the positioning and goal of piano teaching at present. In piano teaching, due to the constraints of traditional music, resulting in a more traditional teaching mode, the main features are as follows:

(1) In the teaching of the music field, analyzed by the teaching objectives, the piano teaching is opened firstly to meet the students with a relatively weak piano foundation and to improve their piano skills, and secondly to cultivate piano education talents for young children and primary and secondary school institutions. However, no matter which kind of teaching goal, the content of teaching has appeared the trend of pulling up, and the overall content is more difficult. Only chasing away the difficulty and skills

of piano playing, so that students with a weak foundation are more strenuous in learning, and have a feeling of aversion and fear of the piano. Therefore, the teaching of piano should not blindly pursue the ability, should focus on the foundation of students, improve the quality of students, so that students can fully feel the beauty and essence of music (Li, 2021; Wang, 2022).

(2) Although students in colleges and universities are more capable of learning compared to students in other stages, it is more difficult to learn and understand the piano, and it is difficult to exceed the students who have been learning the piano since childhood. Therefore, it is necessary to motivate students in the teaching process, enhance their understanding and creativity, so that students can convert the theory in the classroom into their own understanding. Enhance students' independent learning ability, promote students' own development, and promote the positive development of music education.

3.2 Objectives of Piano Education

For the current piano teaching goals and objects to start the analysis, can be divided into two main types, as follows:

(1) In the teaching of piano, a very small part of the students is to master the piano skills from childhood, with a deep foundation and professional ability to play the repertoire skillfully. The other part of the students have a good sense of music, a unique understanding and appreciation of piano repertoire, and a certain interest in simple piano playing. However, most of the students are interested in piano, with weak playing ability, poor foundation, little theoretical study and even little contact with piano.

(2) Usually, in the piano teaching in schools, it is generally divided into three parts. First, it is to train the top talents in music, who have a deep foundation in piano playing and can break through the skills of piano playing with a certain degree of talent. The second is to train teachers for educational institutions, who need to master all kinds of skills in piano playing, have a comprehensive understanding of piano knowledge, can explain and apply it, and be able to combine theory and practice. The third is to cultivate talents in early childhood enlightenment, need to have a certain understanding of piano knowledge, fully grasp the knowledge of music theory, can enhance the students' musical aesthetics, for piano education to provide strength and talent.

3.3 Limitations of piano teaching

In the current teaching field, the piano teaching mode is backward and

has certain limitations, as follows:

(1) Because the current teaching mode needs to be limited by the class schedule and the form of education, so the teacher can not listen to the results of all the students' return to the class in a short period of time, making it difficult for the teacher to grasp the students' school results and progress, and can not carefully put forward the opinions and explanations to the students, and can only be answered for the majority of the students, and the way of guidance and suggestions are more general and not targeted, thus limiting the students' own development and learning ability, making it difficult for students to make progress in piano.

(2) Randomly selected a college, the type of repertoire and style that students like in their spare time to investigate, Table 1 for the type of repertoire and the ability of the students' favorite repertoire. Through the investigation of the students' ability, it is concluded that 27% of the students' piano foundation is less than one year, 35% of the students' piano foundation is between one and three years, 36% of the students have three to five years of piano foundation and study, and only 2% of the students have a greater than five years of study foundation. The progress of piano mastery will be different due to the different progress of students' foundation and the style of repertoire they usually like, but the teaching mode of the school usually requires the content and progress to be the same, so it creates a certain contradiction to the students' ability to learn and their personality. If students with strong learning ability are kept in music theory and not cultivated in composition and skills, they will not see their own progress, and thus will learn on their own out of the teaching mode and progress, or reduce their interest in piano learning. As for the weaker students, they will lose the motivation to learn piano because they can't keep up with the progress of learning, resulting in low self-esteem, anorexia and fear (Liu & Huang, 2021; Xue & Jia, 2022).

Table 1 Students' Favorite Track Types and Abilities

Favorite Track Types				
Chinese Pop Music	European and American Popular Music	Western Classical Music	Chinese Folk Instrumental Music	Chinese Folk Song
465 people 95%	303 people 62%	112 people 23%	132 people 27%	79 people 16%
Less than one year 27%	Between one and three years 35%	Piano Basics Three to five years 36%	Greater than five years 2%	

(3) In piano teaching, teachers will communicate and exchange ideas

with students in order to accomplish their teaching goals, so as to unify and coordinate the students' situation and progress with the teachers' teaching methods, and thus develop teaching methods. However, at present, many teachers rarely develop novel teaching methods in teaching, lack of innovation, it is difficult to mobilize the enthusiasm and interest of students, students master less knowledge, the efficiency of teaching is low, affecting the subsequent development of students and the enhancement of their own ability, and it is difficult to meet the needs of society (Hou, 2022; Lu et al., 2023).

4. DIVERSIFICATION OF PIANO TEACHING

4.1 Musical Diversification

In the current life, multiple cultures and exchanges are gradually integrated into people's lives, resulting in multiculturalism, while multicultural music culture is to integrate the cultures of different ethnic groups, ensuring that the music culture of each ethnic group can develop in a balanced and equal manner, thus enriching the field of music. Multi-music culture education first appeared in the education model of the United States, and due to the better response of students, it was promoted to countries such as Europe and Canada, becoming a new concept of music. In the 1960s, pluralistic music and culture education was introduced to China, and educators renewed their education in music and developed new education programs, taking respect for art and understanding of diversity as the goal of education, suggesting that teachers can play some ethnic music when teaching music-related knowledge, so as to open up the students' horizons and mobilize their motivation and musical aesthetic qualities (Herrera & Cremades, 2020; Wei, 2021). Nowadays, due to the development of the times, the phenomenon of multiculturalism is becoming more and more mature, gradually infiltrating into all fields of music teaching, making cultural exchanges between China and other countries closer, enabling students to have a more comprehensive understanding of music, and enhancing students' abilities and interests.

4.2 Diversification Strategies for Piano Education

According to the above analysis of the piano teaching mode, it can be concluded that in the current context of diversified education, the traditional piano teaching mode is outdated and does not apply to the current environment, so it is necessary to adjust the strategy of teaching as follows:

(1) As many current teaching models are not targeted, they cannot ensure that the progress of different students is consistent, and it is difficult to point out the problems of different students in piano playing in a timely manner. Therefore, it is necessary to adjust this, to take different teaching methods for students with different learning progress, and to integrate a variety of cultural elements into the classroom, so that the teaching methods are diversified, so as to improve the students' thinking ability and the efficiency of piano learning, and to expand the students' thinking (Wei, 2021).

(2) Diversified methods into the piano training, in order to improve students' piano skills and mastery of music theory, piano training is generally divided into two ways. First, collective training, improve the students' piano foundation, targeted teaching for students, timely solution of the problems encountered by students in the classroom, and grasp the rhythm and content of piano learning, the use of continuo and unison way of training for students, improve students' skills. The second is to participate in competitions. Piano competitions can enrich students' experience and vision. Students can not only enjoy the performances of different regions and cultures, but also learn the knowledge and information about the piano, so that students can diversify their learning, integrate different cultures and arts, and promote the progress and development of students.

(3) In piano teaching, the diversification of piano training methods is an important means to realize the diversification of piano teaching, which can ensure the results of piano training. Therefore, it is necessary to reasonably set up the evaluation system of the piano, combine the evaluation method with the actual situation, and choose the first-line teachers in the piano neighborhood as the team of piano training evaluation. From the diversified form, to ensure the effectiveness and accuracy of the piano evaluation, as well as the comprehensiveness of the evaluation, can be a complete assessment of the students' piano ability.

According to the above process can complete the adjustment of the piano teaching strategy, integrate the diversity into the piano education, open up the students' horizons, and improve the students' music literacy.

5. ANALYSIS OF THE RESULTS OF INNOVATIVE PRACTICES

5.1 Analysis of student satisfaction

Student satisfaction analysis is mainly used to measure students' satisfaction with the integration of diversified teaching modes, and whether

the piano teaching strategy of integration of diversification meets students' requirements and satisfies their learning quality and environment. If students' satisfaction is high, it means that students are more satisfied with the adjusted piano teaching strategy, which can provide students with better learning resources, set up rich and practical piano courses, and can enhance students' own development. And if the students' satisfaction is lower, it means that the adjusted piano strategy does not meet the students' needs, and it is difficult to attract and mobilize the students' learning enjoyment. So 1000 students were surveyed and the results of student satisfaction are shown in Table 2. Students were more satisfied with the adjusted piano teaching strategy, 800 students were satisfied with the repertoire style of teaching and scored 8 points. While 750 students thought that the techniques and theories of the improved teaching strategies were in line with the progress of the course, which could reach about 7 points, 760 students thought that the developed teaching plan could meet the needs and progress of the students, which could reach about 7.5 points. 710 students thought that the cross-cultural integration of the classroom was better, which was at about 8 points, and 750 students thought that the teacher's feedback was quicker, which was at about 8.3 points. This can show that the adjusted piano teaching strategy can meet the students' needs and provide a good learning environment for them. And the piano teaching incorporates a variety of cultures, which opens up the students' horizons and improves their aesthetic quality, so that students can recognize their own learning value and ability, promote students' self-learning ability, and cultivate more piano talents for the society.

Table 2 Results of student satisfaction

Number of Students	Diversified Piano Teaching Styles	Student Satisfaction Ratings
800	Diversified surface styles of teaching	8
750	Teaching techniques and theories in line with the progress	7
770	Diversification of teaching interactions	7.5
710	Cross-cultural musical integration	8
760	Teaching program development meets students' needs	7.5
750	Faster feedback from teachers	8.3
800	Regular piano concerts	8

5.2 Comparative Analysis of Student Achievement

The comparison of student performance is mainly used to measure whether there is a change or increase in student performance after the

improvement of the piano strategy. If the students' performance fluctuates and shows an upward trend, it means that the improved lesson strategy can improve the students' performance and can attract the students' interest in learning. If the students' grades fluctuate less or show a downward trend, it means that the methods used are difficult to attract students' interest in learning and their academic performance will not be significantly improved. Table 3 shows the comparison of students' performance, students' performance has been improved after the improved piano teaching strategy, the original average grade of class 1 is around 75, after the improvement of learning performance increased to 88, the percentage of improvement is around 17.3%. While the original average score of class two was around 70 and after diversified piano learning strategies, it improved to around 80 and the percentage of improvement was at around 14.3%. The initial score of the third class was around 82, and after improvement it was around 92, and the percentage of improvement was at 12.2%. This can show that the adjusted piano teaching method can improve the students' performance, increase the students' student efficiency and interest, enable the students to master the relevant theoretical knowledge of piano completely, and promote the students' personal development.

Table 3 Comparison of student performance

Classes	Initial Average	Improved Average Grade	Percentage improvement
Class 1	75	88	17.3%
Class 2	70	80	14.3%
Class 3	82	92	12.2%
Class 4	65	80	19%
Class 5	83	93	13%
Class 6	73	85	18.1%

5.3 Analysis of Teaching Diversity

Teaching diversity analysis is used to measure whether the teaching methods used by teachers in the teaching process are diversified, whether they are relevant to students' learning, and whether the teaching content developed can cover all piano courses, keep pace with the times and promote students' own development. Table 4 shows the results of the assessment of teaching diversity, which enables students to develop good learning habits and at the same time cultivate their interest in piano. Table 4 shows the results of the assessment of teaching diversity. The piano teaching mode that integrates multiple cultural elements meets the needs of students, and the teaching methods and music theory knowledge are

more diversified, with a rating of about 8 points. Moreover, the teacher's novelty in classroom demonstration is high and can reach 8 points, which can attract the students' interest and enhance their motivation in learning. It can be concluded that the improved piano teaching strategy incorporates more cultural elements, which opens up students' horizons, enables them to see the integration and exchange of other cultures in the world, and improves their aesthetic quality. As a result, they can create or play piano pieces with emotions and have new knowledge and understanding of piano playing skills.

Table 4 Results of the Teaching Diversity Assessment

Assessment Indicators	Specific description	Assessment results
Lecture Methods	Does the teacher's classroom instruction incorporate multiple elements	8 points
Video teaching	The richness of the video teaching elements	7 points
Technique Training	Variety of piano technique training	7.5 points
Knowledge of Music Theory	Diversity of instruction	8 points
Demonstration	Is the demonstration innovative?	8 points
Musical Instruments	Is the quality of the piano up to classroom standards	7.3 points
Classroom Interaction	Are the elements of the classroom rich?	7.7 points

5.4 Analysis of teaching evaluation

Teaching evaluation analysis is usually an assessment of the content of the teaching, to determine whether the content is accurate and applicable, whether the knowledge and skills conveyed can meet the needs and goals of the students, and whether the students' mastery of knowledge is comprehensive and complete. If the teaching evaluation is more complete, it can accurately show the students' learning situation and the rationality of the teacher's content, which is very important for piano education. The results of teaching evaluation are shown in Table 5, the improved piano teaching strategy can be complete teaching evaluation, teaching evaluation is more diversified, the evaluation method can comprehensively assess the scope of student learning, the score can be around 8 points. And the content of the evaluation is not restricted by the traditional music teaching mode, with less limitation, the rating is around 7.5 points. This can show

that the teaching evaluation method can combine a variety of elements for comprehensive assessment, the assessment results are accurate, and can accurately measure the degree of mastery and learning interest participation of students. In this way, it can enhance the efficiency of learning and students' performance, make students' learning motivated, better meet students' needs, promote the development and progress of the music field, and cultivate more talents for the piano field.

Table 5 Results of Teaching Evaluation

Types of Assessment	Specific description	Score
Teaching Evaluation Diversity	Is the teaching evaluation approach diversified	8
Scope of Teaching Evaluation	Whether the teaching evaluation methods are comprehensive and complete	7.5
Applicability of Teaching Evaluation	Whether the teaching evaluation methods are applied in a single scenario	8
Limitations of Teaching Evaluation	Whether the teaching evaluation methods are limited	7.5
Innovativeness of Teaching Evaluation	Is the teaching evaluation method novel?	7
Practicality of Teaching Evaluation	Whether the teaching evaluation methods meet the actual needs	7.5

6. CONCLUSION

This paper analyzes the current situation of piano education as well as its characteristics, and draws out the current limitations in piano teaching. Diversified music is analyzed to obtain the development process of diversified music, and diversified music ideas are integrated into piano teaching to enhance the interaction between teachers and students so that students can experience music from different regions and cultures. According to the results of the analysis, it can be concluded that the school's strategy improves the students' performance, increasing the original average score of 70 to about 80, with the percentage of improvement at 14.3%, and the teaching evaluation is diversified to be able to comprehensively assess the scope of students' learning, which can reach about 8 points. Students are more satisfied with the improved teaching mode, 710 students think that the cross-cultural integration in the classroom is better, which can be scored around 8 points, and 750 students think that the teacher's feedback is faster and can point out the technical problems in time, which is around 8.3 points. This shows that the teaching mode of integrating multiple cultural elements can enhance students'

interest in learning, mobilize students' enthusiasm, and has a certain relevance, which can promote students' growth.

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