

The Development of Integrated Piano Teaching Strategies to Enhance Music Skills for Higher Education Level

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Abstract

This research aims to develop and evaluate integrated piano teaching strategies designed to enhance the musical skills of higher education students. The study focused on analyzing the limitations of traditional, applied, and international piano teaching methods and integrating their strengths to create a comprehensive teaching approach. The research sample consisted of 67 piano students from Xinghai Conservatory of Music, selected through simple random sampling. The research instruments included interviews with faculty members, teaching observations, and experimental testing of the newly developed teaching strategy. Data collection involved gathering feedback from teachers and students, pre- and post-course testing, and satisfaction surveys. Data analysis was conducted to assess the effectiveness of the integrated teaching strategy in improving students' technical skills, musical expression, and overall performance.

The research results found that the integrated piano teaching strategy significantly improved students' performance across various evaluation categories, including playing skills, reading and rhythm, and musical expression. The findings suggest that this comprehensive approach is effective in meeting the demands of modern piano education, offering a promising alternative to existing methods.

Keywords: Piano Pedagogy; Music Skills; Piano Teaching Strategies; Educational Methods

Introduction

With the improving of social requirements for piano talents to diversification, practical and scale, traditional piano pedagogy, application piano pedagogy and international music education method have become more and more difficult to meet the needs of the society for piano talents (Buchanan, 1964). How to meet the social demand for piano talent improvisation, high-end performance and large-scale training is a problem that music education research in China must face. Therefore, the integration of piano education method, the application of piano education method, and the international music education law, learning from each other's strengths and inclusiveness, has important practical significance and value for the cultivation of high-quality musical skills.

Traditional piano education law requires us to pay attention to strict fingering teaching on piano education research, for repertoire is strictly limited in Mozart, Beethoven, for beginners to inevitably boring, blow learning interest, and traditional piano education law lack of improvisation ability cultivation, cause students to master the ability after graduation, cannot meet the demand of unit of choose and employ persons. The application of piano education

*Received: August 16 2024; Revised: August 26 2024; Accepted: August 27 2024

rules emphasizes the feeling of music, emphasizes the first place of interest, relaxes strict fingering teaching requirements, accepts pop music and jazz, and encourages improvisation. Although it can improve the interest of beginners in the early stage of teaching, it is also easy to cause not solid basic skills, difficult to further improve, and difficult to be competent for high-end performance (Liu, 2013). International teaching method, alff method emphasizes from the origin and nature of music, namely "resort to sensibility, return to humanistic" pay attention to on the basis of rhythm, encourage students to understand the composer's life and creative background to better understand the artistic conception of the tune, interpretation of the composer through music mood, encourage students to improvisation, but the students own understanding ability requirement is higher, difficult to scale.

The existing piano teaching methods each have their strengths and weaknesses. Traditional methods offer strong technical foundations but can be monotonous and lack creativity. Applied methods increase student engagement and creativity but may sacrifice technical rigor. International methods foster a deeper understanding of music and its emotional content but are difficult to implement on a large scale due to their complexity. As a result, there is a significant gap in the ability of these methods to comprehensively address the evolving needs of piano education in higher education. This gap highlights the necessity for a new, integrated teaching approach that combines the strengths of traditional, applied, and international methods while addressing their individual shortcomings.

Therefore, how to study a new teaching method integrating the strengths of three teaching methods on the basis of "traditional teaching method", "applied teaching method" and "international teaching method" has become an urgent problem to be solved by the majority of music education researchers.

Research Objectives

1. Research and analysis of piano pedagogies in colleges and universities.
2. Develop piano pedagogies suitable for college students.
3. Study the development efficiency of integrated piano teaching strategies to improve the musical skills of higher education level.

Literature Review

1. Traditional Piano Pedagogy

Buchanan (1964) criticizes traditional piano teaching for overemphasizing technical skills while neglecting musical appreciation and creativity, which results in students being unable to compose music independently. Pan (2018) adds that this approach overly focuses on technical practice and repertoire, ignoring improvisational skills, leaving students unprepared for real-world applications. However, Liu and Lu (2017) acknowledge that traditional methods can tailor teaching to student needs, improving performance skills, but they lack interaction and innovation, limiting students' proactive learning and exposure to contemporary content.

2. Xindi Applied Piano Pedagogy (XAPP)

Liu (2013) notes that XAPP simplifies music theory, focusing on practical skills like accompaniment through graded etudes, which boosts student interest and performance ability. Tang (2015) praises XAPP for promoting enjoyable and creative learning, helping students build confidence and core musical literacy in a fun, practical environment.

3. International Piano Teaching

Kupana and Otacioglu (2012) advocate for the Suzuki method's gradual approach, emphasizing review and positive reinforcement to build student confidence and enthusiasm. Tao (2016) found that the Orff method, compared to traditional teaching, enhances classroom efficiency, student interest, and sight-singing ability.

4. Integrated Piano Teaching Method

Ma Yan (2012) recommends fostering student interest through differentiated teaching, cooperative learning, and diverse evaluation methods to improve performance and musical accomplishment. Lixia Li (2018) suggests integrating basic piano courses with improvisational accompaniment to create a more scientific teaching model, combining music theory with practical skills, and revising assessment methods to include improvisational tasks.

Research Methodology

1. Population and Sample

The population for this study includes first-year piano students at the Xinghai Conservatory of Music, selected due to their foundational level in piano education and the institution's reputation as a leading music conservatory in China. The sample was chosen using simple random sampling, ensuring that the selection was unbiased and representative of the student population. A total of 67 students were selected as the sample size, providing a sufficient basis for testing the effectiveness of the integrated piano teaching strategies.

2. Research Tools

The research employed a combination of qualitative and quantitative research tools to gather comprehensive data:

Interviews: In-depth interviews were conducted with faculty members and educational experts to gain insights into the existing teaching methods and identify areas for improvement.

Observation: Classroom observations were carried out to analyze the application of different teaching methods and their impact on student engagement and learning outcomes.

Experimental Testing: Pre- and post-course tests were designed to evaluate the effectiveness of the integrated piano teaching strategy. These tests were based on the established piano scoring standards of Xinghai Conservatory of Music.

Satisfaction Survey: A structured questionnaire was developed to assess student satisfaction with the integrated teaching methods across various indicators such as training objectives, teaching methods, and course content.

3. Data Collection

Data collection was carried out in three main phases:

Survey and Interviews: A survey was conducted among piano instructors at five universities, including Xinghai Conservatory of Music, to gather information on current teaching practices and the needs of piano students. Additionally, interviews with industry professionals provided insights into the skills required for successful piano graduates.

Pre- and Post-Course Testing: Students' skills were assessed before and after the implementation of the integrated piano teaching strategy using the Piano Skill Test Form. The tests were designed to measure improvements in playing skills, reading and rhythm, and musical expression.

Satisfaction Survey: An anonymous satisfaction survey was administered to students after the completion of the course to gather feedback on their experiences and identify areas for further refinement of the teaching strategy.

4. Data Analysis

Data analysis involved both quantitative and qualitative approaches:

Quantitative Analysis: The results from the pre- and post-course tests were statistically analyzed to determine the effectiveness of the integrated teaching strategy. Scores in various categories were compared to assess the degree of improvement in students' piano skills.

Qualitative Analysis: Interview transcripts and observation notes were coded and analyzed to identify recurring themes and insights related to the strengths and weaknesses of the integrated teaching methods. The satisfaction survey results were also analyzed to gauge student satisfaction and identify any discrepancies between the importance of various indicators and their satisfaction levels.

5. Conceptual Framework

The conceptual framework for this study is based on the integration of three key piano teaching methods: traditional, applied, and international. The framework posits that combining the technical rigor of traditional methods, the creativity and engagement of applied methods, and the deep musical understanding fostered by international methods can result in a comprehensive and effective teaching strategy. This integrated approach is designed to address the limitations of each individual method, providing a balanced education that prepares students for both the technical and creative demands of modern piano performance.

The framework also emphasizes the importance of continuous feedback and adaptation. By regularly assessing student progress and satisfaction, the integrated teaching strategy can be refined to better meet the needs of students and align with industry expectations. This dynamic approach ensures that the teaching methods remain relevant and effective in cultivating high-quality musical skills in higher education students.

Research Results

1. Analysis of Piano Pedagogy in Higher Education Institutions

1.1 Teaching Philosophies and Methods

This study collected insights from faculty members at five universities: Guangdong Technical Normal University, Guangdong Vocational College of Urban Construction, Hanshan Normal University, Qingyuan Vocational and Technical College, and Xinghai Conservatory of Music. Across these institutions, the teaching philosophies heavily emphasized individualized instruction, where the focus is on adapting teaching methods to meet the unique needs and abilities of each student. This approach was particularly highlighted at Guangdong Technical Normal University, where the philosophy revolves around a student-centered, gradual teaching process that allows for continuous feedback and adjustment.

Similarly, at Guangdong Vocational College of Urban Construction, the teaching philosophy prioritizes music over technical prowess. Here, the aim is to help students understand and express music through their own interpretations and feelings, rather than focusing solely on the mechanical aspects of playing the piano.

Various teaching methods were employed across these institutions. The heuristic method, prominently used at Guangdong Technical Normal University, involves steps such as introducing the lesson topic, guiding students through exploration and observation, followed by guided questioning, and practical demonstrations. This method is designed to engage

students and stimulate their creativity. On the other hand, the explanatory method, which is widely adopted, involves providing systematic instruction on music theory and performance techniques, ensuring students have a deep theoretical understanding before engaging in practice. Lastly, the task-driven approach, as seen at Xinghai Conservatory of Music, sets clear goals and guides students through practical exercises, fostering active learning and self-directed improvement.

1.2 Curriculum Content

The curriculum structure across these institutions typically begins with foundational skill development in the freshman year, progressing to more complex and specialized training in the senior years. In the first year, emphasis is placed on mastering basic skills such as finger dexterity and music theory. For instance, at Guangdong Technical Normal University, students begin with Czerny Etudes, focusing on finger speed and accuracy.

As students advance to their sophomore year, the curriculum introduces more complex repertoire and focuses on cultivating musical comprehension and expression. For example, at Hanshan Normal University, sophomores start working on polyphonic pieces, which help enhance their technical skills and deepen their understanding of musical structures.

By the junior and senior years, the curriculum shifts towards more advanced studies, including the interpretation and performance of sonatas, harmony, and large-scale works such as concertos. At Xinghai Conservatory of Music, seniors engage in intermediate harmony theory to enhance their improvisational skills and deepen their understanding of music, preparing them for professional challenges in the field.

1.3 Evaluation and Assessment

Assessment methods across these universities emphasize a combination of musical literacy, performance skills, and musical expression. Faculty members evaluate students on their ability to accurately read and interpret music, their technical proficiency, and their emotional expressiveness in performance. At Xinghai Conservatory of Music, additional emphasis is placed on students' proficiency in harmony and their creative capabilities, reflecting a broader educational goal of cultivating not only performers but also versatile musicians who are capable of composition and improvisation.

The study reveals that qualities such as focus, patience, continuous learning, and a deep passion for music are considered essential for success, whether as a pianist, teacher, or student. The evaluations are designed to ensure that students develop a comprehensive skill set that includes technical ability, musicality, and a deep understanding of music theory, all of which are crucial for their future careers.

2. Develop piano pedagogies suitable for college students can be described in detail as follows.

Models for teaching piano include Principles and concepts in organizing piano teaching, Objectives of teaching and learning piano and Content.

2.1 Principles and concepts in organizing piano teaching

Referring to the research results of the interview, combined with the principle of interest priority in Orff's music theory and Suzuki's teaching method, as well as the long-term lack of piano career planning and interest research in reality, we believe that the teaching principles of the new piano pedagogy should be: (1) pay attention to the basic skills of the piano, (2) respect the interests of students, and choose the training path according to the

interests of students, (3) pay attention to the introduction of traditional repertoire in the teaching materials, and (4) pay attention to the practice of piano.

2.2 Objectives of teaching and learning piano

Referring to the research results of the interviews, and we believe that piano graduates should be based on employment in their home countries, and need to cultivate graduates who are suitable for their own country's characteristics, and need to cultivate graduates who are based on the employment situation of their home countries, we believe that the teaching objectives of the new piano pedagogy should be: (1) to cultivate students' solid piano foundation, (2) to be able to combine piano skills with traditional music of their country, (3) to maximize students' talents, (4) to be able to perform piano independently, and (5) to have certain piano academic research ability.

2.3 Content

From the model for teaching piano Can be distributed according to the lesson plan as follows:

In the first and second week, we assign the first-year courses which includes: career planning courses, interest research and basic piano skills training. So that students can understand the development plan of piano career and guide students to discover their talents and interests, and at the same time cultivate students' solid piano basic skills. In the following third and fourth week, we assign the second-year courses. In the second-year courses, students will be taught the basic piano skills and Chinese and foreign repertoire appreciation, which will not only strengthen the students' basic piano skills, but also increase the appreciation of foreign and domestic repertoire, cultivate students' musicality, appreciation ability and cultivate their interest in domestic songs. From the sixth week till the eighth week, we assign the third-year courses. In the third year courses, students are taught piano performance skills and academic research, and students' independent performance ability and academic research ability are cultivated. And lastly from week nine till week ten, we assign the fourth year courses. The fourth grade mainly teaches the knowledge related to piano recitals and cultivates students' ability to perform independently in piano recitals. The details are shown in Table 1

Table 1 From the model for teaching piano lesson plan

Course	Sequence of steps	Details
First-Year courses (1st~2nd week)	Content	Course1: Piano Career Planning Seminar Course2: Career interest assessment Course3: Integrated Piano Pedagogy Piano Practice Course 4: Integrated Piano Pedagogy Music Games
	Objectives	1. Cultivate a solid foundation of piano playing skill 2. Career guidance and interest discovery
	Teaching methods/Activities	Pedagogical Presentation Method
	Times/hours	Course 3: Piano practice is once per day, each lesson cost 60 minutes; The rest of the courses are once per week and 60-minute for each course
	Teaching materials	Integrated Piano Pedagogy (Year 1)
	Measurement and evaluation	Teachers give one-on-one scoring
Second-Year courses	Content	Course 1: Integrated Piano Pedagogy Exercises Course 2: Appreciation of Foreign Music Works with Integrated Piano Pedagogy Course 3: Introduction to Ethnic Music with Integrated Piano Pedagogy

(3rd~5th week)	Course 4: Integrated Piano Pedagogy Music Games
	Objectives Cultivate a solid piano foundation and cultivate musical aesthetics
	Teaching methods/ Activities Lectures, heuristic pedagogy, exemplary performance, lecturing
	Times/hours Course 1: Piano practice is once per day, each lesson cost 60 minutes; The rest of the courses are once per week and 60-minute for each course
	Teaching materials Integrated Piano Pedagogy (Year 2)
	Measurement and evaluation Post-course test
Third-Year courses (6th~8th week)	Content Course 1: Basic Piano Practice with Integrated Piano Pedagogy Course 2: Integrated Piano Pedagogy Piano Essay Writing Guide Course 3: Music Appreciation with Integrated Piano Pedagogy
	Objectives 1. Develop independent learning and performance skills 2. Cultivate Piano academic research ability
	Teaching methods/ Activities Heuristic teaching method, model method, teaching method
	Times/hours Course 1: Piano practice is once per day, each lesson cost 60 minutes;
	Teaching materials Integrated Piano Pedagogy (Year 3)
	Measurement and evaluation Scores are given based on performance
Fourth-Year courses (9th~10th week)	Content Course 1: Integrated Piano Pedagogy Exercises Course 2: Piano Recital Etiquette; Course 3: Students hold individual piano recitals;
	Objectives Cultivate self-worth realization and piano practice ability
	Teaching methods/ Activities Recitals, heuristic pedagogy, exemplary performance, lecturing
	Times/hours Course 1: Piano practice is once per day, each lesson cost 60 minutes; The rest of the courses are once per week and 120-minute for each course
	Teaching materials Integrated Piano Pedagogy (Year 4)
	Measurement and evaluation Scores are given based on performance

This structured curriculum ensures a comprehensive development of skills from basic proficiency to advanced performance and academic research, preparing students for a successful career in piano music.

3. Evaluating the Efficiency of Integrated Piano Teaching Strategies

This section explores the effectiveness of integrated piano teaching strategies in enhancing the musical skills of higher education students. The study involved designing a comprehensive piano skills test, conducting experimental testing, and evaluating student satisfaction with the teaching methods.

3.1 Design of the Piano Skill Test Form

As Table 2. To evaluate the effectiveness of the integrated piano teaching strategies, a Piano Skill Test Form was designed, referencing the final assessment standards of Xinghai Conservatory of Music. The assessment criteria were optimized to align with the practical needs of employers and the overall educational objectives. The test form assesses three main areas: Playing Skills and Integrity, Reading & Rhythm, and Musical Expression and Style. Each area is scored on a scale ranging from "Excellent" (91-100) to "Fail" (60 or below).

Table 2 Example Integrated Piano Method Course Test Table

Category	Score	Weighting (%)
Playing Skills and Integrity	0-100	40
Reading & Rhythm	0-100	30
Musical Expression and Style	0-100	30

This comprehensive evaluation ensures that students are assessed holistically, considering both their technical proficiency and their musical interpretation abilities.

3.2 Experimental Testing

To evaluate the effectiveness of the integrated piano teaching methods, a simple random sampling method was employed to select 67 piano students from Xinghai Conservatory of Music as experimental subjects. These students were assessed before and after the integrated piano teaching course using the designed Piano Skill Test Form.

(1) Pre-Course Test Results

Before the course, the performance of the 67 students was generally poor across all evaluation categories. In the "Playing Skills and Integrity" category, no students achieved an "Excellent" rating (91-100 points). Only two students received a "Good" rating (81-90 points), four students "Passed" (60-80 points), and the rest failed. In the "Reading & Rhythm" category, again, no students achieved an "Excellent" rating, only one student received a "Good" rating, and five students "Passed." Similarly, in the "Musical Expression and Style" category, no students received an "Excellent" rating, only two students received a "Good" rating, and three students "Passed." Overall, only one student passed all the evaluation criteria.

(2) Post-Course Test Results:

After completing the 10-week integrated piano teaching course, there was a significant improvement in the students' performance. In the "Playing Skills and Integrity" category, 15 out of the 67 students achieved an "Excellent" rating, 25 students received a "Good" rating, and 22 students "Passed." In the "Reading & Rhythm" category, 16 students achieved an "Excellent" rating, 26 students received a "Good" rating, and 20 students "Passed." In the "Musical Expression and Style" category, 13 students achieved an "Excellent" rating, 24 students received a "Good" rating, and 22 students "Passed."

(3) Comparison and Analysis of Test Results:

The comparison between the pre-course and post-course test results clearly demonstrates that the integrated piano teaching method significantly improved the students' performance across all evaluation categories. Before the course, students generally performed poorly in all areas, whereas after the course, the majority showed substantial improvement in "Playing Skills and Integrity," "Reading & Rhythm," and "Musical Expression and Style." This indicates that the integrated piano teaching method is effective in enhancing both the technical skills and musical expression of the students, enabling them to better master the comprehensive abilities required for piano performance.

The notable improvement validates the effectiveness of the integrated piano teaching method, particularly in its ability to significantly enhance students' overall musical literacy and skills within a short period. These findings provide a solid foundation for further promotion and refinement of such teaching strategies and demonstrate their considerable potential for application in higher education music instruction.

3.3 Course Satisfaction Evaluation

To further assess the effectiveness of the integrated teaching strategies, a satisfaction survey was conducted at the end of the 10-week course. The survey measured student satisfaction across 11 indicators, such as training objectives, teaching methods, and course content (Table 3).

Table 3 Results of the Student Satisfaction Survey on Integrated Piano Pedagogy

Indicators (Index)	Importance (Mean)	Satisfaction (Mean)
1.Evaluation on training objectives	6	6
2.Evaluation on teacher	6	5
3.Evaluation on teaching equipment	6	4
4.Evaluation on the class atmosphere	3	5
5.Evaluation on the way of class	6	6
6.Evaluation on course content	6	6
7.Evaluation on teaching plans	6	6
8.Evaluation on teaching materials	6	5
9.Evaluation on teaching methods	6	5
10.Evaluation on exercise	5	3
11.Evaluation on Assessment	6	3

Based on the data presented in Table 3, the overall average importance score across the 11 indicators is 5.63, while the average satisfaction score is 4.9. Indicators scoring above these averages are categorized as high importance or high satisfaction, while those below are considered low importance or low satisfaction.

For example, the training objective received a perfect importance score of 6, indicating its critical significance to students. It also garnered a matching satisfaction score of 6, reflecting high student contentment with this aspect. Similarly, teacher evaluation, teaching methods, course content, teaching plans, and textbook evaluation all scored 6 in importance, showing their key role in the educational experience. These areas generally received high satisfaction scores, indicating that students' expectations are largely being met.

However, some areas showed a discrepancy between importance and satisfaction. Teaching equipment, despite being rated highly important with a score of 6, only received a satisfaction score of 4, indicating lower satisfaction with the resources available. Similarly, practice evaluation, which scored 5 in importance, had a significantly lower satisfaction score of 3, highlighting a need for improvement in practice sessions.

In contrast, the classroom atmosphere scored 3 in importance, indicating it is less critical to students, yet it received a satisfaction score of 5. This suggests that while students are satisfied with the classroom environment, they do not see it as a major factor in their educational experience.

These findings lead to a deeper analysis, as summarized in Table 4.

Table 4 Satisfaction analysis of integrated piano pedagogy

Topic/Issue	High importance & low satisfaction	High Importance & High Satisfaction	Low importance & high satisfaction	Low importance /low satisfaction
1.Evaluation on training objectives		√		
2.Evaluation on teacher		√		
3.Evaluation on teaching equipment	√			
4.Evaluation on the class atmosphere			√	
5.Evaluation on the way of class		√		
6.Evaluation on course content		√		
7.Evaluation on teaching plans		√		
8.Evaluation on teaching materials		√		
9.Evaluation on teaching methods		√		
10.Evaluation on exercise	√			
11.Evaluation on Assessment	√			

From the Table 4, we know that the three aspects of teaching equipment, exercises, and assessment are high importance & low satisfaction evaluations, which are the key areas that schools need to address urgently in the teaching curriculum, and schools should take priority actions to improve student satisfaction in these three aspects.

The six aspects including Evaluation on training objectives, Evaluation on teacher, Evaluation on the class atmosphere, Evaluation on course content, Evaluation on teaching plans, and Evaluation on teaching materials belong to high importance & high satisfaction, strong advantages, and are a symbol of excellent curriculum, which is very conducive to the construction of curriculum benchmarking, therefore, colleges and universities can use these projects for curriculum promotion and publicity.

The evaluation of class atmosphere is a low-importance & high-satisfaction project, and the school can appropriately readjust its resources from the areas of low importance to the areas of high importance that students perceive.

Discussion

1. Research Objectives

The primary objectives of this research were to develop and evaluate an integrated piano teaching strategy that combines the strengths of traditional, applied, and international methods to enhance the musical skills of higher education students. Specifically, the study aimed to address the shortcomings of each individual method by creating a more comprehensive approach that improves technical proficiency, creativity, and overall performance capabilities among piano students.

2. Research Results

The research findings indicate that the integrated piano teaching strategy significantly improved students' performance across various metrics, including playing skills, reading and rhythm, and musical expression. Before the course, the majority of students performed poorly, with only one student passing the piano literacy test. After the course, 64 out of 67 students passed, with 24 students receiving a "Good" rating and 4 students achieving an "Excellent" rating. This marked improvement in both basic and advanced piano skills demonstrates the

effectiveness of the integrated teaching strategy in addressing the needs of modern piano education.

Furthermore, the satisfaction survey results revealed that students were generally satisfied with the integrated teaching strategy, particularly in areas such as course content, teaching methods, and overall learning experience. However, certain aspects, such as teaching equipment and practice exercises, were identified as areas needing improvement, as they received lower satisfaction scores despite their high importance.

3. Reflection

The significant improvement in students' performance highlights the potential of the integrated piano teaching strategy as a valuable tool in higher education. This approach not only addresses the technical shortcomings of traditional methods but also enhances the creative and expressive aspects of piano education, which are often emphasized in applied and international teaching methods. The results align with the findings of Ma Yan (2012), who advocated for the integration of different teaching methods to improve overall musical accomplishment. Similarly, Lixia Li (2018) supported the idea of combining music theory with practical skills and revising assessment methods to include improvisational tasks, which is reflected in the positive outcomes of this study.

However, the study also identifies areas where the integrated strategy could be further refined. The lower satisfaction scores for teaching equipment and practice exercises suggest that while the integrated method is effective in improving student performance, additional resources and support are necessary to fully realize its potential. This finding noted that traditional methods often lack the necessary interaction and innovation, limiting students' proactive learning. By addressing these shortcomings, the integrated strategy could be made even more effective.

4. Consistent and Inconsistent Findings:

The integrated strategy developed in this study successfully balances technical proficiency with creative expression, leading to improved student outcomes. The findings also support the importance of enjoyable and creative learning environments. The integrated strategy, which incorporates elements of applied pedagogy, resulted in higher student satisfaction and engagement.

While this study acknowledges the limitations of traditional pedagogy, it demonstrates that when combined with applied and international methods, these traditional techniques can still play a crucial role in a comprehensive piano education.

Additionally, the study differs from Kupana and Otacioglu (2012), who found that international methods like the Suzuki approach are difficult to scale. The integrated strategy in this study successfully incorporated elements of international methods, such as the Orff approach, and was implemented effectively with a large group of students, indicating that with proper adaptation, these methods can be scaled.

This research demonstrates the effectiveness of an integrated piano teaching strategy in enhancing the musical skills of higher education students. The study's findings align with much of the existing literature, while also challenging some previous assumptions about the limitations of traditional and international teaching methods. By integrating the strengths of various approaches, this study offers a promising new direction for piano education in higher education, addressing both technical and creative needs in a balanced and holistic manner..

Conclusion

This study focused on developing integrated piano teaching strategies to enhance the musical skills of college students. The research and analysis of piano pedagogy across five universities highlighted several key issues and informed the development of a new, integrated approach.

1. Existing Piano Pedagogy Issues

Interviews and observations from teachers at five universities revealed that current piano teaching methods often lack the flexibility and practical focus needed to meet modern students' needs. Traditional methods emphasize basic skills but fail to address practical application, while newer methods like the Xindi approach, though more accessible, may neglect foundational training. This gap underscores the need for a teaching strategy that balances skill-building with practical application.

2. Development of a New Piano Pedagogy

To address these issues, the study developed an integrated piano teaching strategy based on interviews with employers and educational experts. This strategy focuses on building a solid foundation in piano skills, integrating traditional music, maximizing student talent, fostering independent performance, and encouraging academic research. The strategy was tested with 67 students at Xinghai Conservatory of Music, leading to significant improvements in student performance. Before the course, only one student passed the piano literacy test. After the course, 64 students passed, with 24 earning "Good" and 4 achieving "Excellent" ratings, demonstrating the effectiveness of the integrated approach.

3. Evaluation of Teaching Strategy Efficiency

The study also involved designing a piano skill test form and conducting a satisfaction evaluation. The test form, refined based on employer needs, assessed students on playing skills, reading and rhythm, and musical expression. Experimental testing showed significant improvement in student scores after the course. Additionally, the satisfaction survey highlighted areas for improvement, particularly in teaching equipment, exercises, and assessment methods, while confirming the strengths of the new strategy in meeting educational objectives.

Suggestions

1. Theoretical Suggestions

Given the constraints of resources and time, this study was unable to conduct comparative experiments between the integrated piano teaching method, traditional piano teaching methods, and the Xindi applied piano teaching method. Future research should aim to include such comparative studies to better highlight the effectiveness of the integrated approach and provide more robust conclusions. Additionally, expanding the number of interviewees beyond the limited sample size used in this study could enhance the accuracy and comprehensiveness of the findings. Finally, to overcome geographical limitations, future research should consider conducting interviews and experiments on a national or even international scale to increase the representativeness of the results.

2. Policy Suggestions

The findings from this study suggest that the integrated piano teaching method offers significant benefits over traditional and Xindi methods, particularly in enhancing practical skills and building a solid foundation in piano playing. Educational institutions, including universities and training centers, should consider adopting this integrated approach to improve

student learning outcomes efficiently. Implementing this method could significantly contribute to the development of well-rounded piano graduates who possess both practical skills and comprehensive musical literacy. Policymakers in the education sector should support the adoption and dissemination of this method to foster more effective and holistic piano education programs.

3. Further Suggestions

The curriculum proposed in the integrated piano pedagogy serves as a flexible and open-ended framework. Teachers are encouraged to adapt and innovate within this framework, tailoring the curriculum and teaching materials to the specific needs and characteristics of their students. Continuous innovation and adaptation based on teaching feedback are essential to refining the integrated piano teaching method. Future research should focus on testing these innovations and gathering data to further enhance the effectiveness of the approach and ensure it remains relevant in diverse educational contexts.

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